PLEASE NOTE: THIS IS NOT AN OFFICIAL VERSION OF THE ELECTRICITY SYSTEM AND MARKET RULES

CONSOLIDATED 'COMPANION' VERSION OF THE ELECTRICITY SYSTEM AND MARKET RULES (1 OCTOBER 2027) PREPARED ON 20 OCTOBER 2026

This 'companion' version of the Electricity System and Market Rules (ESM Rules) reflects the ESM Rules that, subject to any subsequent amendments after the date this companion version was prepared, are intended to be in force from 1 October 2027.

This companion version was prepared on 20 October 2026.

This companion version includes all Amending Rules made before 20 October 2026 with a confirmed commencement date on or before 1 October 2027. Changes from the 1 October 2026 ESM Rules are shown in tracked changes.

This companion version includes the following Amending Rules that were yet to commence as at 20 October 2026:

Amending Rules

Name of Instrument	Date Gazetted	Commencement Date
Wholesale Electricity Market Amendment (RCM Reviews Sequencing) Rules 2025, Schedule 4	14 January 2025	1 October 2027
Electricity System and Market Amendment (Tranche 8) Rules 2025, Schedule 5	3 June 2025	1 October 2027
Wholesale Electricity Market Amendment (RCM Reviews Sequencing) Rules 2025, Schedule 6	14 January 2025	1 October 2027
Electricity System and Market Amendment (Tranche 9) Rules 2025, Schedule 4	23 December 2025	1 October 2027
Electricity System and Market Amendment (Tranche 10) Rules 2026, Schedule 3	25 September 2026	1 October 2027

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1. Introduction

The Electricity System and Market Rules

1.1. Authority of the Electricity System and Market Rules

1.1.1. These are the Electricity System and Market Rules ("ESM Rules") made under the Regulations and contemplated by section 123 of the Electricity Industry Act.

1.1.2. These ESM Rules govern the market and the operation of the South West interconnected system, including the wholesale sale and purchase of electricity, Reserve Capacity, and Essential System Services.

1.2. State Electricity Objective

1.2.1. The State Electricity Objective is to promote efficient investment in, and efficient operation and use of, electricity services for the long-term interests of consumers of electricity in relation to:

(a) the quality, safety, security and reliability of supply of electricity; and

(b) the price of electricity; and

(c) the environment, including reducing greenhouse gas emissions.

Conventions

1.3. Electricity Industry Act and Regulations

1.3.1. A word or phrase defined in the Electricity Industry Act or the Regulations has the same meaning when used in these ESM Rules.

1.4. Other rules of interpretation

1.4.1. In these ESM Rules, unless the contrary intention appears:

(a) (**Glossary**): a word or phrase listed in the Glossary in Chapter 11 has the meaning given in the Glossary;

(b) (**day**): a day means a calendar day;

(c) [Blank]

(d) (**singular and plural**): the singular includes the plural and the plural includes the singular;

(e) (**gender**): a reference to a gender includes any gender;

(f) (**headings**): headings (including those in brackets at the beginning of paragraphs) are for convenience only and do not affect the interpretation of these ESM Rules;

(g) (**persons**): a reference to a person includes an individual, a firm, a body corporate, a partnership, a joint venture, an unincorporated body or association, or any government agency;

(h) (**things**): a reference to any thing (including any amount) is a reference to the whole and each part of it;

(i) (**clauses etc**): a reference to a clause, section, appendix, chapter, annexure or schedule is a reference to a clause, section, appendix or chapter in or annexure or schedule to the ESM Rules;

(j) (**statutes etc**): a reference to a statute, ordinance, code or other law includes regulations and other instruments under it and consolidations, amendments, re-enactments or replacements of any of them;

(k) (**variations**): a reference to a document (including the ESM Rules) includes any variation or replacement of it;

(l) (**other parts of speech**): other parts of speech and grammatical forms of a word or phrase defined in the Glossary in chapter 11 have a corresponding meaning;

(m) (**appointments**): where these ESM Rules confer a power on a person to make an appointment to a position, the person also has the power:

i. to specify the period for which any person appointed in exercise of the power ("**appointee**") holds the position;

ii. to remove or suspend an appointee and to reappoint or reinstate an appointee; and

iii. where an appointee is suspended or is unable, or expected to become unable, for any other cause to perform the functions of the position, to appoint a person to act temporarily in place of the appointee during the period of suspension or other inability;

(n) (**amendments**): if AEMO, the Economic Regulation Authority, the Coordinator or a Network Operator has the power to make, prescribe, determine, compile, establish or develop a document, instrument, matter or thing, then AEMO, the Economic Regulation Authority, the Coordinator or a Network Operator, as applicable, also has the power to amend, replace or revoke the whole or part of that document, instrument, matter or thing exercisable in like manner and subject to like conditions (if any);

(o) (**functions**): "function" includes function, power, duty, responsibility and authority;

(p) (**include or including**): the words “include” or “including” are not used as, nor are they to be interpreted as, words of limitation, and, when introducing an example, do not limit the meaning of the words to which the example relates;

(q) [Blank]

(r) (**headings and comments**): headings and comments appearing in footnotes or boxes in these ESM Rules (other than tables containing data or other information) are for convenience only and do not affect the interpretation of these ESM Rules.

1.4.2. In these ESM Rules, unless the contrary intention appears, any notice or confirmation required to be issued by the Coordinator, AEMO or the Economic Regulation Authority may be issued by an automated software system employed by the Coordinator, AEMO or the Economic Regulation Authority, as applicable,.

1.4.3. The Wholesale Electricity Market will operate on Western Standard Time (= Coordinated Universal Time (UTC) + 8 hours). At all times, the times and time limits mentioned in these ESM Rules refer to Western Standard Time.

1.5. Subservient Documents

1.5.1. The following documents are subservient to the ESM Rules:

(a) WEM Procedures; and

(b) any other document or instrument issued, made or given by AEMO, the Economic Regulation Authority, a Network Operator or the Coordinator under the ESM Rules.

1.5.2. In the event of conflict between the ESM Rules and other documents, then the order of precedence is to be, in the following order:

(a) the Electricity Industry Act;

(b) the Regulations;

(c) the ESM Rules;

(d) the WEM Procedures;

(dA) any other document or instrument issued, made or given by AEMO under the ESM Rules;

(dB) any other document or instrument issued, made or given by the Economic Regulation Authority under these ESM Rules; and

(dC) any other document or instrument issued, made or given by the Coordinator under these ESM Rules.

(e) [Blank]

1.5.3. If a provision of a document which is higher in the order of precedence (in this clause called the “higher provision”) is inconsistent with a provision of a document which is lower in the order of precedence, then the higher provision prevails, but only to the extent of the inconsistency.

1.6. Notices

1.6.1. The Coordinator must develop a WEM Procedure which sets out the method by which notices and communications required under, contemplated by or relating to, these ESM Rules are to be given to or by the Coordinator.

1.6.2. AEMO must develop a WEM Procedure which sets out the method by which notices and communications required under, contemplated by or relating to, these ESM Rules are to be given to or by AEMO.

1.7. Publication

1.7.1. Where AEMO is required by these ESM Rules to publish a document or information, then AEMO must make that document or information available on the WEM Website, in a place which is publicly accessible.

1.7.2. [Blank]

1.7.3. Where the Economic Regulation Authority is required by these ESM Rules to publish a document or information, then the Economic Regulation Authority must make that document or information available on its website, in a place which is publicly accessible.

1.7.3A. Where the Coordinator is required by these ESM Rules to publish a document or information, the Coordinator must make that document or information available on the Coordinator’s Website, in a place which is publicly accessible.

1.7.4. If a Network Operator (in respect to any WEM Procedure the Network Operator is required to develop and maintain under these ESM Rules) is required by these ESM Rules to publish a document or information, then:

(a) the Network Operator must make that document or information available on its website, in a place that is publicly accessible; and

(b) if these ESM Rules require that document or information to be published on the WEM Website:

i. the Network Operator must promptly notify AEMO when the document or information is published on the Network Operator’s website;

ii. AEMO must, at a minimum, promptly publish on the WEM Website a link to the area of the Network Operator's website where the document or information is published; and

iii. the Network Operator is deemed to have published the document or information once the Network Operator has published the document or information on its website, and has notified AEMO.

1.7.5. If a Distribution System Operator (in respect to any WEM Procedure the Distribution System Operator is required to develop and maintain under these ESM Rules) is required by these ESM Rules to publish a document or information, then:

(a) the Distribution System Operator must make that document or information available on its website, in a place that is publicly accessible; and

(b) if these ESM Rules require that document or information to be published on the WEM Website:

i. the Distribution System Operator must promptly notify AEMO when the document or information is published on the Distribution System Operator's website;

ii. AEMO must, at a minimum, promptly publish on the WEM Website a link to the area of the Distribution System Operator's website where the document or information is published; and

iii. the Distribution System Operator is deemed to have published the document or information once the Distribution System Operator has published the document or information on its website, and has notified AEMO.

Staging

1.8. Staging of the ESM Rules

1.8.1. A provision of the ESM Rules commences at the time fixed by the Minister.

1.8.2. [Blank]

1.8.3. The Minister may fix different times for different provisions of these ESM Rules under clause 1.8.1.

1.8.4. The Minister must publish notice of the commencement time fixed for a provision under clause 1.8.1 in the Government Gazette.

1.8.5. [Blank]

1.8.6. To avoid doubt, and without limiting the foregoing, where a word or phrase listed in the Glossary in Chapter 11 is defined by reference to a provision of these ESM Rules, regard should be had to that provision for the purposes of determining the meaning of that word or phrase, even though the provision has not yet commenced.

1.9. [Blank]

1.10. [Blank]

1.11. [Blank]

1.12. [Blank]

1.13. [Blank]

1.14 [Blank]

1.15 [Blank]

1.16. [Blank]

1.17. [Blank]

1.17A. Transition of certain Economic Regulation Authority functions to the Coordinator

1.17A.1. On and from the Coordinator Transfer Date:

(a) where the Coordinator is required to do an act, matter or thing under a provision of these ESM Rules, and that act, matter or thing was done by the Economic Regulation Authority prior to the Coordinator Transfer Date, then the act, matter or thing is deemed to have been done by the Coordinator in accordance with the relevant provision;

(b) where the Coordinator is required to do an act, matter or thing under a provision of a WEM Procedure, and that act, matter or thing was done by the Economic Regulation Authority prior to the Coordinator Transfer Date, then the act, matter or thing is deemed to have been done by the Coordinator in accordance with the relevant provision;

(c) notwithstanding the operation of clauses 1.17A.1(a) and 1.17A.1(b), the Coordinator is not liable for any act, matter or thing done by the Economic Regulation Authority prior to the Coordinator Transfer Date in breach of these ESM Rules or any WEM Procedure;

(d) where the Coordinator is required to publish or release any information or document (other than a WEM Procedure) (including, without limitation, a form, protocol, instrument or other thing) and that information or document was published or released by the Economic Regulation Authority prior to the Coordinator Transfer Date, then:

i. the information or document is deemed to have been published or released by the Coordinator in accordance with these ESM Rules; and

ii. any reference to the Economic Regulation Authority in that information or document that should be a reference to the Coordinator having regard to the Coordinator's functions, powers, rights and obligations under these ESM Rules and the WEM Procedures is deemed to be a reference to the Coordinator; and

(e) where a person (including, without limitation, a Rule Participant) is required to provide information to, or do an act, matter or thing for the Coordinator under these ESM Rules or a WEM Procedure and the person has provided that information to, or done that act, matter or thing for the Economic Regulation Authority prior to the Coordinator Transfer Date, then the information, act, matter or thing, is deemed to have been provided to, or done for, the Coordinator in accordance with the relevant ESM Rules or WEM Procedure.

1.18. [Blank]

1.18A. Transition of certain Rule Change Panel functions to the Coordinator

1.18A.1. On and from the Coordinator Transfer Date—

(a) where the Coordinator is required to do an act, matter or thing under a provision of these ESM Rules, and that act, matter or thing was done by the Rule Change Panel prior to the Coordinator Transfer Date, then the act, matter or thing is deemed to have been done by the Coordinator in accordance with the relevant provision;

(b) where the Coordinator is required to do an act, matter or thing under a provision of a WEM Procedure, and that act, matter or thing was done by the Rule Change Panel prior to the Coordinator Transfer Date, then the act, matter or thing is deemed to have been done by the Coordinator in accordance with the relevant provision;

(c) notwithstanding the operation of clauses 1.18A.1(a) and 1.18A.1(b), the Coordinator is not liable for any act, matter or thing done by the Rule Change Panel prior to the Coordinator Transfer Date in breach of these ESM Rules or any WEM Procedure;

(d) where the Coordinator is required to develop or maintain a WEM Procedure, and that WEM Procedure was developed or maintained by the Rule Change Panel prior to the Coordinator Transfer Date, then—

i. the WEM Procedure is deemed to have been developed or maintained by the Coordinator in accordance with these ESM Rules;

ii. a reference to the Rule Change Panel in that WEM Procedure that should be a reference to the Coordinator having regard to the Coordinator's functions, powers, rights and obligations under these

ESM Rules and the other WEM Procedures is deemed to be a reference to the Coordinator;

iii. the Coordinator may amend the WEM Procedure to refer to the Coordinator instead of the Rule Change Panel (where appropriate) and make any necessary consequential amendments without undertaking the Procedure Change Process; and

iv. any WEM Procedure which is amended by the Coordinator in accordance with this clause 1.18A.1(d) may commence operation on the date and time determined by the Coordinator and published on the Coordinator's Website;

(e) where the Coordinator is required to publish or release any information or document (other than a WEM Procedure) (including, without limitation, a form, protocol, instrument or other thing) and that information or document was published or released by the Rule Change Panel prior to the Coordinator Transfer Date, then—

i. the information or document is deemed to have been published or released by the Coordinator in accordance with these ESM Rules; and

ii. any reference to the Rule Change Panel in that information or document that should be a reference to the Coordinator having regard to the Coordinator's functions, powers, rights and obligations under these ESM Rules and the WEM Procedures is deemed to be a reference to the Coordinator;

(f) where a person (including, without limitation, a Rule Participant) is required to provide information to, or do an act, matter or thing for the Coordinator under these ESM Rules or a WEM Procedure and the person has provided that information to, or done that act, matter or thing for the Rule Change Panel prior to the Coordinator Transfer Date, then the information, act, matter or thing, is deemed to have been provided to, or done for, the Coordinator in accordance with the relevant ESM Rules or WEM Procedure; and

(g) if, by operation of this clause 1.18A.1, the Coordinator is deemed to have made a Reviewable Decision that was made by the Rule Change Panel, then, on and from the Coordinator Transfer Date any application to the Electricity Review Board for a review of the Reviewable Decision that might have been brought or continued by a Rule Participant against the Rule Change Panel may be brought or continued against the Coordinator as if all references to the Rule Change Panel as the relevant decision-maker are references to the Coordinator.

1.18A.2. On and from the Coordinator Transfer Date—

(a) any Rule Change Proposal that has, prior to the Coordinator Transfer Date, been developed by or submitted to the Rule Change Panel (and in respect of which the rule change process under sections 2.4 to 2.8 is not, as at the Coordinator Transfer Date, complete) will be deemed to have been developed by or submitted to the Coordinator; and

(b) notwithstanding any other provision of these ESM Rules, a WEM Procedure or any document referred to in these ESM Rules or a WEM Procedure (including a Draft Rule Change Report), the normal timeframes for the Coordinator or any other person to do any act, matter or thing in relation to a Rule Change Proposal referred to in clause 1.18A.2(a) (including any extended timeframe determined by the Rule Change Panel under clause 2.5.10 in respect of any such proposal) will be automatically extended for such period as determined by the Coordinator (which determination may be made at a date after the date of the expiry of the normal, or previously extended, timeframe).

1.18A.3. The Coordinator must publish a notice of the extended timeframe(s) determined in accordance with clause 1.18A.2(b), and must update any information already published in accordance with clause 2.5.7(f) (if applicable).

1.18A.4. Notwithstanding clause 2.24.6A, the date by which the Coordinator must notify AEMO of the dollar amount that the Coordinator may recover under clause 2.24.5B in the Financial Year beginning on 1 July 2021, is 15 July 2021, and the references in clauses 2.24.2 and 2.24.2A, in connection with the Coordinator providing information, to 5 Business Days prior to 30 June are to be read as references to 15 July 2021.

1.19. [Blank]

1.19A. Amendments to WEM Procedures to reflect transfer of functions

1.19A.1. In addition to the amendments to WEM Procedures referred to in clause 1.18A.1, AEMO, the Economic Regulation Authority, the Coordinator, and Western Power (as applicable) (each a Transferee) may make the minimum necessary amendments to a WEM Procedure required to be developed or maintained by the Transferee to:

(a) reflect the transfer of functions, powers, rights and obligations from Western Power, AEMO or the Rule Change Panel to the Transferee or another Transferee; or

(b) maintain consistency between the WEM Procedure and these ESM Rules,

without undertaking the Procedure Change Process.

1.19A.2. Any WEM Procedure which is amended by a Transferee in accordance with clause 1.19A.1 may commence operation on the date and time determined by the

Transferee required to develop or maintain the WEM Procedure and published on the relevant Transferee's website.

1.19A.3. Until such time as the relevant Transferee makes the amendments referred to in clause 1.19A.1, any reference in any WEM Procedure to the Rule Change Panel that should be a reference to the Coordinator having regard to the Coordinator's functions, powers, rights and obligations under these ESM Rules and other WEM Procedures is deemed to be a reference to the Coordinator.

1.20. [Blank]

1.21. Deferral of dates for the 2016 Reserve Capacity Cycle

Notwithstanding any other provision of these ESM Rules, the operation of the following clauses is modified in respect of the 2016 Reserve Capacity Cycle as follows:

(a) clause 4.1.11(b) is modified so that AEMO must cease to accept lodgement of applications for certification of Reserve Capacity for the 2016 Reserve Capacity Cycle in accordance with clause 4.9.1 from 5:00 PM on 29 September 2017;

(b) clause 4.1.12(b) is modified so that AEMO must notify each applicant for certification of Reserve Capacity of the Certified Reserve Capacity to be assigned by 5:00 PM on 17 November 2017;

(c) clause 4.1.13(b)(i) is modified so that each Market Participant must provide to AEMO any Reserve Capacity Security required in accordance with clause 4.13.1 not later than 5:00 PM on 1 December 2017 if any of the Facility's Certified Reserve Capacity is specified to be traded bilaterally in accordance with clause 4.14.1(c) or acquired by AEMO under clause 4.14.1(ca) or if the Facility is subject to a Network Control Service Contract;

(d) clause 4.1.13(b)(ii) is modified so that each Market Participant must provide to AEMO any Reserve Capacity Security required in accordance with clause 4.13.1 not later than 5:00 PM on 14 December 2017 if any of the Facility's Certified Reserve Capacity is specified to be offered into the Reserve Capacity Auction in accordance with clause 4.14.1(a) and where clause 4.1.13(b)(i) does not apply;

(e) clause 4.1.14(c) is modified so that each Market Participant holding Certified Reserve Capacity for the 2016 Reserve Capacity Cycle must provide to AEMO notification in accordance with clause 4.14.1 as to how its Certified Reserve Capacity will be dealt with not later than 5:00 PM on 1 December 2017;

(f) clause 4.1.15 is modified so that AEMO must confirm to each Market Participant in accordance with clause 4.14.9 the amount of Certified

Reserve Capacity that can be traded from its Facilities by 5:00 PM on 4 December 2017;

(g) clause 4.1.15A is modified so that AEMO must publish the Certified Reserve Capacity for each Facility in accordance with clause 4.9.9A by 5:00 PM on 5 December 2017;

(h) clause 4.1.16(c) is modified so that AEMO must publish the information required by clauses 4.15.1 and 4.15.2 pertaining to whether or not a Reserve Capacity Auction is required by 5:00 PM on 5 December 2017;

(i) clause 4.1.17(a)(iii) is modified so that, if a Reserve Capacity Auction proceeds, then AEMO must accept submission of Reserve Capacity Offers from Market Participants in accordance with clause 4.17.2 from 9:00 AM on 6 December 2017;

(j) clause 4.1.17(b)(iii) is modified so that, if a Reserve Capacity Auction proceeds, then AEMO must accept submission of Reserve Capacity Offers from Market Participants in accordance with clause 4.17.2 until 5:00 PM on 14 December 2017;

(k) clause 4.1.20 is modified so that each Market Participant holding Certified Reserve Capacity which has been scheduled by AEMO in a Reserve Capacity Auction must provide to AEMO notification, in accordance with clause 4.20, of how many Capacity Credits each Facility will provide not later than 5:00 PM on 21 December 2017;

(l) clause 4.1.21 is modified so that a Market Participant may apply to AEMO under clause 4.13.2A for a recalculation of the amount of Reserve Capacity Security required to be held by AEMO for a Facility in accordance with clause 4.13.2(b) after 5:00 PM on 22 December 2017; and

(m) clause 4.1.21A is modified so that AEMO must, in the event that a Reserve Capacity Auction was required, assign Capacity Credits in accordance with clause 4.20.5A not later than 5:00 PM on 22 December 2017.

1.22. Deferral of dates for the 2017 Reserve Capacity Cycle

Notwithstanding any other provision of these ESM Rules, the operation of the following clauses is modified in respect of the 2017 Reserve Capacity Cycle as follows:

(a) clause 4.1.11(b) is modified so that AEMO must cease to accept lodgement of applications for certification of Reserve Capacity for the 2017 Reserve Capacity Cycle in accordance with clause 4.9.1 from 5:00 PM on 29 December 2017;

(b) clause 4.1.12(b) is modified so that AEMO must notify each applicant for certification of Reserve Capacity of the Certified Reserve Capacity to be assigned by 5:00 PM on 19 February 2018;

(c) clause 4.1.13(b)(i) is modified so that each Market Participant must provide to AEMO any Reserve Capacity Security required in accordance with clause 4.13.1 not later than 5:00 PM on 2 March 2018 if any of the Facility's Certified Reserve Capacity is specified to be traded bilaterally in accordance with clause 4.14.1(c) or acquired by AEMO under clause 4.14.1(ca) or if the Facility is subject to a Network Control Service Contract;

(d) clause 4.1.13(b)(ii) is modified so that each Market Participant must provide to AEMO any Reserve Capacity Security required in accordance with clause 4.13.1 not later than 5:00 PM on 14 March 2018 if any of the Facility's Certified Reserve Capacity is specified to be offered into the Reserve Capacity Auction in accordance with clause 4.14.1(a) and where clause 4.1.13(b)(i) does not apply;

(e) clause 4.1.14(c) is modified so that each Market Participant holding Certified Reserve Capacity for the 2017 Reserve Capacity Cycle must provide to AEMO notification in accordance with clause 4.14.1 as to how its Certified Reserve Capacity will be dealt with not later than 5:00 PM on 2 March 2018;

(f) clause 4.1.15 is modified so that AEMO must confirm to each Market Participant in accordance with clause 4.14.9 the amount of Certified Reserve Capacity that can be traded from its Facilities by 5:00 PM on 6 March 2018;

(g) clause 4.1.15A is modified so that AEMO must publish the Certified Reserve Capacity for each Facility in accordance with clause 4.9.9A by 5:00 PM on 7 March 2018;

(h) clause 4.1.16(c) is modified so that AEMO must publish the information required by clauses 4.15.1 and 4.15.2 pertaining to whether or not a Reserve Capacity Auction is required by 5:00 PM on 7 March 2018;

(i) clause 4.1.17(a)(iii) is modified so that, if a Reserve Capacity Auction proceeds, then AEMO must accept submission of Reserve Capacity Offers from Market Participants in accordance with clause 4.17.2 from 9:00 AM on 8 March 2018;

(j) clause 4.1.17(b)(iii) is modified so that, if a Reserve Capacity Auction proceeds, then AEMO must accept submission of Reserve Capacity Offers from Market Participants in accordance with clause 4.17.2 until 5:00 PM on 14 March 2018;

(k) clause 4.1.20 is modified so that each Market Participant holding Certified Reserve Capacity which has been scheduled by AEMO in a Reserve Capacity Auction must provide to AEMO notification, in accordance with clause 4.20, of how many Capacity Credits each Facility will provide not later than 5:00 PM on 21 March 2018;

(l) clause 4.1.21 is modified so that a Market Participant may apply to AEMO under clause 4.13.2A for a recalculation of the amount of Reserve Capacity Security required to be held by AEMO for a Facility in accordance with clause 4.13.2(b) after 5:00 PM on 23 March 2018; and

(m) clause 4.1.21A is modified so that AEMO must, in the event that a Reserve Capacity Auction was required, assign Capacity Credits in accordance with clause 4.20.5A not later than 5:00 PM on 23 March 2018.

1.23. Application of clauses 1.21 and 1.22

1.23.1. Nothing in clause 1.21 shall affect the operation of Chapter 4 insofar as the clauses of Chapter 4 apply to a Reserve Capacity Cycle other than the 2016 Reserve Capacity Cycle.

1.23.2. Nothing in clause 1.22 shall affect the operation of Chapter 4 insofar as the clauses of Chapter 4 apply to a Reserve Capacity Cycle other than the 2017 Reserve Capacity Cycle.

1.24. Specific Transition Provisions for the 2017 Capacity Year

1.24.1. In this section 1.24:

RCM Amendments: Means the amending rules in Schedule B, Part 3 of the Wholesale Electricity Market Amending Rules 2016 made under regulation 7(4) of the ESM Regulations, published in the Government Gazette on 31 May 2016.

RCM Amendments Commencement Day: Means the Trading Day commencing at 8:00 AM on 1 October 2017, the date and time the RCM Amendments are to commence.

Pre-Amended Rules: Means the ESM Rules as in force immediately before the RCM Amendments come into effect.

Post-Amended Rules: Means the ESM Rules as in force immediately after the RCM Amendments come into effect.

1.24.2. Before 8:00 AM on the RCM Amendments Commencement Day, notwithstanding that the Pre-Amended Rules continue to apply, each Rule Participant must perform all obligations imposed on that Rule Participant under the Post-Amended Rules, in relation to the RCM Amendments Commencement Day and subsequent Trading Days, that, if the Post-Amended Rules were in force, the Rule Participant would have been required to perform under the Post-Amended Rules. This includes, but is not limited to, obligations relating to:

(a) updated Standing Data under section 2.34;

(b) Reserve Capacity Obligation Quantity under section 4.12;

(c) Relevant Demand under clause 4.26.2CA;

(d) Individual Reserve Capacity Requirements under clause 4.28.8;

(e) a Non-Balancing Dispatch Merit Order under section 6.12;

(f) a Dispatch Instruction or Operating Instruction under Chapter 7; and

(g) a Dispatch Advisory under section 7.11.

1.24.3. If before 8:00 AM on the RCM Amendments Commencement Day, notwithstanding that the Pre-Amended Rules continue to apply, a Rule Participant performs an obligation under the Post-Amended Rules under clause 1.24.2, then to the extent that the obligation is performed, the Rule Participant is not required to perform any equivalent obligation under the Pre-Amended Rules to the extent that these obligations relate to the RCM Amendments Commencement Day or subsequent Trading Days.

1.24.4. If before 8:00 AM on the RCM Amendments Commencement Day, notwithstanding that the Pre-Amended Rules continue to apply, a Rule Participant is required to perform an obligation that relates to the RCM Amendments Commencement Day or subsequent Trading Days that it will not be required to perform under the Post-Amended Rules, the Rule Participant is not required to perform the obligation to the extent that it relates to the RCM Amendments Commencement Day or subsequent Trading Days and to the extent that the obligation will not apply under the Post-Amended Rules.

1.24.5. After 8:00 AM on the RCM Amendments Commencement Day, notwithstanding that the Post-Amended Rules apply, each Rule Participant must perform all obligations imposed on that Rule Participant under the Pre-Amended Rules, arising in relation to each Trading Day (or part of a Trading Day) up to but excluding the RCM Amendments Commencement Day, that, if the Pre-Amended Rules were in force, the Rule Participant would have been required to perform under the Pre-Amended Rules. This includes, but is not limited to, obligations relating to:

(a) administration of the market under Chapter 2;

(b) administration of the Reserve Capacity Mechanism under Chapter 4;

(c) dispatch under Chapter 7;

(d) settlement under Chapter 9; and

(e) treatment of information under Chapter 10.

1.25. [Blank]

1.26. Transitional calculation of Individual Reserve Capacity Requirements and the Capacity Credit Allocation Process

1.26.1. In this section 1.26:

New Rules: Means the Amending Rules made in the Prudential Exposure Final Rule Change Report (other than the Amending Rule with respect to this section 1.26).

Post-Amended Rules: Means the ESM Rules as in force immediately after the New Rules come into effect.

Pre-Amended Rules: Means the ESM Rules as in force immediately before the New Rules come into effect.

Prudential Exposure Final Rule Change Report: Means the Rule Change Panel's Final Rule Change Report for the Rule Change Proposal: Reduction of the prudential exposure in the Reserve Capacity Mechanism (RC_2017_06).

Rule Change Commencement Day: Means the Trading Day when the New Rules come into effect (as determined by the Rule Change Panel under clause 2.8.12).

Rule Change Commencement Month: Means the Trading Month in which the Rule Change Commencement Day falls.

1.26.2. Prior to the Rule Change Commencement Day, notwithstanding that the Pre-Amended Rules continue to apply, each Rule Participant must perform all obligations imposed on that Rule Participant under the Post-Amended Rules, in relation to the Rule Change Commencement Month and subsequent Trading Months, that, if the Post-Amended Rules were in force, the Rule Participant would have been required to perform under the Post-Amended Rules. This includes but is not limited to obligations relating to:

(a) publication of Indicative Individual Reserve Capacity Requirements under clause 4.1.23C; and

(b) Capacity Credit Allocations under sections 9.4 and 9.5.

1.26.3. Prior to the Rule Change Commencement Day, notwithstanding that the Pre-Amended Rules continue to apply, each Rule Participant may perform any of the discretionary actions that the Rule Participant is permitted to perform under the Post-Amended Rules, in relation to the Rule Change Commencement Month and subsequent Trading Months, that, if the Post-Amended Rules were in force, the Rule Participant would be permitted to perform under the Post-Amended Rules.

1.26.4 AEMO must determine and publish the 12 Peak SWIS Trading Intervals for each Hot Season for which the 12 Peak SWIS Trading Intervals will be required for the determination of Individual Reserve Capacity Requirements (including the assessment of Non-Temperature Dependent Loads) under the Post-Amended Rules by the time that is the later of:

(a) five Business Days after the commencement of this section 1.26; and

(b) the time specified in clause 4.1.23A of the Post-Amended Rules for the relevant Hot Season.

1.26.5. AEMO must determine and publish the 4 Peak SWIS Trading Intervals for each Trading Month for which the 4 Peak SWIS Trading Intervals will be required for the determination of Individual Reserve Capacity Requirements (including the assessment of Non-Temperature Dependent Loads) under the Post-Amended Rules by the time that is the later of:

(a) five Business Days after the commencement of this section 1.26; and

(b) the time specified in clause 4.1.23B of the Post-Amended Rules for the relevant Trading Month.

1.26.6. AEMO must, as soon as practicable, publish an updated settlement cycle timeline for the Financial Year in which the Post-Amended Rules come into effect that meets the requirements under clause 9.16.2 of the Post-Amended Rules for the Trading Months in the Financial Year that will be settled under the Post-Amended Rules.

1.26.7. If before the Rule Change Commencement Day, notwithstanding that the Pre-Amended Rules continue to apply, a Rule Participant performs an obligation under the Post-Amended Rules under clause 1.26.2, then to the extent that the obligation is performed, the Rule Participant is not required to perform any equivalent obligation under the Pre-Amended Rules to the extent that these obligations relate to the Rule Change Commencement Month or subsequent Trading Months.

1.26.8. If before the Rule Change Commencement Day, notwithstanding that the Pre-Amended Rules continue to apply, a Rule Participant is required to perform an obligation that relates to the Rule Change Commencement Month or subsequent Trading Months that it will not be required to perform under the Post-Amended Rules, the Rule Participant is not required to perform the obligation to the extent that it relates to the Rule Change Commencement Month or subsequent Trading Months and to the extent that the obligation will not apply under the Post-Amended Rules.

1.26.9. From the Rule Change Commencement Day, notwithstanding that the Post-Amended Rules apply:

(a) each Rule Participant must perform all obligations imposed on that Rule Participant under the Pre-Amended Rules, arising in relation to each Trading Month up to but excluding the Rule Change Commencement Month, that, if the Pre-Amended Rules were in force, the Rule Participant would have been required to perform under the Pre-Amended Rules; and

(b) if the Post-Amended Rules require recalculation of the Individual Reserve Capacity Requirements for a Trading Month prior to the Rule Change

Commencement Month, then the Post-Amended Rules do not apply to the extent that it would recalculate the Individual Reserve Capacity Requirements for that Trading Month.

1.26.10. From the Rule Change Commencement Day, notwithstanding that the Post-Amended Rules apply, each Rule Participant may perform any of the discretionary actions that the Rule Participant is permitted to perform under the Pre-Amended Rules, in relation to each Trading Month up to but excluding the Rule Change Commencement Month, that, if the Pre-Amended Rules were in force, the Rule Participant would have been permitted to perform under the Pre-Amended Rules.

1.27. Deferral of dates for the 2018 Reserve Capacity Cycle

1.27.1. Notwithstanding any other provision of these ESM Rules, the operation of the following clauses is modified in respect of the 2018 Reserve Capacity Cycle as follows:

(a) clause 4.1.11(b) is modified so that AEMO must cease to accept lodgement of applications for certification of Reserve Capacity for the 2018 Reserve Capacity Cycle in accordance with clause 4.9.1 from 5:00 PM on 28 February 2019;

(b) clause 4.1.12(b) is modified so that AEMO must notify each applicant for certification of Reserve Capacity of the Certified Reserve Capacity to be assigned by 5:00 PM on 29 April 2019;

(c) clause 4.1.13(b)(i) is modified so that each Market Participant must provide to AEMO any Reserve Capacity Security required in accordance with clause 4.13.1 not later than 5:00 PM on 13 May 2019 if any of the Facility's Certified Reserve Capacity is specified to be traded bilaterally in accordance with clause 4.14.1(c) or acquired by AEMO under clause 4.14.1(ca) or if the Facility is subject to a Network Control Service Contract;

(d) clause 4.1.13(b)(ii) is modified so that each Market Participant must provide to AEMO any Reserve Capacity Security required in accordance with clause 4.13.1 not later than 5:00 PM on 24 May 2019 if any of the Facility's Certified Reserve Capacity is specified to be offered into the Reserve Capacity Auction in accordance with clause 4.14.1(a) and where clause 4.1.13(b)(i) does not apply;

(e) clause 4.1.14(c) is modified so that each Market Participant holding Certified Reserve Capacity for the 2018 Reserve Capacity Cycle must provide to AEMO notification in accordance with clause 4.14.1 as to how its Certified Reserve Capacity will be dealt with not later than 5:00 PM on 13 May 2019;

(f) clause 4.1.15 is modified so that AEMO must confirm to each Market Participant in accordance with clause 4.14.9 the amount of Certified

Reserve Capacity that can be traded from its Facilities by 5:00 PM on 14 May 2019;

(g) clause 4.1.15A is modified so that AEMO must publish the Certified Reserve Capacity for each Facility in accordance with clause 4.9.9A by 5:00 PM on 15 May 2019;

(h) clause 4.1.16(c) is modified so that AEMO must publish the information required by clauses 4.15.1 and 4.15.2 pertaining to whether or not a Reserve Capacity Auction is required by 5:00 PM on 15 May 2019;

(i) clause 4.1.16A is modified so that if a Reserve Capacity Auction is cancelled, AEMO must assign Capacity Credits in accordance with clause 4.20.5A(a) and make the determination referred to in clause 4.1.16A(b) by 5.00 PM on 15 May 2019;

(j) clause 4.1.17(a)(iii) is modified so that, if a Reserve Capacity Auction proceeds, then AEMO must accept submission of Reserve Capacity Offers from Market Participants in accordance with clause 4.17.2 from 9:00 AM on 17 May 2019;

(k) clause 4.1.17(b)(iii) is modified so that, if a Reserve Capacity Auction proceeds, then AEMO must accept submission of Reserve Capacity Offers from Market Participants in accordance with clause 4.17.2 until 5:00 PM on 30 May 2019;

(l) clause 4.1.18(a)(iii) is modified so that, if a Reserve Capacity Auction proceeds, AEMO must run the Reserve Capacity Auction on 31 May 2019;

(m) clause 4.1.20 is modified so that each Market Participant holding Certified Reserve Capacity which has been scheduled by AEMO in a Reserve Capacity Auction must provide to AEMO notification, in accordance with clause 4.20, of how many Capacity Credits each Facility will provide not later than 5:00 PM on 6 June 2019;

(n) clause 4.1.21 is modified so that a Market Participant may apply to AEMO under clause 4.13.2A for a recalculation of the amount of Reserve Capacity Security required to be held by AEMO for a Facility in accordance with clause 4.13.2(b) after 5:00 PM on 11 June 2019; and

(o) clause 4.1.21A is modified so that AEMO must, in the event that a Reserve Capacity Auction was required, assign Capacity Credits in accordance with clause 4.20.5A not later than 5:00 PM on 11 June 2019.

1.27.2. Nothing in clause 1.27.1 shall affect the operation of Chapter 4 insofar as the clauses of Chapter 4 apply to a Reserve Capacity Cycle other than the 2018 Reserve Capacity Cycle.

1.28. AEMO to Provide Information to the Minister

1.28.1. At any time before 1 July 2021, the Minister may, by written notice, request AEMO to provide information or documents to the Minister or a person nominated by the Minister by the date and time specified in the notice where:

(a) the Minister has reasonable grounds for believing the information or documents are in AEMO's possession or control including information which a Rule Participant has provided AEMO regardless of the assigned confidentiality status of the information or documents; and

(b) the information or documents are requested for the purpose of delivering the Western Australian Government's Energy Transformation Strategy.

1.28.2. Before issuing a notice under clause 1.28.1, the Minister must consult with AEMO about the scope of the request and the time by which the information or documents must be provided and take into account that consultation.

1.28.3 The Minister may delegate the power to request information or documents under clause 1.28.1 of these ESM Rules by written notice and any request is to be taken to have been made in accordance with the terms of the delegation, unless the contrary is shown.

1.28.4 Subject to the Minister or their delegate, amending the scope of the request or extending the timeframe by which the information or documents requested are to be provided in a notice issued under clause 1.28.1, AEMO must comply with the request before the date and time specified in the notice.

1.28.5 The Minister must treat information or documents provided by AEMO under this section 1.28 as confidential and must not publish any of the information provided unless the information is published in a form that:

(a) does not identify the Market Participant or Market Participants to which the information or documents relates or concerns; and

(b) the relevant Market Participant or Market Participants cannot be reasonably ascertained as a result of publication of the information or documents.

1.28.6 Any information or documents provided under this section must only be used for the purpose of delivering the Western Australian Government's Energy Transformation Strategy, and may only be disclosed to another person:

(a) where the person is directly involved in the delivery of the Western Australian Government's Energy Transformation Strategy; and

(b) the person agrees to, or is otherwise bound by, terms that restrict the use, publication and disclosure of the information or documents on substantially the same terms as this section 1.28.

1.29 Transitional Provisions – DSM Reserve Capacity Security

1.29.1. Section 4.13A applies to the 2019 Reserve Capacity Cycle and onwards.

1.29.2. AEMO is required to complete the Procedure Change Process to document all of the processes referred to in clause 4.13A.23 in a WEM Procedure no later than 1 July 2020.

1.29.3. Subject to clause 1.29.4, a Market Participant cannot make a request for the release or waiver of DSM Reserve Capacity Security in accordance with clause 4.13A.18 until after 1 October 2021.

1.29.4. Notwithstanding the requirements of section 4.13A, AEMO may, by notice in writing:

(a) exempt a Market Participant with a Demand Side Programme that was assigned Capacity Credits for the 2019 Reserve Capacity Cycle from the requirement to provide DSM Reserve Capacity Security; and

(b) revoke an exemption granted under clause 1.29.4(a) in accordance with clause 4.13A.21.

1.29.5. AEMO may grant an exemption in accordance with clause 1.29.4(a) where it:

(a) is satisfied that the Demand Side Programme has fulfilled its Reserve Capacity Obligations for the 2016 Reserve Capacity Cycle; or

(b) considers that, as at the date of the proposed exemption, the Demand Side Programme will be able to continue to meet its Reserve Capacity Obligations.

1.29.6. For the purposes of section 4.13A, an exemption granted under clause 1.29.4(a) is deemed to be:

(a) a request by the relevant Market Participant under clause 4.13A.18(b); and

(b) a determination by AEMO under clause 4.13A.19(a) to waive the requirement to give AEMO the benefit of DSM Reserve Capacity Security.

1.30. Specific Transitional Provisions for the 2021 Capacity Year – Operational Matters

1.30.1. In this section 1.30:

Pre-Amended Rules: Means the ESM Rules as in force immediately before the RCM Pricing Amendments come into effect.

Post-Amended Rules: Means the ESM Rules as in force immediately after the RCM Pricing Amendments come into effect.

RCM Pricing Amendments: Means the Amending Rules that will commence on the RCM Pricing Amendments Commencement Day made by the Minister under

regulation 7(5) of the ESM Regulations by a notice published in the Government Gazette.

RCM Pricing Amendments Commencement Day: Means the Trading Day commencing at 8:00 AM on 1 October 2021.

Rule Change Commencement Month: Means the Trading Month in which the RCM Pricing Amendments Commencement Day falls.

1.30.2. Before 8:00 AM on the RCM Pricing Amendments Commencement Day, notwithstanding that the Pre-Amended Rules continue to apply, each Rule Participant must perform all obligations imposed on that Rule Participant under the Post-Amended Rules, in relation to the RCM Pricing Amendments Commencement Day and subsequent Trading Days, that, if the Post-Amended Rules were in force, the Rule Participant would have been required to perform under the Post-Amended Rules. This includes, but is not limited to, obligations relating to:

(a) Individual Reserve Capacity Requirements under clause 4.28.8;

(b) a Non-Balancing Dispatch Merit Order under section 6.12;

(c) a Dispatch Instruction or Operating Instruction under Chapter 7; and

(d) a Dispatch Advisory under section 7.11.

1.30.3. If before 8:00 AM on the RCM Pricing Amendments Commencement Day, notwithstanding that the Pre-Amended Rules continue to apply, a Rule Participant performs an obligation under the Post-Amended Rules under clause 1.30.2, then to the extent that the obligation is performed, the Rule Participant is not required to perform any equivalent obligation under the Pre-Amended Rules to the extent that these obligations relate to the RCM Pricing Amendments Commencement Day or subsequent Trading Days.

1.30.4. Before 8:00AM on the RCM Pricing Amendments Commencement Day, notwithstanding that the Pre-Amended Rules continue to apply, a Rule Participant may perform any of the discretionary actions that the Rule Participant is permitted to perform under the Post-Amended Rules, in relation to the Rule Change Commencement Month and subsequent Trading Months, that, if the Post-Amended Rules were in force, the Rule Participant would be permitted to perform under the Post-Amended Rules.

1.30.5 Capacity Credit Allocations that are made by a Market Participant prior to the RCM Pricing Amendments Commencement Day for the Rule Change Commencement Month or any subsequent Trading Months must be made by the Market Participant in respect of a Facility in accordance with the Post-Amended Rules.

1.30.6. If before 8:00 AM on the RCM Pricing Amendments Commencement Day, notwithstanding that the Pre-Amended Rules continue to apply, a Rule Participant

is required to perform an obligation that relates to the RCM Pricing Amendments Commencement Day or any subsequent Trading Days that it will not be required to perform under the Post-Amended Rules, the Rule Participant is not required to perform the obligation to the extent that:

(a) it relates to the RCM Pricing Amendments Commencement Day or any subsequent Trading Days; and

(b) to the extent that the obligation will not apply under the Post-Amended Rules.

1.30.7. After 8:00 AM on the RCM Pricing Amendments Commencement Day, notwithstanding that the Post-Amended Rules apply, each Rule Participant must perform all obligations imposed on that Rule Participant under the Pre-Amended Rules, arising in relation to each Trading Interval (or part of a Trading Interval) in a Trading Day, each Trading Day (or part of a Trading Day) or each Trading Month (or part of a Trading Month) up to but excluding the RCM Pricing Amendments Commencement Day, that, if the Pre-Amended Rules were in force, the Rule Participant would have been required to perform under the Pre-Amended Rules. This includes, but is not limited to, obligations relating to:

(a) administration of the market under Chapter 2;

(b) administration of the Reserve Capacity Mechanism under Chapter 4;

(c) dispatch under Chapter 7;

(d) settlement under Chapter 9; and

(e) treatment of information under Chapter 10.

1.30.8. From the RCM Pricing Amendments Commencement Day, notwithstanding that the Post-Amended Rules apply, each Rule Participant may perform any of the discretionary actions that the Rule Participant is permitted to perform under the Pre-Amended Rules, in relation to each Trading Month up to but excluding the Rule Change Commencement Month, that, if the Pre-Amended Rules were in force, the Rule Participant would have been permitted to perform under the Pre-Amended Rules.

1.30.9 Notwithstanding clause 4.5.13, the Statement of Opportunities Report for the 2021 Reserve Capacity Cycle does not need to include information that is not required to be included in a Statement of Opportunities Report under the Post-Amended Rules.

1.31. Transitional Provisions – Review of Reserve Capacity Price Factors

1.31.1. Clause 2.26.3A is modified so that the Economic Regulation Authority must not carry out the first review required by clause 2.26.3A before 30 September 2022.

1.32. Transitional Provisions – Publishing Information in Clause 4.20.5AA

1.32.1. For the purposes of the 2019 Reserve Capacity Cycle, notwithstanding clause 4.1.18A, AEMO must publish the summary of information in clause 4.20.5AA within 10 Business Days of the prices referred to in that clause having been determined by AEMO.

1.33. Specific Transitional Provisions – Network Congestion and Constraint Equations

1.33.1. To facilitate the implementation of Wholesale Electricity Market and Constrained Network Access Reform, prior to the New WEM Commencement Day:

(a) AEMO must:

i. develop the procedures described in clauses 2.27A.10 and 2.27B.8;

ii. consult with Rule Participants and other relevant stakeholders in developing the procedures described in clauses 2.27A.10 and 2.27B.8;

iii. formulate Constraint Equations:

1. in accordance with the relevant procedure required to be developed by AEMO under clause 1.33.1(a)(i); and

2. using the Reference Node to apply from the New WEM Commencement Day;

iv. publish the Constraints Library and any other information relating to Constraints that AEMO determines, acting reasonably, should be published prior to the New WEM Commencement Day; and

v. provide the information specified under clause 4.4B.2 to each Network Operator in accordance with the relevant procedure required to be developed by AEMO under clause 1.33.1(a)(i) for AEMO to complete the activities described in that WEM Procedure; and

(b) each Network Operator must:

i. develop the procedure described in clause 2.27A.11;

ii. consult with Rule Participants and other relevant stakeholders in developing the procedure described in clause 2.27A.11;

iii. provide Limit Advice, developed in accordance with the procedure required to be developed by each Network Operator in accordance with clause 1.33.1(b)(i), to AEMO in sufficient time for AEMO to complete the activities described in clauses 1.33.1(a)(iii) and 1.33.1(a)(iv);

iv. provide any clarifications, updates or further information on Limit Advice, or further Limit Advice, as may be reasonably requested by AEMO;

v. do anything else reasonably necessary or desirable to enable AEMO to undertake the activities described in clause 1.33.1(a);

vi. provide the information specified under clause 4.4B.5 to AEMO in accordance with the relevant procedure required to be developed by AEMO under clause 1.33.1(a)(i) for AEMO to complete the activities described in that WEM Procedure; and

vii. develop RCM Limit Advice in accordance with the relevant procedure required to be developed by each Network Operator in accordance with clause 1.33.1(b)(i) for AEMO to complete the activities described in the WEM Procedure required to be developed by AEMO under clause 1.33.1(a)(i); and

(c) the Economic Regulation Authority may do anything reasonably necessary or desirable to prepare for its function of monitoring compliance with the obligations in sections 2.27A and 2.27B.

1.33.2. Each procedure that is required to be developed under clauses 1.33.1(a)(i) and 1.33.1(b)(i) is a Transitional Procedure which:

(a) without limiting clauses 1.33.1(a)(ii) and 1.33.1(b)(ii), may, but is not required to, be developed in accordance with the Procedure Change Process; and

(b) is, from the New WEM Commencement Day, deemed to be the relevant WEM Procedure required to be developed under section 2.27A or 2.27B.

1.33.3. Except in respect to the obligations under this section 1.33, prior to the New WEM Commencement Day, AEMO and each Network Operator are not required to:

(a) comply with the obligations in sections 2.27A and 2.27B; or

(b) respond to any requests issued by the Economic Regulation Authority under clause 2.27C.7.

1.34. Calculation of Loss Factors – Change of Reference Node

1.34.1. Without limiting clauses 2.27.6 and 2.27.7:

(a) by 1 June immediately prior to the New WEM Commencement Day, each Network Operator must, in accordance with the WEM Procedure specified in clause 2.27.17:

i. recalculate the Loss Factors for its connection points using the Reference Node to apply from the New WEM Commencement Day; and

ii. provide the updated Transmission Loss Factors and Distribution Loss Factors (as applicable) for each Loss Factor Class in the Network Operator's classification system to AEMO; and

(b) AEMO must publish the Transmission Loss Factors and Distribution Loss Factors provided by a Network Operator in accordance with clause 1.34.1(a) within five Business Days after receiving them.

1.34.2. For the purposes of clause 2.27.8, the Transmission Loss Factors and Distribution Loss Factors that are recalculated and published in accordance with clause 1.34.1 apply from the New WEM Commencement Day.

1.35. Specific Transitional Provisions for the First Review of the Minimum STEM Price

1.35.1. Notwithstanding clause 6.20.13, the Economic Regulation Authority must commence the first review of the Minimum STEM Price under clause 6.20.13 by 1 February 2021.

1.35.2. Notwithstanding clause 6.20.14, for the first review of the Minimum STEM Price under clause 6.20.13(a), the time period for which the Economic Regulation Authority must consider the matters referred to in clause 6.20.14 is at least the period beginning on 1 October 2019 until the commencement of the first review.

1.36. Specific Transitional Provisions – WEM Procedures for WEM Reforms Tranche 1 Amending Rules

1.36.1. In this section 1.36:

Pre-Amended Rules: Means the ESM Rules as in force immediately before the Tranche 1 Commencement Date.

Post-Amended Rules: Means the ESM Rules as in force immediately after the Tranche 1 Commencement Date.

WEM Reforms Tranche 1 Amending Rules: Means the Amending Rules made by the Minister under regulation 7(5) of the ESM Regulations by a notice published in the Government Gazette as part of the program of work for the Wholesale Electricity Market and Constrained Network Access Reform.

1.36.2. Before 8:00 AM on the Tranche 1 Commencement Date, notwithstanding that the Pre-Amended Rules continue to apply, AEMO, each Network Operator and the Coordinator must perform each of their obligations in this section 1.36, as if the Post-Amended Rules were in force.

1.36.3. AEMO must, without limiting clause 1.36.6:

(a) develop each of the procedures it is responsible for in accordance with the WEM Reforms Tranche 1 Amending Rules prior to the Tranche 1 Commencement Date; and

(b) consult with Rule Participants and other relevant stakeholders in developing the procedures it is responsible for in accordance with the WEM Reforms Tranche 1 Amending Rules.

1.36.4. Each Network Operator must, without limiting clause 1.36.6:

(a) develop each of the procedures it is responsible for in accordance with the WEM Reforms Tranche 1 Amending Rules prior to the Tranche 1 Commencement Date; and

(b) consult with Rule Participants and other relevant stakeholders in developing the procedures it is responsible for in accordance with the WEM Reforms Tranche 1 Amending Rules.

1.36.5. The Coordinator must, without limiting clause 1.36.6:

(a) develop each of the procedures it is responsible for in accordance with the WEM Reforms Tranche 1 Amending Rules prior to the Tranche 1 Commencement Date; and

(b) consult with Rule Participants and other relevant stakeholders in developing the procedures it is responsible for in accordance with the WEM Reforms Tranche 1 Amending Rules.

1.36.6. Each WEM Procedure that is required to be developed under clauses 1.36.3(a), 1.36.4(a) and 1.36.5(a):

(a) without limiting clauses 1.36.3(b), 1.36.4(b) and 1.36.5(b), may, but is not required to, be developed in accordance with the Procedure Change Process;

(b) is, from the Tranche 1 Commencement Date, deemed to be the relevant WEM Procedure required to be developed under the relevant clause in the WEM Reforms Tranche 1 Amending Rules; and

(c) may, with industry consultation, be amended or replaced with a revised WEM Procedure without undertaking the Procedure Change Process by the party responsible for developing the WEM Procedure until six months after the New WEM Commencement Day provided that, in determining a commencement date for the revised WEM Procedure, the party responsible for developing the WEM Procedure gives reasonable consideration of an appropriate commencement date that minimises the impact of the changes to the WEM Procedure on Rule Participants. To avoid doubt, after 6 months from the New WEM Commencement Day, any amendment or replacement of the WEM Procedure must be made in accordance with the Procedure Change Process.

1.36.7. In developing, amending or replacing a WEM Procedure in accordance with this section 1.36, AEMO, a Network Operator or the Coordinator, as applicable, must:

(a) publish a call for submissions on the proposed or revised WEM Procedure, and the due date for submissions must not be less than 15 Business Days from the date the proposed or revised WEM Procedure is published; and

(b) publish, together with the final WEM Procedure, a summary of the submissions received and the response of AEMO, the Network Operator or the Coordinator, as applicable, to the issues raised in those submissions.

1.36A. Specific Transitional Provisions – Deferral of Key Events for Year 1 of the 2021 Reserve Capacity Cycle

1.36A.1. Notwithstanding clause 4.1.1C, for the 2021 Reserve Capacity Cycle, AEMO has the power to modify and extend the dates and times for key events that are scheduled to occur in Year 1 of that Reserve Capacity Cycle only in accordance with this section 1.36A.

1.36A.2. By 5:00 PM on 1 March 2021, AEMO must determine and publish a timetable on the WEM Website setting out the modified or extended dates and times for each of the key events specified in clause 1.36A.6 for the 2021 Reserve Capacity Cycle. The modified or extended dates or times take effect from the date that the timetable is published.

1.36A.3. Subject to clause 1.36A.7, AEMO may further modify or extend the dates or times for any one or more of the key events specified in clause 1.36A.6 by publishing an updated timetable on the WEM Website. Any such further modified or extended dates and times take effect from the date that the updated timetable is published.

1.36A.4. In determining the modified or extended dates and times under clauses 1.36A.2 or 1.36A.3, AEMO must:

(a) seek to preserve investment certainty for Market Participants and other interested stakeholders by allowing a reasonable time for decisions to be made relative to the modified or extended timelines; and

(b) minimise the overlap of:

i. key events in Year 1 of the 2021 Reserve Capacity Cycle;

ii. key events in Year 1 of the 2022 Reserve Capacity Cycle; and

iii. commencement of the new fully co-optimised energy and Essential System Service markets on the New WEM Commencement Day.

1.36A.5. In determining the modified or extended dates and times under clauses 1.36A.2 and 1.36A.3, AEMO may consult with Market Participants and other interested stakeholders prior to setting or amending, as applicable, the modified or extended dates and times.

1.36A.6. Notwithstanding any other provision of these ESM Rules, the operation of the following clauses is amended in respect of the 2021 Reserve Capacity Cycle as follows:

(a) clause 4.1.4 is amended so that AEMO must advertise a Request for Expressions of Interest in accordance with clause 4.2.4 by the date and time specified in the timetable published by AEMO under clause 1.36A.2 and as may be updated by AEMO in accordance with clause 1.36A.3;

(b) clause 4.1.5 is amended so that the potential Reserve Capacity providers may respond to the Request for Expressions of Interest in accordance with section 4.2 by the date and time specified in the timetable published by AEMO under clause 1.36A.2 and as may be updated by AEMO in accordance with clause 1.36A.3;

(c) clause 4.1.6 is amended so that AEMO must publish a summary of the responses to its Request for Expressions of Interest in accordance with clause 4.2.7 by the date and time specified in the timetable published by AEMO under clause 1.36A.2 and as may be updated by AEMO in accordance with clause 1.36A.3;

(d) clause 4.1.7 is amended so that AEMO must accept lodgement of applications for certification of Reserve Capacity in accordance with clause 4.9.1 from the date and time specified in the timetable published by AEMO under clause 1.36A.2 and as may be updated by AEMO in accordance with clause 1.36A.3;

(e) clause 4.1.8 is amended so that AEMO must publish a Statement of Opportunities Report produced in accordance with the Long Term PASA process described in clause 4.5.11 by the date and time specified in the timetable published by AEMO under clause 1.36A.2 and as may be updated by AEMO in accordance with clause 1.36A.3;

(f) clause 4.1.10 is amended so that AEMO must publish on the WEM Website the Reserve Capacity Information Pack in accordance with clause 4.7.2 by the date and time specified in the timetable published by AEMO under clause 1.36A.2 and as may updated by AEMO in accordance with clause 1.36A.3;

(g) clause 4.1.11 is amended so that AEMO must cease to accept lodgement of applications for certification of Reserve Capacity in accordance with clause 4.9.1 from the date and time specified in the timetable published by AEMO under clause 1.36A.2 and as may be updated by AEMO in accordance with clause 1.36A.3;

(h) clause 4.1.12 is amended so that AEMO must notify each applicant for certification of Reserve Capacity of the Certified Reserve Capacity to be assigned by the date and time specified in the timetable published by

AEMO under clause 1.36A.2 and as may be updated by AEMO in accordance with clause 1.36A.3;

(i) clause 4.1.13 is amended so that each Market Participant must provide to AEMO any Reserve Capacity Security required in accordance with clause 4.13.1 and any DSM Reserve Capacity Security required in accordance with clause 4.13A.1 not later than the date and time specified in the timetable published by AEMO under clause 1.36A.2 and as may be updated by AEMO in accordance with clause 1.36A.3;

(j) clause 4.1.14 is amended so that each Market Participant holding Certified Reserve Capacity for the Reserve Capacity Cycle must provide to AEMO notification in accordance with clause 4.14.1 as to how its Certified Reserve Capacity will be dealt with not later than the date and time specified in the timetable published by AEMO under clause 1.36A.2 and as may be updated by AEMO in accordance with clause 1.36A.3;

(k) clause 4.1.15 is amended so that AEMO must confirm to each Market Participant in accordance with clause 4.14.9 the amount of Certified Reserve Capacity that can be traded bilaterally from its Facilities by the date and time specified in the timetable published by AEMO under clause 1.36A.2 and as may be updated by AEMO in accordance with clause 1.36A.3;

(l) clause 4.1.15A is amended so that AEMO must publish the Certified Reserve Capacity for each Facility in accordance with clause 4.9.9A by the date and time specified in the timetable published by AEMO under clause 1.36A.2 and as may be updated by AEMO in accordance with clause 1.36A.3;

(m) clause 4.1.16A is amended so that AEMO must:

i. assign Capacity Credits in accordance with clause 4.20.5A(a) as set out in clause 4.1.16A(a); and

ii. determine in accordance with clause 4.20.5A(aA) whether the Reserve Capacity Requirement has been met or exceeded with the Capacity Credits assigned for Year 3 as set out in clause 4.1.16A(b),

by the date and time specified in the timetable published by AEMO under clause 1.36A.2, and as may be updated by AEMO in accordance with clause 1.36A.3, provided that, subject to clause 1.36A.7, the date is not later than 30 June 2022;

(n) clause 4.1.18A is amended so that AEMO must publish the summary of information described in clause 4.20.5AA by the date and time specified in the timetable (which must be the same date and time as specified in the timetable for performance of the obligations under clause 4.1.16A)

published by AEMO under clause 1.36A.2 and as may be updated by AEMO in accordance with clause 1.36A.3;

(o) clause 4.1.19 is amended so that AEMO must commence the review of the Benchmark Reserve Capacity Price as required by clause 4.16.3 and complete the review in accordance with clause 4.1.19 by the date and time specified in the timetable (which must be the same date and time as specified in the timetable for performance of the obligations under clause 4.1.4) published by AEMO under clause 1.36A.2 and as may be updated by AEMO in accordance with clause 1.36A.3;

(p) clause 4.1.21 is amended so that a Market Participant may apply to AEMO under clause 4.13.2A for a recalculation of the amount of Reserve Capacity Security required to be held by AEMO for a Facility in accordance with clause 4.13.2(b) or under clause 4.13A.8 for a recalculation of the amount of DSM Reserve Capacity Security required to be held by AEMO for a Demand Side Programme in accordance with clauses 4.13A.1 or 4.13A.4, as applicable, by the date and time specified in the timetable published by AEMO under clause 1.36A.2 and as may be updated by AEMO in accordance with clause 1.36A.3; and

(q) clause 4.1.21A is amended so that each relevant Market Participant must notify AEMO of the number of Capacity Credits that are to be associated with each component of their Facility for the Capacity Year in accordance with clause 4.20.16 by the date and time specified in the timetable published by AEMO under clause 1.36A.2 and as may be updated by AEMO in accordance with clause 1.36A.3.

1.36A.7. If AEMO wishes to modify or extend the date for completion of the key events referred to in clause 1.36A.6(m) to a date after 30 June 2022, then AEMO must, without limiting its obligations under clause 2.21.6:

(a) consult with Market Participants and other interested stakeholders on the proposed modified or extended date;

(b) call for submissions; and

(c) publish on the WEM Website:

i. AEMO's decision on the modified or extended date;

ii. any submissions received; and

iii. an updated timetable in accordance with clause 1.36A.3.

1.36A.8. Notwithstanding the time and date specified in clause 4.1.4, for the 2021 Reserve Capacity Cycle, AEMO is not required to advertise a Request for Expression of Interest in accordance with section 4.2 for that Reserve Capacity Cycle until the time and date specified in the timetable to be published by AEMO under clause 1.36A.2 and as may be updated by AEMO in accordance with clause 1.36A.3.

1.36A.9. For the 2021 Reserve Capacity Cycle, any clause that refers to a clause amended in accordance with clause 1.36A.6, is to be read in the context of the operation of this section 1.36A and the clause as amended.

1.36A.10. Nothing in this section 1.36A shall affect the operation of Chapter 4 insofar as the clauses of Chapter 4 apply to a Reserve Capacity Cycle other than the 2021 Reserve Capacity Cycle.

1.36B. Specific Transitional Provisions – Deferral of Key Events for Year 1 of the 2022 Reserve Capacity Cycle

1.36B.1. Notwithstanding clause 4.1.1C, for the 2022 Reserve Capacity Cycle, AEMO has the power to modify and extend the dates and times for key events that are scheduled to occur in Year 1 of that Reserve Capacity Cycle only in accordance with this section 1.36B.

1.36B.2. By 5:00 PM on 1 March 2021, AEMO must determine and publish a timetable on the WEM Website setting out the modified or extended dates and times for each of the key events specified in clause 1.36B.6 for the 2022 Reserve Capacity Cycle. The modified or extended dates or times take effect from the date that the timetable is published.

1.36B.2A. If, following the initial publication of the timetable referred to in clause 1.36B.2, clause 1.36B.6 is amended to include a new key event in section 4.1, AEMO must, within 20 Business Days of the amendment commencing, determine and publish an updated timetable to include the modified or extended date and time, as applicable, for the new key event.

1.36B.3. Subject to clause 1.36B.7, AEMO may further modify or extend the dates or times for any one or more of the key events specified in clause 1.36B.6 by publishing an updated timetable on the WEM Website. Any such further modified or extended dates and times take effect from the date that the updated timetable is published.

1.36B.4. In determining the modified or extended dates and times under clause 1.36B.2 or 1.36B.3, AEMO must:

(a) seek to preserve investment certainty for Market Participants and other interested stakeholders by allowing a reasonable time for decisions to be made relative to the modified or extended timelines; and

(b) minimise the overlap of:

i. key events in Year 1 of the 2021 Reserve Capacity Cycle;

ii. key events in Year 1 of the 2022 Reserve Capacity Cycle; and

iii. commencement of the new fully co-optimised energy and Essential System Service markets on the New WEM Commencement Day.

1.36B.5. In determining the modified or extended dates and times under clauses 1.36B.2 and 1.36B.3, AEMO may consult with Market Participants and other interested stakeholders prior to setting or amending, as applicable, the modified or extended dates and times.

1.36B.6. Notwithstanding any other provision of these ESM Rules the operation of the following clauses is amended in respect of the 2022 Reserve Capacity Cycle as follows:

(a) clause 4.1.4 is amended so that AEMO must advertise a Request for Expressions of Interest in accordance with clause 4.2.4 by the date and time specified in the timetable published by AEMO under clause 1.36B.2 and as may be updated by AEMO in accordance with clause 1.36B.3;

(b) clause 4.1.5 is amended so that the potential Reserve Capacity providers may respond to the Request for Expressions of Interest in accordance with section 4.2 by the date and time specified in the timetable published by AEMO under clause 1.36B.2 and as may be updated by AEMO in accordance with clause 1.36B.3;

(c) clause 4.1.6 is amended so that AEMO must publish a summary of the responses to its Request for Expressions of Interest in accordance with clause 4.2.7 by the date and time specified in the timetable published by AEMO under clause 1.36B.2 and as may be updated by AEMO in accordance with clause 1.36B.3;

(d) clause 4.1.7 is amended so that AEMO must accept lodgement of applications for certification of Reserve Capacity in accordance with clause 4.9.1 from the date and time specified in the timetable published by AEMO under clause 1.36B.2 and as may be updated by AEMO in accordance with clause 1.36B.3;

(e) clause 4.1.8 is amended so that AEMO must publish a Statement of Opportunities Report produced in accordance with the Long Term PASA process described in clause 4.5.11 by the date and time specified in the timetable published by AEMO under clause 1.36B.2 and as may be updated by AEMO in accordance with clause 1.36B.3;

(f) clause 4.1.10 is amended so that AEMO must publish on the WEM Website the Reserve Capacity Information Pack in accordance with clause 4.7.2 by the date and time specified in the timetable published by AEMO under clause 1.36B.2 and as may be updated by AEMO in accordance with clause 1.36B.3;

(g) clause 4.1.11 is amended so that AEMO must cease to accept lodgement of applications for certification of Reserve Capacity in accordance with clause 4.9.1 from the date and time specified in the timetable published by AEMO under clause 1.36B.2 and as may be updated by AEMO in accordance with clause 1.36B.3;

(h) clause 4.1.12 is amended so that AEMO must notify each applicant for certification of Reserve Capacity of the Certified Reserve Capacity to be assigned by the date and time specified in the timetable published by AEMO under clause 1.36B.2 and as may be updated by AEMO in accordance with clause 1.36B.3;

(i) clause 4.1.13 is amended so that each Market Participant must provide to AEMO any Reserve Capacity Security required in accordance with clause 4.13.1 and any DSM Reserve Capacity Security required in accordance with clause 4.13A.1 not later than the date and time specified in the timetable published by AEMO under clause 1.36B.2 and as may be updated by AEMO in accordance with clause 1.36B.3;

(j) clause 4.1.14 is amended so that each Market Participant holding Certified Reserve Capacity for the Reserve Capacity Cycle must provide to AEMO notification in accordance with clause 4.14.1 as to how its Certified Reserve Capacity will be dealt with not later than the date and time specified in the timetable published by AEMO under clause 1.36B.2 and as may be updated by AEMO in accordance with clause 1.36B.3;

(k) clause 4.1.15 is amended so that AEMO must confirm to each Market Participant in accordance with clause 4.14.9 the amount of Certified Reserve Capacity that can be traded bilaterally from its Facilities by the date and time specified in the timetable published by AEMO under clause 1.36B.2 and as may be updated by AEMO in accordance with clause 1.36B.3;

(l) clause 4.1.15A is amended so that AEMO must publish the Certified Reserve Capacity for each Facility in accordance with clause 4.9.9A by the date and time specified in the timetable published by AEMO under clause 1.36B.2 and as may be updated by AEMO in accordance with clause 1.36B.3;

(m) clause 4.1.16A is amended so that AEMO must:

i. assign Capacity Credits in accordance with clause 4.20.5A(a) as set out in clause 4.1.16A(a);

ii. determine in accordance with clause 4.20.5A(aA) whether the Reserve Capacity Requirement has been met or exceeded with the Capacity Credits assigned for Year 3 as set out in clause 4.1.16A(b);

iii. notify each Market Participant of the Network Access Quantity determined for each of its Facilities in accordance with clause 4.15.11; and

iv. publish the information required to be published under clause 4.15.16,

by the date and time specified in the timetable published by AEMO under clause 1.36B.2, and as may be updated by AEMO in accordance with clause 1.36B.3, provided that, subject to clause 1.36B.7, the date is not later than 31 December 2022;

(n) clause 4.1.18A is amended so that AEMO must publish the summary of information described in clause 4.20.5AA by the date and time specified in the timetable (which must be the same date and time as specified in the timetable for performance of the obligations under clause 4.1.16A) published by AEMO under clause 1.36B.2 and as may be updated by AEMO in accordance with clause 1.36B.3;

(o) clause 4.1.19 is amended so that AEMO must commence the review of the Benchmark Reserve Capacity Price as required by clause 4.16.3 and complete the review in accordance with clause 4.1.19 by the date and time specified in the timetable (which must be the same date and time as specified in the timetable for performance of the obligations under clause 4.1.4) published by AEMO under clause 1.36B.2 and as may be updated by AEMO in accordance with clause 1.36B.3;

(p) clause 4.1.21 is amended so that a Market Participant may apply to AEMO under clause 4.13.2A for a recalculation of the amount of Reserve Capacity Security required to be held by AEMO for a Facility in accordance with clause 4.13.2(b) or under clause 4.13A.8 for a recalculation of the amount of DSM Reserve Capacity Security required to be held by AEMO for a Demand Side Programme in accordance with clauses 4.13A.1 or 4.13A.4, as applicable, by the date and time specified in the timetable published by AEMO under clause 1.36B.2 and as may be updated by AEMO in accordance with clause 1.36B.3;

(q) clause 4.1.21A is amended so that each relevant Market Participant must notify AEMO of the number of Capacity Credits that are to be associated with each component of their Facility for the Capacity Year in accordance with clause 4.20.16 by the date and time specified in the timetable published by AEMO under clause 1.36B.2 and as may be updated by AEMO in accordance with clause 1.36B.3;

(qA) clause 4.1.22 is amended so that AEMO must set the number of Capacity Credits to be associated with each component of a Facility in accordance with clause 4.20.17 and publish that information by the date and time specified in the timetable published by AEMO under clause 1.36B.2 and as may be updated by AEMO in accordance with clause 1.36B.3;

(r) clause 4.4B.2 is amended so that AEMO must provide the following information to each relevant Network Operator by the date and time specified in the timetable published by AEMO under clause 1.36B.2 and as may be updated by AEMO in accordance with clause 1.36B.3:

i. details of each Facility specified in an Expression of Interest submitted under clause 4.2.6 for the Reserve Capacity Cycle, including the information in clauses 4.4.1;

ii. details of each Facility for which AEMO has received a notice under clause 4.4A.1 where the intention is for the Facility to cease operation permanently by 1 October of Year 3 of the Reserve Capacity Cycle; and

iii. details of each Facility for which AEMO has received an Early Certified Reserve Capacity application and whether the Facility has nominated to be classified as a Network Augmentation Funding Facility.

(s) clause 4.4B.3 is amended so that each Network Operator must, in respect of its Network, provide its reasonable estimate of the configuration at peak demand, and associated Thermal Network Limits of its Network in accordance with that clause by the date and time specified in the timetable published by AEMO under clause 1.36B.2 and as may be updated by AEMO in accordance with clause 1.36B.3;

(t) clause 4.4B.5 is amended so that each Network Operator must provide the information specified in that clause in respect of its Network to AEMO by the date and time specified in the timetable published by AEMO under clause 1.36B.2 and as may be updated by AEMO in accordance with clause 1.36B.3; and

(u) clause 4.4B.6 is amended so that AEMO must publish the following information in the Constraints Library for the 2022 Reserve Capacity Cycle by the date and time specified in the timetable published by AEMO under clause 1.36B.2 and as may be updated by AEMO in accordance with clause 1.36B.3:

i. the information provided by each Network Operator under clause 4.4B.5; and

ii. the Preliminary RCM Constraint Equations.

1.36B.7. If AEMO wishes to modify or extend the date for completion of the key events referred to in clause 1.36B.6(m) to a date after 31 December 2022, then AEMO must, without limiting its obligations under clause 2.21.6:

(a) consult with Market Participants and other interested stakeholders on the proposed modified or extended date;

(b) call for submissions; and

(c) publish on the WEM Website:

i. AEMO's decision on the modified or extended date;

ii. any submissions received; and

iii. an updated timetable in accordance with clause 1.36B.3.

1.36B.8. For the 2022 Reserve Capacity Cycle, any clause that refers to a clause amended in accordance with clause 1.36B.6, is to be read in the context of the operation of this section 1.36B and the clause as amended.

1.36B.9. Nothing in this section 1.36B shall affect the operation of Chapter 4 insofar as the clauses of Chapter 4 apply to a Reserve Capacity Cycle other than the 2022 Reserve Capacity Cycle.

1.36C. General Transitional Provisions – Staging of Amendments

1.36C.1. In this section 1.36C:

Amending Rules Commencement Day: Means a date, other than the New WEM Commencement Day, by notice published in the Government Gazette, that a Specific Amending Rule commences.

Commenced Amending Rule: Means a Specific Amending Rule that has commenced on an Amending Rules Commencement Day.

Post-Amended Rules: Means the ESM Rules as in force immediately after the most recent Amending Rules Commencement Day.

Pre-Amended Rules: Means the ESM Rules as in force immediately before the most recent Amending Rules Commencement Day.

Specific Amending Rule: Means an Amending Rule made by the Minister under regulation 7(5) of the ESM Regulations (at any time) by a notice published in the Government Gazette as part of the program of work for the Wholesale Electricity Market and Constrained Network Access Reform but excludes an Amending Rule which commences on the New WEM Commencement Day.

WEM Participant: Means the Coordinator, a Rule Participant and the Economic Regulation Authority.

1.36C.2. Before 8:00 AM on an Amending Rules Commencement Day, notwithstanding that the Pre-Amended Rules continue to apply, each WEM Participant must perform all obligations imposed on that WEM Participant under the Post-Amended Rules, in relation to that Amending Rules Commencement Day and subsequent Trading Days, that, if the Post-Amended Rules were in force, the WEM Participant would have been required to perform under the Post-Amended Rules.

1.36C.3. If before 8:00 AM on an Amending Rules Commencement Day, notwithstanding that the Pre-Amended Rules continue to apply, a WEM Participant performs an obligation under the Post-Amended Rules under clause 1.36C.2, then to the extent that the obligation is performed, the WEM Participant is not required to perform any equivalent obligation under the Pre-Amended Rules to the extent that

these obligations relate to that Amending Rules Commencement Day or subsequent Trading Days.

1.36C.4. If before 8:00 AM on an Amending Rules Commencement Day, notwithstanding that the Pre-Amended Rules continue to apply, a WEM Participant is required to perform an obligation that relates to that Amending Rules Commencement Day or subsequent Trading Days that it will not be required to perform under the Post-Amended Rules, the WEM Participant is not required to perform the obligation to the extent that it relates to that Amending Rules Commencement Day or subsequent Trading Days and to the extent that the obligation will not apply under the Post-Amended Rules.

1.36C.5. After 8:00 AM on an Amending Rules Commencement Day, notwithstanding that the Post-Amended Rules apply, each WEM Participant must perform all obligations imposed on that WEM Participant under the Pre-Amended Rules, arising in relation to each Trading Day (or part of a Trading Day) up to but excluding that Amending Rules Commencement Day, that, if the Pre-Amended Rules were in force, the WEM Participant would have been required to perform under the Pre-Amended Rules other than those obligations the WEM Participant is not required to perform pursuant to clause 1.36C.3.

1.36C.6. Where a Commenced Amending Rule requires the operation of one or more Specific Amending Rules that have not yet commenced, then regard may be had to those Specific Amending Rules to interpret or give effect to the Commenced Amending Rule even though the Specific Amending Rules have not yet commenced.

1.36C.7. Where any Commenced Amending Rule requires the operation of ESM Rules which have been amended, repealed or replaced by one or more Commenced Amending Rules, regard may be had to those ESM Rules to interpret or give effect to the Commenced Amending Rule even though those ESM Rules have been amended, repealed or replaced.

1.36D. Specific Transitional Provisions for Publication of Electric Storage Resource Obligation Intervals for the 2021 Reserve Capacity Cycle

1.36D.1. Notwithstanding clause 4.11.3A, for the purposes of the 2021 Reserve Capacity Cycle, AEMO must publish the Electric Storage Resource Obligation Intervals on the WEM Website at least 20 Business Days before the date and time specified in clause 4.1.7, as set in the timetable published by AEMO in accordance with clause 1.36A.2 and as may be updated by AEMO in accordance with clause 1.36A.3.

1.37. Specific Transitional Provisions for Administrative Amendments

1.37.1. In this section 1.37:

Pre-Amended Rules: Means the ESM Rules as in force immediately before the Administrative Amendments come into effect.

Post-Amended Rules: Means the ESM Rules as in force immediately after the Administrative Amendments come into effect.

Administrative Amendments: Means the Amending Rules that will commence at 8:00 AM on the Administrative Amendments Commencement Day made by the Minister under regulation 7(5) of the ESM Regulations by a notice published in the Government Gazette.

Administrative Amendments Commencement Day: Means a day specified by the Minister under regulation 7(5) of the ESM Regulations by a notice published in the Government Gazette.

1.37.2. Where a WEM Procedure refers to System Management (as that term is defined in the Pre-Amended Rules) then:

(a) the relevant Rule Participant responsible for the WEM Procedure must, as soon as practicable after the Administrative Amendments Commencement Day, amend the WEM Procedure to refer to AEMO instead of System Management and make any consequential amendments that AEMO considers reasonably necessary to give effect to the Administrative Amendments without undertaking the Procedure Change Process;

(b) any WEM Procedure which is amended in accordance with clause 1.37.2(a) commences operation on the date and time determined by the relevant Rule Participant responsible for the WEM Procedure and published on the WEM Website; and

(c) until any WEM Procedure is amended and commenced in accordance with clauses 1.37.2(a) and 1.37.2(b), a reference in a WEM Procedure that should be a reference to AEMO having regard to AEMO's functions, including System Operation Functions, rights and obligations under these ESM Rules and any other WEM Procedure, is deemed to be a reference to AEMO.

1.37.3. On and from the Administrative Amendments Commencement Day, all market information that AEMO has set the class of confidentiality status as System Management Confidential in accordance with clause 10.2.1 or section 10.9 of the Pre-Amended Rules, is to be deemed to be the confidentiality status of System Operation Confidential under the Post-Amended Rules.

1.38. Specific Transitional Provisions – Application of Chapter 3A to Network Operators

1.38.1. Notwithstanding the requirements of Chapter 3A, a Network Operator, other than Western Power, is exempt from the requirement to comply with Chapter 3A and

Appendix 12 until such time as it is notified by AEMO, in writing, that it must comply with Chapter 3A and Appendix 12.

1.38.2. AEMO may issue a notice to a Network Operator that it must comply with Chapter 3A and Appendix 12, where:

(a) AEMO has consulted with the Network Operator in respect of the Network Operator's ability to comply with Chapter 3A and Appendix 12; and

(b) AEMO reasonably considers that the Network Operator can comply with Chapter 3A and Appendix 12 on and from the date of the notification.

1.38.3. A notice issued under clause 1.38.2 must specify the time by which the Network Operator is required to comply with Chapter 3A and Appendix 12 which must be no less than six months from the date of the notice.

1.38.4. At the same time AEMO issues a notice to the Network Operator under clause 1.38.2, AEMO must provide a copy of that notice to the Economic Regulation Authority.

1.39. Application of Chapter 3A to Existing Transmission Connected Generating Systems

1.39.1. A Market Participant responsible for an Existing Transmission Connected Generating System is exempt from all of the requirements of section 3A.1, section 3A.2 and sections 3A.5 to 3A.14 other than as set out in sections 1.39 to 1.42 until the time at which the Existing Transmission Connected Generating System ceases to be an Existing Transmission Connected Generating System as set out in clause 1.39.13.

1.39.2. The date by which the Market Participant responsible for an Existing Transmission Connected Generating System must have a Registered Generator Performance Standard for each Technical Requirement for the Transmission Connected Generating System will be the later of:

(a) 31 January 2022; or

(b) any date agreed by the relevant Network Operator and the Market Participant responsible for the Existing Transmission Connected Generating System under clause 1.39.4.

1.39.3. If, by the date set out in clause 1.39.2, a Market Participant responsible for an Existing Transmission Connected Generating System does not have a Registered Generator Performance Standard for each Technical Requirement then the relevant Network Operator must commence the dispute resolution mechanism contained in section 1.42.

1.39.4. Subject to clause 1.39.5, a Market Participant may request the date referred to in clause 1.39.2 be extended by the Network Operator, who must agree to extend

the date by a reasonable period where the Network Operator considers that the Market Participant is making reasonable progress to having Registered Generator Performance Standards in respect of Technical Requirements for one or more of its Existing Transmission Connected Generating Systems and reasonably requires additional time to have all required Registered Generator Performance Standards. To avoid doubt, the Market Participant may request, and the Network Operator may extend, the date in clause 1.39.2 more than once.

1.39.5. A request made under clause 1.39.4 must be made at least 20 Business Days before 31 January 2022, or any extended date agreed under clause 1.39.4. Where a request is made within 20 Business Days of the relevant date the Network Operator may, but is not obliged to, consider the request.

1.39.6. A Network Operator must notify the Market Participant responsible for the Existing Transmission Connected Generating System whether the request made under clause 1.39.4 is approved or rejected within 10 Business Days or other date agreed between the parties.

1.39.7. The time by which the Market Participant responsible for an Existing Transmission Connected Generating System must have a Generator Monitoring Plan approved by AEMO will be the later of:

(a) the date that is 12 months after the date on which the Market Participant submits their proposed Generator Monitoring Plan to AEMO for approval; or

(b) any date agreed by AEMO and the Market Participant responsible for the Existing Transmission Connected Generating System under clause 1.39.9.

1.39.8. If, by the date set out in clause 1.39.7, a Market Participant responsible for an Existing Transmission Connected Generating System does not have a Generator Monitoring Plan approved by AEMO in accordance with section 1.41 then AEMO must commence the dispute resolution mechanism contained in section 1.42.

1.39.9. Subject to clause 1.39.10, a Market Participant may request the date referred to in clause 1.39.7 be extended by AEMO, who must agree to extend the date by a reasonable period where AEMO considers that the Market Participant is making reasonable progress towards having a Generator Monitoring Plan for one or more of its Existing Transmission Connected Generating Systems and reasonably requires additional time to complete the Generator Monitoring Plan or Generator Monitoring Plans. To avoid doubt, the Market Participant may request, and AEMO may extend, the date in clause 1.39.7 more than once.

1.39.10. A request made under clause 1.39.9 must be made at least 20 Business Days before the date described in clause 1.39.7(a), or any extended date agreed under clause 1.39.9. Where a request is made within 20 Business Days of the relevant date AEMO may, but is not obliged to, consider the request.

1.39.11. AEMO must notify the Market Participant whether the request made under clause 1.39.9 is approved or rejected within 10 Business Days or other date agreed between the parties.

1.39.12. A Market Participant responsible for an Existing Transmission Connected Generating System must use reasonable endeavours to provide all data and information reasonably required by a Network Operator or AEMO under sections 1.39 to 1.42 to assess the impact of the Existing Transmission Connected Generating System on the performance and security of the applicable network.

1.39.13. An Existing Transmission Connected Generating System will cease to be an Existing Transmission Connected Generating System at the time the Market Participant responsible for the Existing Transmission Connected Generating System has:

(a) a Registered Generator Performance Standard for each Technical Requirement in accordance with section 1.40; and

(b) a Generator Monitoring Plan approved by AEMO in accordance with section 1.41 or determined by an arbitrator in accordance with the dispute resolution mechanism contained in section 1.42.

1.40. Requirements for Existing Transmission Connected Generating Systems

1.40.1. In this section 1.40:

Access Standard: Means an existing standard or technical level of performance in respect of the same or equivalent matter as a Technical Requirement that is either:

(a) set out in and required by an Arrangement for Access; or

(b) otherwise previously agreed by the Network Operator at the time of connection of the Existing Transmission Connected Generating System to the SWIS, or prior to the Tranche 1 Commencement Date,

and includes any condition or circumstance which is of similar effect as a Generator Condition in respect of an existing standard or technical level of performance for the Existing Transmission Connected Generating System.

Agreed Generator Performance Standard: Means the standard or technical level of performance in respect of a Technical Requirement that is either:

(a) agreed between a Market Participant responsible for an Existing Transmission Connected Generating System and the relevant Network Operator; or

(b) deemed to be the applicable standard or technical level of performance in respect of the same matter as a Technical Requirement that applies in respect of an Existing Transmission Connected Generating System,

in accordance with this section 1.40.

Generator Condition: Means one or more circumstances specified in a Proposed Alternative Standard:

(a) the occurrence of which requires a Market Participant responsible for an Existing Transmission Connected Generating System to undertake required actions to achieve an agreed outcome and or achieve an agreed higher level of performance than set out in the Proposed Alternative Standard in respect of one or more Technical Requirements; and

(b) that specifies or describes each of the matters in clauses 3A.5.6(a) to 3A.5.6(g), where each reference to 'Trigger Event' in those clauses is to be read as 'Generator Condition'.

Proposed Alternative Standard: Means a standard or technical level of performance in respect of a Technical Requirement proposed to apply to an Existing Transmission Connected Generating System that has been submitted in accordance with clause 1.40.6.

Reference Standard: Means a standard or technical level of performance that applied at the time of connection of the Existing Transmission Connected Generating System to the SWIS or a modification of an Existing Transmission Connected Generating System before the Tranche 1 Commencement Date as set out in the WEM Procedure referred to in clause 1.40.30 in respect of the same matter as a Technical Requirement.

1.40.2. A Market Participant responsible for an Existing Transmission Connected Generating System must use reasonable endeavours to provide to the relevant Network Operator any relevant document or information that it is able to provide that is in its possession, power or control which relates to an Access Standard in respect of the Existing Transmission Connected Generating System.

1.40.3. A Network Operator must use reasonable endeavours to provide to a Market Participant responsible for an Existing Transmission Connected Generating System any relevant document or information that it is able to provide that is in its possession, power or control which relates to an Access Standard in respect of the Existing Transmission Connected Generating System.

1.40.4. Subject to clause 1.40.6, an Access Standard in respect of the same or equivalent matter as a Technical Requirement will be deemed to be the Agreed Generator Performance Standard for that Technical Requirement.

1.40.5. Subject to clause 1.40.6, where no Access Standard in respect of the same matter as a Technical Requirement exists and there is an applicable Reference Standard, then the Reference Standard will be deemed to be the Agreed Generator Performance Standard for that Technical Requirement.

1.40.6. Where:

(a) these ESM Rules do not deem a standard of performance for a Technical Requirement to be an Agreed Generator Performance Standard in accordance with clause 1.40.4 or clause 1.40.5;

(b) a Market Participant responsible for the Existing Transmission Connected Generating System does not reasonably consider that the Existing Transmission Connected Generating System is able to comply with a Reference Standard that is deemed to be an Agreed Generator Performance Standard under clause 1.40.5; or

(c) the relevant Network Operator and Market Participant responsible for the Existing Transmission Connected Generating System disagree as to the existence or interpretation of an Access Standard,

the Market Participant responsible for the Existing Transmission Connected Generating System must notify the Network Operator as soon as practicable and submit a Proposed Alternative Standard which may include a Generator Condition.

1.40.7. Where clause 1.40.6 applies, the Market Participant responsible for the Existing Transmission Connected Generating System must also submit reasons and supporting evidence as to how the Proposed Alternative Standard meets the applicable criteria listed in clause 1.40.8 and is otherwise appropriate in the circumstances. Where the Proposed Alternative Standard is less onerous than the Minimum Generator Performance Standard or the Reference Standard (as applicable) for that Technical Requirement, the Market Participant must also submit:

(a) technical evidence as to why the Existing Transmission Connected Generating System cannot comply with the Minimum Generator Performance Standard or the Reference Standard (as applicable); and

(b) information on the costs the Market Participant is likely to incur in order to meet the Minimum Generator Performance Standard or Reference Standard (as applicable).

1.40.8. A Proposed Alternative Standard submitted under clause 1.40.6 must be as consistent as practicable to the Minimum Generator Performance Standard or Reference Standard for the relevant Technical Requirement (as applicable), having regard to:

(a) the need to protect the Existing Transmission Connected Generating System from damage;

(b) power system conditions at the location of the connection;

(c) the commercial and technical feasibility of complying with the Minimum Generator Performance Standard or Reference Standard (as applicable);

(d) the costs associated with complying with the Minimum Generator Performance Standard or Reference Standard (as applicable) over the remaining life of the Existing Transmission Connected Generating System; and

(e) the capability of the Existing Transmission Connected Generating System in respect of the Technical Requirement.

1.40.9. If the relevant Network Operator requires further information that it considers necessary to determine whether a Proposed Alternative Standard is appropriate it must request the information from the Market Participant responsible for the Existing Transmission Connected Generating System who must use reasonable endeavours to provide the further information that is in its possession, power or control. To avoid doubt, a Market Participant is not required to undertake testing to comply with this obligation.

1.40.10. If:

(a) a Proposed Alternative Standard is at or above the Minimum Generator Performance Standard or Reference Standard (as applicable); or

(b) the Network Operator reasonably considers it will approve a Proposed Alternative Standard having regard to the matters in clause 1.40.8 and following the receipt of the information and evidence referred to in clause 1.40.7 and any further information requested under clause 1.40.9,

the Network Operator must:

(c) provide any information received from the Market Participant responsible for the Existing Transmission Connected Generating System under clause 1.40.7 and clause 1.40.9 to AEMO; and

(d) use best endeavours to consult with AEMO within a reasonable timeframe, in accordance with the process agreed under clause 3A.1.3, in relation to each submitted Proposed Alternative Standard.

1.40.11. AEMO must use best endeavours to respond in a reasonable timeframe after being consulted in accordance with clause 1.40.10 and provide a recommendation to the Network Operator whether a Proposed Alternative Standard should be approved or rejected, or whether AEMO requires further information to make the recommendation.

1.40.12. Where AEMO requires further information under clause 1.40.11, the Network Operator must:

(a) provide the further information that is in its possession, power or control; or

(b) use reasonable endeavours to obtain that information from the Market Participant responsible for the Existing Transmission Connected

Generating System and provide that information to AEMO in accordance with the process agreed under clause 3A.1.3.

1.40.13. In making a recommendation whether a Proposed Alternative Standard should be approved or rejected in accordance with clause 1.40.11, AEMO is not limited to considering information provided by the Network Operator and may use any other relevant information available to it.

1.40.14. Subject to clause 1.40.15, AEMO must recommend that the Network Operator accept a Proposed Alternative Standard if:

(a) AEMO reasonably considers the Proposed Alternative Standard satisfies clause 1.40.8; or

(b) the Proposed Alternative Standard:

i. relates to a standard or technical level of performance for a Technical Requirement for which there is no Agreed Generator Performance Standard that is deemed to apply in accordance with clause 1.40.4 or clause 1.40.5; and

ii. is at or above the Minimum Generator Performance Standard for the relevant Technical Requirement.

1.40.15. AEMO must recommend that the Network Operator reject a Proposed Alternative Standard if it reasonably considers that the Proposed Alternative Standard may create an unacceptable risk to Power System Security or Power System Reliability.

1.40.16. Where AEMO recommends that the Network Operator reject a Proposed Alternative Standard in respect of a Technical Requirement, AEMO must:

(a) provide written reasons to the Network Operator; and

(b) recommend that either:

i. an amended Proposed Alternative Standard is adopted that AEMO considers satisfies clause 1.40.8 which may include a Generator Condition; or

ii. otherwise:

1. where a Reference Standard exists, the Reference Standard is adopted; or

2. where no Reference Standard exists, the Minimum Generator Performance Standard is adopted.

1.40.17. Subject to clauses 1.40.18, 1.40.19 and clause 1.40.24, after a Network Operator has received the recommendation from AEMO in respect of a Proposed Alternative Standard, the Network Operator must determine whether to approve or

reject each Proposed Alternative Standard proposed by the Market Participant responsible for the Existing Transmission Connected Generating System.

1.40.18. Subject to clause 1.40.19, a Network Operator must approve a Proposed Alternative Standard and notify the relevant Market Participant where AEMO recommends that the Network Operator accept a Proposed Alternative Standard.

1.40.19. A Network Operator must reject a Proposed Alternative Standard where:

(a) AEMO has recommended that the Network Operator reject the Proposed Alternative Standard; or

(b) the Network Operator reasonably considers the Proposed Alternative Standard may create an unacceptable risk in relation to:

i. Power System Security;

ii. Power System Reliability;

iii. Power Transfer Capability; or

iv. the quality of supply of electricity for other users of the Network.

1.40.20. If the Network Operator rejects a Proposed Alternative Standard, the Network Operator must provide to the Market Participant responsible for the Existing Transmission Connected Generating System:

(a) written reasons for the decision; and

(b) an alternative or amended Proposed Alternative Standard that the Network Operator and AEMO consider is acceptable having regard to each of the matters in clause 1.40.8 which may include a Generator Condition.

1.40.21. Where the Market Participant responsible for the Existing Transmission Connected Generating System agrees with the amended Proposed Alternative Standard proposed in accordance with clause 1.40.20(b), the amended Proposed Alternative Standard will be the Agreed Generator Performance Standard for the Technical Requirement.

1.40.22. Where the Market Participant responsible for the Existing Transmission Connected Generating System disagrees with the amended Proposed Alternative Standard proposed in accordance with clause 1.40.20(b):

(a) the Market Participant and Network Operator may agree to a testing regime in accordance with clause 1.40.24; otherwise

(b) the Market Participant must commence the dispute resolution mechanism contained in section 1.42.

1.40.23. Where the Network Operator approves a Proposed Alternative Standard in accordance with clause 1.40.17, it will be the Agreed Generator Performance Standard for the Technical Requirement.

1.40.24. A Market Participant responsible for an Existing Transmission Connected Generating System may, at any time, agree with a Network Operator to a testing regime or interrogation of data under clause 1.40.26 to demonstrate the performance or capability of the Existing Transmission Connected Generating System and assist in determining a Proposed Alternative Standard that is likely to be acceptable to both the relevant Network Operator and AEMO.

1.40.25. A Network Operator, must consult with and only agree to a testing regime or interrogation of data under clause 1.40.24 with the agreement of AEMO.

1.40.26. A testing regime or interrogation of data contemplated by clause 1.40.24 must include measures which each party will take, at their cost, to demonstrate the performance or capability of the Existing Transmission Connected Generating System. Where possible, the measures agreed should be the lowest cost option available, after considering all other relevant information available. For the avoidance of doubt, the testing regime or interrogation of data may be undertaken by the Existing Transmission Connected Generating System, the Network Operator, or AEMO.

1.40.27. Following receipt of the testing results or interrogation of data contemplated by clause 1.40.24, the Market Participant responsible for the Existing Transmission Connected Generating System and the relevant Network Operator must negotiate in good faith to determine if they can agree a Proposed Alternative Standard, which may include a Generator Condition, in respect of the Technical Requirement that the Existing Transmission Connected Generating System can comply with based on the testing results or data. To avoid doubt, the Network Operator may, as part of the negotiations or otherwise, consult with AEMO as to any Proposed Alternative Standard.

1.40.28. If the Market Participant responsible for the Existing Transmission Connected Generating System and the relevant Network Operator can agree a Proposed Alternative Standard under clause 1.40.27, the agreed Proposed Alternative Standard will be the Agreed Generator Performance Standard for the Technical Requirement. If the Market Participant and Network Operator cannot agree, the Network Operator must commence the dispute resolution mechanism contained in section 1.42.

1.40.29. For the purposes of this section 1.40, where the standard or technical level of performance in respect of a Technical Requirement is determined under the dispute resolution mechanism contained in section 1.42, it will be an Agreed Generator Performance Standard for the Technical Requirement.

1.40.30. A Network Operator must develop and maintain a WEM Procedure which includes:

(a) the process and considerations it will follow in assessing a Proposed Alternative Standard under this section 1.40; and

(b) the relevant Reference Standards which may apply to an Existing Transmission Connected Generating System for the purposes of this section 1.40.

1.40.31. An Agreed Generator Performance Standard must be recorded by the relevant Network Operator on the Generator Register and it will be the Registered Generator Performance Standard for the Technical Requirement for that Transmission Connected Generating System.

1.40.32. Where an Agreed Generator Performance Standard includes a Generator Condition, once the Agreed Generator Performance Standard becomes the Registered Generator Performance Standard under clause 1.40.31, the Generator Condition will be a Trigger Event for the purposes of Chapter 3A.

1.41. Generator Monitoring Plans for Existing Transmission Connected Generating Systems

1.41.1. In this section 1.41:

Existing Monitoring Plan: Means an existing plan approved or agreed by the relevant Network Operator for monitoring the performance of the Existing Transmission Connected Generating System against a Technical Requirement.

1.41.2. Subject to any extension granted under clause 1.41.3, no later than six months after the Tranche 1 Commencement Date, a Market Participant responsible for an Existing Transmission Connected Generating System must submit a proposed Generator Monitoring Plan to AEMO for approval in accordance with any requirements for submission in the WEM Procedure referred to in clause 1.41.6 that:

(a) meets the Generator Monitoring Plan Requirements as applicable to the Existing Transmission Connected Generating System; or

(b) meets the Generator Monitoring Plan Requirements as applicable to the Existing Transmission Connected Generating System other than in respect of variations that the Market Participant reasonably considers are required on the basis that:

i. compliance is not possible, or where doing so would impose unreasonable costs on the Market Participant; or

ii. an Existing Monitoring Plan includes a monitoring regime or requirements in respect of the relevant Technical Requirement.

1.41.3. Subject to clause 1.41.4, a Market Participant may, by written notice, request the date referred to in clause 1.41.2 be extended by AEMO, including detailed

reasons as to why an extension is necessary. Where AEMO considers that the Market Participant is making reasonable progress towards having a Generator Monitoring Plan for one or more of its Existing Transmission Connected Generating Systems and reasonably requires additional time to complete it, AEMO must agree to extend the date by a reasonable period. To avoid doubt, the Market Participant may request, and AEMO may extend, the date in clause 1.41.2 more than once.

1.41.4. A request made under clause 1.41.3 must be made at least 20 Business Days before the date in clause 1.41.2, or any extended date agreed under clause 1.41.3. Where a request is made within 20 Business Days of the relevant date AEMO may, but is not obliged to, consider the request.

1.41.5. AEMO must notify the Market Participant whether the request made under clause 1.41.3 is approved or rejected within 10 Business Days or other date agreed between the parties.

1.41.6. AEMO may develop a WEM Procedure which sets out:

(a) the information required by AEMO to, and the method by which AEMO will, consider a proposed Generator Monitoring Plan submitted under clause 1.41.2; and

(b) the information required by AEMO to, and method by which AEMO will, consider and determine requests for an extension made under clause 1.41.3.

1.41.7. Subject to clauses 1.41.9 and 1.41.12, AEMO must approve a proposed Generator Monitoring Plan that AEMO reasonably considers satisfies the requirements in clause 1.41.2 and where AEMO considers any variations requested by the Market Participant are justified.

1.41.8. Where a Market Participant responsible for an Existing Transmission Connected Generating System proposes a Generator Monitoring Plan that includes required variations on the basis of clause 1.41.2(b)(ii), it must provide a copy of the Existing Monitoring Plan to AEMO including any supporting documentation that AEMO reasonably considers necessary.

1.41.9. Subject to clause 1.41.10, if AEMO is satisfied an Existing Monitoring Plan applies in respect of a Technical Requirement, AEMO must approve the method of monitoring as it relates to that Technical Requirement as set out in the Existing Monitoring Plan as part of a Generator Monitoring Plan proposed by a Market Participant.

1.41.10. Where AEMO reasonably considers the method of monitoring in an Existing Monitoring Plan in accordance with clause 1.41.9 would create an unacceptable risk to Power System Security or Power System Reliability, AEMO must:

(a) reject the Existing Monitoring Plan in respect of that Technical Requirement; and

(b) in addition to the reasons provided under clause 1.41.14, provide detailed reasons to the Market Participant as to why it considers the Existing Monitoring Plan in respect of that Technical Requirement would create an unacceptable risk to Power System Security or Power System Reliability.

1.41.11. Where a Market Participant responsible for an Existing Transmission Connected Generating System proposes a Generator Monitoring Plan, AEMO must use reasonable endeavours to respond in a reasonable timeframe and no later than 12 months after AEMO receives the proposed Generator Monitoring Plan, determine whether to approve or reject the proposed Generator Monitoring Plan or request further information.

1.41.12. When considering whether or not to approve a proposed Generator Monitoring Plan under clause 1.41.2(b)(i), AEMO must consider where relevant:

(a) the technical feasibility of the Existing Transmission Connected Generating System complying with the Generator Monitoring Plan Requirements;

(b) consistency of alternative testing methods proposed with good electricity industry practice including any contained in an Existing Monitoring Plan (if applicable);

(c) the age of the Existing Transmission Connected Generating System, in particular the cost of imposing the standard testing method relative to the benefits gained over the expected remaining life of the Existing Transmission Connected Generating System;

(d) the risk that the Existing Transmission Connected Generating System poses to power system security and reliability (considering size, location and technology type of generator);

(e) the efficacy of an alternative proposed testing method (incorporating cost, risk and accuracy of alternative proposed testing method);

(f) any advice from manufacturers and industry experts;

(g) specific factors associated with the technology of the Existing Transmission Connected Generating System, including whether its performance is likely to drift or degrade over a particular timeframe, in which case more stringent monitoring may be required; and

(h) whether the testing method or data source proposed by the Market Participant responsible for the Existing Transmission Connected Generating System as a modification to the Generator Monitoring Plan Requirements was used to establish the compliance standard as part of the process to determine the Registered Generator Performance Standards for that Existing Transmission Connected Generating System.

1.41.13. AEMO may, but is not required to, consult the relevant Network Operator in respect of a proposed Generator Monitoring Plan submitted to AEMO for approval under this section 1.41.

1.41.14. Where AEMO rejects a proposed Generator Monitoring Plan submitted in accordance with this section 1.41, AEMO:

(a) must notify the Market Participant;

(b) must provide reasons to the Market Participant for the rejection; and

(c) may request amendments to the proposed Generator Monitoring Plan that it considers are required to meet the requirements of the Generator Monitoring Plan Requirements or are otherwise satisfactory to AEMO taking into account the matters referred to in clause 1.41.12 where relevant.

1.41.15. Where AEMO requests amendments under clause 1.41.14(c), the Market Participant responsible for the Existing Transmission Connected Generating System may either:

(a) accept the proposal, in which case the requested amendments will be taken to be made to the proposed Generator Monitoring Plan and it will be deemed to be the approved Generator Monitoring Plan for the Existing Transmission Connected Generating System; or

(b) reject the proposal, in which case the Market Participant must commence the dispute resolution mechanism contained in section 1.42.

1.41.16. A Generator Monitoring Plan for an Existing Transmission Connected Generating System will commence on the later of:

(a) the date on which the Market Participant responsible for the Existing Transmission Connected Generating System has;

i. a Registered Generator Performance Standard for each Technical Requirement in accordance with section 1.40; and

ii. a Generator Monitoring Plan is approved under this section 1.41 or determined to apply by arbitration in accordance with section 1.42; or

(b) the date agreed by AEMO and the Market Participant.

1.41.17. A Generator Monitoring Plan approved by AEMO under this section 1.41 or determined by arbitration in accordance with section 1.42 must be recorded by the relevant Network Operator on the Generator Register.

1.42. Dispute Resolution Mechanism for Existing Transmission Connected Generating Systems

1.42.1. In this section 1.42:

Confidential Information: Means in relation to arbitral proceedings conducted under this section 1.42, information that relates to the arbitral proceedings or a decision of the Generator Arbitrator in the arbitral proceedings and includes the following:

(a) the statement of claim, statement of defence and all other pleadings, submissions, statements or other information supplied to the Generator Arbitrator by a Party;

(b) any information supplied by a Party to another Party in compliance with a direction of the Generator Arbitrator;

(c) any evidence (whether documentary or otherwise) supplied to the Generator Arbitrator;

(d) any notes made by the Generator Arbitrator of oral evidence or submissions given before the Generator Arbitrator;

(e) any transcript of oral evidence or submissions given before the Generator Arbitrator; and

(f) any other thing declared by the Generator Arbitrator (whether upon submissions by a Party or otherwise) to be Confidential Information.

Dispute: Means a dispute to which the ESM Rules provide that this section 1.42 will apply.

Generator Arbitration Commencement Date: Has the meaning given in clause 1.42.11.

Generator Arbitration Decision: Has the meaning given in clause 1.42.18.

Generator Arbitrator: Means the arbitrator to which the Dispute has been referred by the Coordinator under clause 1.42.5.

Party: Means a party to the Dispute.

Primary Generator Arbitrator: Has the meaning given in clause 1.42.2(a).

Secondary Generator Arbitrator: Has the meaning given in clause 1.42.2(b).

Technical Panel of Experts: Has the meaning given in clause 1.42.2(c).

1.42.2. The Coordinator must, not later than 1 April 2021, in accordance with the process referred to in clause 1.42.28, appoint:

(a) one primary arbitrator ("**Primary Generator Arbitrator**");

(b) at least two secondary arbitrators ("**Secondary Generator Arbitrator**"); and

(c) an independent panel of not less than three experts for the purpose of performing the function described in 1.42.14 ("**Technical Panel of Experts**").

The Coordinator may, in accordance with the process referred to in clause 1.42.28, appoint a further Primary Generator Arbitrator, Secondary Generator Arbitrator or person to the Technical Panel of Experts.

1.42.3. The Coordinator must, in respect of each appointment made under clause 1.42.2 publish:

(a) the names and relevant details of each appointment;

(b) respective tenures of each appointment; and

(c) the remuneration and expense provisions,

within five Business Days of each appointment.

1.42.4. Before a Dispute may be resolved in accordance with the arbitral proceedings set out in this section 1.42, a Party must comply with any relevant processes set out in the WEM Procedure referred to in clause 1.42.10 and deliver a written notification for that Dispute to be referred to arbitration to:

(a) the Coordinator; and

(b) each other Party to the Dispute.

1.42.5. On satisfying itself that clause 1.42.4 has been complied with, the Coordinator must, subject to clauses 1.42.6 to 1.42.9, refer the Dispute for resolution to a Generator Arbitrator in accordance with this section 1.42.

1.42.6. The Generator Arbitrator to which a Dispute is referred under clause 1.42.5 must be the Primary Generator Arbitrator unless, subject to the WEM Procedure referred to in clause 1.42.10, in the reasonable opinion of the Coordinator:

(a) the Primary Generator Arbitrator has an actual, potential or perceived conflict of interest with the subject matter of the Dispute;

(b) the Primary Generator Arbitrator has insufficient time to adequately perform their functions under this section 1.42 due to one or more contemporaneous arbitral proceedings being conducted under this section 1.42;

(c) the Primary Generator Arbitrator is in ill health such that they are unable to adequately perform their functions under this section 1.42; or

(d) the Coordinator otherwise declares for a reason as set out in the WEM Procedure referred to in clause 1.42.10,

in which case, the Primary Generator Arbitrator must be a Secondary Generator Arbitrator (and any references under this section 1.42 to the Primary Generator Arbitrator will be to the Secondary Generator Arbitrator).

1.42.7. For the purpose of clause 1.42.6, where the Generator Arbitrator is a Secondary Generator Arbitrator, the Coordinator must select which Secondary Generator Arbitrator is to be the Generator Arbitrator, subject to the WEM Procedure referred to in clause 1.42.10 and subject to clause 1.42.6 (which in such case are to apply as if the Secondary Generator Arbitrator is the Primary Generator Arbitrator).

1.42.8. For the purpose of clause 1.42.6, a Party must:

(a) declare if in their reasonable belief the Primary Generator Arbitrator or a Secondary Generator Arbitrator, as relevant, has an actual, potential or perceived conflict of interest with the subject matter of or parties to the Dispute; and

(b) provide written reasons to the Coordinator as to why the Generator Arbitrator should not be the Primary Generator Arbitrator or a Secondary Generator Arbitrator, as relevant.

1.42.9. Should the Primary Generator Arbitrator and each Secondary Generator Arbitrator be excluded from being the Generator Arbitrator, the Coordinator and each Party to the Dispute shall decide upon an alternative independent arbitrator to be the Generator Arbitrator by majority vote. The Coordinator will have the deciding vote in the event of a tied vote.

1.42.10. The Coordinator must develop a WEM Procedure which sets out:

(a) any administrative support the Coordinator will provide to the Primary Generator Arbitrator, Secondary Generator Arbitrators and Technical Panel of Experts;

(b) the particulars of how the Coordinator will assess the matters detailed in clauses 1.42.6(a) to 1.42.6(c);

(c) any reasons under clause 1.42.6(d) where the Coordinator will declare the Generator Arbitrator to be a Secondary Generator Arbitrator;

(d) the process which a Party must follow in order to refer a Dispute for arbitration under this section 1.42;

(e) the manner in which the Dispute is to be resolved by the Generator Arbitrator, including, but not limited to, the manner in which evidence is to be presented;

(f) the awarding of costs pursuant to clause 1.42.20; and

(g) any other particulars in relation to the referral of a Dispute to a Generator Arbitrator.

1.42.11. Unless otherwise agreed by the Parties, the arbitral proceedings contemplated by this section 1.42 in respect of a particular Dispute commence on the date the Dispute is referred to the Generator Arbitrator in accordance with clause 1.42.5 ("**Generator Arbitration Commencement Date**").

1.42.12. Unless otherwise agreed by the Parties and the Generator Arbitrator, the Dispute will be resolved in accordance with the WEM Procedure referred to in clause 1.42.10.

1.42.13. The Generator Arbitrator:

(a) must use best endeavours to resolve a Dispute within six months from the Generator Arbitration Commencement Date; and

(b) if the Generator Arbitrator reasonably considers that the Dispute will not be resolved within six months from the Generator Arbitration Commencement Date, the Generator Arbitrator:

i. must notify the Parties in writing of the reasons for the belief and the estimated date by which the Generator Arbitrator reasonably believes that the Dispute will be resolved; and

ii. must update the Parties should the Generator Arbitrator's reasonable belief contemplated in 1.42.13(b)(i) materially change.

1.42.14. Subject to clause 1.42.15, the Generator Arbitrator may:

(a) appoint one or more experts from the Technical Panel of Experts to report to it on specific issues to be determined by the Generator Arbitrator; and

(b) may require a Party to give any expert appointed in accordance with clause 1.42.14(a) any relevant information or to produce, or to provide access to, any relevant documents, goods or other property for inspection by the expert,

and unless otherwise agreed by the Parties, if a Party so requests or if the Generator Arbitrator considers it necessary, any expert appointed in accordance with clause 1.42.14(a) must, after delivery of a written or oral report from the expert, participate in a hearing where the Parties have the opportunity to put questions to the expert.

1.42.15. Prior to appointing an expert from the Technical Panel of Experts, the Generator Arbitrator must advise each Party that it intends to appoint an expert from the Technical Panel of Experts, and provide the Parties:

(a) the identification of the particular expert;

(b) the nature of the advice being sought;

(c) the approximate cost of appointing the expert; and

(d) an opportunity for each Party to make submissions to the Generator Arbitrator as to whether the particular expert has an actual, potential or perceived conflict of interest in respect of the matter or the advice being sought.

1.42.16. If the Generator Arbitrator reasonably considers a request for arbitration to be frivolous, vexatious, trivial or lacking in substance, the Generator Arbitrator may:

(a) require that the Parties undertake negotiations on terms the Generator Arbitrator reasonably considers appropriate; or

(b) make a Generator Arbitration Decision in accordance with clause 1.42.18 without conducting arbitral proceedings.

1.42.17. If, during the arbitral proceedings, the Parties settle the Dispute:

(a) the Generator Arbitrator must terminate the proceedings in accordance with clause 1.42.21 and, if requested by the Parties and not objected to by the Generator Arbitrator, record the settlement in the form contemplated in clause 1.42.18; and

(b) such settlement will have the same status and effect as a Generator Arbitration Decision.

1.42.18. Subject to clause 1.42.17(a), on determination of the Dispute, the Generator Arbitrator must:

(a) record the decision in writing; and

(b) state the reasons upon which the decision is based, unless the Parties have agreed that no reasons are to be given or the award is an award on agreed terms,

and such determination is final and binding (the "Generator Arbitration Decision").

1.42.19. In relation to the costs associated with arbitral proceedings conducted under this section 1.42, unless otherwise determined by the Generator Arbitrator in accordance with clause 1.42.20:

(a) all administrative costs will be borne equally by the Parties; and

(b) all legal and other costs will be borne by the Party that incurred such cost.

1.42.20. Notwithstanding clause 1.42.19, a Generator Arbitrator may assign any costs associated with the arbitral proceedings as they reasonably consider and in doing so must consider the following factors:

(a) the final Generator Arbitration Decision;

(b) the conduct of the Parties during the arbitral proceedings;

(c) any prior settlement offers or positions of the Parties;

(d) any material public interest considerations; and

(e) any information or requirements in the WEM Procedure referred to in clause 1.42.10.

To avoid doubt, a Generator Arbitrator may assign costs associated with the arbitral proceedings at any stage during the arbitral proceedings and may make payment of those costs a condition to continuing proceedings.

1.42.21. If:

(a) the Party requesting arbitration withdraws their request, unless another Party objects and the Generator Arbitrator recognises a legitimate interest in obtaining a final settlement of the Dispute;

(b) the Parties agree on the termination of the proceedings;

(c) the Generator Arbitrator finds that the continuation of the proceedings has for any other reason become unnecessary or impossible;

(d) the Parties fail to comply with any requirements set out by the Generator Arbitrator as a condition to continue proceedings;

(e) the Dispute is settled as contemplated in clause 1.42.17; or

(f) the Generator Arbitrator makes a Generator Arbitration Decision,

the arbitral proceedings terminate and the Generator Arbitrator must notify the Parties of the termination.

1.42.22. The Generator Arbitrator must publish:

(a) the Generator Arbitration Decision;

(b) any reasons for the Generator Arbitration Decision; and

(c) any cost orders made in accordance with clause 1.42.20,

provided that any commercially sensitive information is redacted and the Generator Arbitrator does not publish any Confidential Information unless the disclosure is permitted under clause 1.42.24.

1.42.23. The Parties, the Generator Arbitrator, or any member of the Technical Panel of Experts must not disclose Confidential Information in relation to the Parties, the Dispute or any arbitral proceedings unless the disclosure is permitted under clause 1.42.24.

1.42.24. Confidential Information may be disclosed in the following circumstances:

(a) where written consent has been obtained from each Party;

(b) the disclosure is to a professional or other adviser of a Party for the purpose of the arbitral proceedings conducted under this section 1.42;

(c) the disclosure is necessary to ensure that a Party has a reasonable opportunity to present the Party's case and the disclosure is no more than reasonable for that purpose;

(d) the disclosure is necessary for the establishment or protection of a Party's legal rights in relation to a third party and the disclosure is no more than reasonable for that purpose;

(e) the disclosure is for the purpose of enforcing a Generator Arbitration Decision or an associated cost order and the disclosure is no more than reasonable for that purpose;

(f) the disclosure is in accordance with an order made or a subpoena issued by a Court; or

(g) the disclosure or publication is authorised or required by these ESM Rules, any applicable law or required by a competent regulatory body, and the person making the disclosure gives written details of the disclosure (including an explanation of the reasons for the disclosure) to:

i. if the person is a Party, the other Parties and the Generator Arbitrator; and

ii. if the Generator Arbitrator is making the disclosure, all the Parties.

1.42.25. A Generator Arbitrator is not liable for anything done or omitted to be done in good faith in their capacity as the arbitrator of a Dispute under these ESM Rules.

1.42.26. Where the Coordinator appoints, fails to appoint or refuses to appoint a person as a Generator Arbitrator in respect of a Dispute under these ESM Rules, the Coordinator will not be liable in relation to the appointment, failure or refusal if done in good faith.

1.42.27. A Generator Arbitrator in respect of a Dispute under these ESM Rules may procure any support and services reasonably required in respect of arbitral proceedings conducted under this section 1.42 and may recover any associated costs as administrative costs associated with the arbitral proceedings.

1.42.28. The Coordinator must publish the process the Coordinator will follow in appointing a Primary Generator Arbitrator, Secondary Generator Arbitrators and members of the Technical Panel of Experts in the event a new Primary Generator Arbitrator, Secondary Generator Arbitrator or new appointments to the Technical Panel of Experts are considered by the Coordinator to be required after the Tranche 1 Commencement Date.

1.43. Specific Transitional Provisions – WEM Procedures for Tranches 2 and 3 Amending Rules

1.43.1. In this section 1.43:

Tranches 2 and 3 Amending Rules: Means the Amending Rules in the *Wholesale Electricity Market Amendment (Tranches 2 and 3 Amendments) Rules 2020* made by the Minister under regulation 7(5) of the ESM Regulations by a

notice published in the Government Gazette as part of the program of work for the Wholesale Electricity Market and Constrained Network Access Reform, and any Amending Rules deemed by the Minister to form part of those Amending Rules in a subsequent instrument made by the Minister for the purposes of this section 1.43.

1.43.2. Where the Tranches 2 and 3 Amending Rules oblige AEMO, a Network Operator or the Economic Regulation Authority to develop or document a WEM Procedure then, notwithstanding that the relevant ESM Rule has not commenced, AEMO, each Network Operator and the Economic Regulation Authority must comply with their obligations in this section 1.43, as if the relevant ESM Rule was in force.

1.43.3 AEMO must, without limiting clause 1.43.6:

(a) develop each procedure it is responsible for in accordance with the Tranches 2 and 3 Amending Rules prior to the commencement of the relevant Amending Rule in the Tranches 2 and 3 Amending Rules that requires AEMO to develop or document that procedure; and

(b) consult with Rule Participants and other relevant stakeholders in developing the procedures it is responsible for in accordance with the Tranches 2 and 3 Amending Rules.

1.43.4. Each Network Operator must, without limiting clause 1.43.6:

(a) develop each procedure it is responsible for in accordance with the Tranches 2 and 3 Amending Rules prior to the commencement of the relevant Amending Rule in the Tranches 2 and 3 Amending Rules that requires the Network Operator to develop or document that procedure; and

(b) consult with Rule Participants and other relevant stakeholders in developing the procedures it is responsible for in accordance with the Tranches 2 and 3 Amending Rules.

1.43.5. The Economic Regulation Authority must, without limiting clause 1.43.6:

(a) develop each procedure it is responsible for in accordance with the Tranches 2 and 3 Amending Rules prior to the commencement of the relevant Amending Rule in the Tranches 2 and 3 Amending Rules that requires the Economic Regulation Authority to develop or document that procedure; and

(b) consult with Rule Participants and other relevant stakeholders in developing the procedures it is responsible for in accordance with the Tranches 2 and 3 Amending Rules.

1.43.6. Each WEM Procedure that is required to be developed under clauses 1.43.3(a), 1.43.4(a) and 1.43.5(a):

(a) without limiting clauses 1.43.3(b), 1.43.4(b) and 1.43.5(b), may, but is not required to, be developed in accordance with the Procedure Change Process;

(b) is, from the commencement of the relevant Amending Rule in the Tranches 2 and 3 Amending Rules that requires the person to develop or document the procedure, deemed to be the relevant WEM Procedure required to be developed under the relevant clause in the Tranches 2 and 3 Amending Rules; and

(c) may, with industry consultation, be amended or replaced with a revised WEM Procedure without undertaking the Procedure Change Process by the party responsible for developing the WEM Procedure until six months after the New WEM Commencement Day provided that, in determining a commencement date for the revised WEM Procedure, the party responsible for developing the WEM Procedure gives reasonable consideration of an appropriate commencement date that minimises the impact of the changes to the WEM Procedure on Rule Participants. To avoid doubt, after six months from the New WEM Commencement Day, any amendment or replacement of the WEM Procedure must be made in accordance with the Procedure Change Process.

1.43.7. In developing, amending or replacing a WEM Procedure in accordance with this section 1.43, AEMO, a Network Operator or the Economic Regulation Authority, as applicable, must:

(a) publish a call for submissions on the proposed or revised WEM Procedure, and the due date for submissions must not be less than 15 Business Days from the date the proposed or revised WEM Procedure is published; and

(b) publish, together with the final WEM Procedure, a summary of the submissions received and the response of AEMO, the Network Operator or the Economic Regulation Authority, as applicable, to the issues raised in those submissions.

1.43A. Specific Transitional Provisions – WEM Procedures for Particular Wholesale Electricity Market and Constrained Network Access Reform Amending Rules

1.43A.1. In this section 1.43A:

Specified Amending Rules: Means the Amending Rules in the *Wholesale Electricity Market Amendment (Tranche 5 Amendments) Rules 2021* and the *Wholesale Electricity Market (Miscellaneous Amendments No. 2) Rules 2021* made by the Minister under regulation 7(5) of the ESM Regulations by a notice published in the Government Gazette as part of the program of work for the Wholesale Electricity Market and Constrained Network Access Reform, and any Amending Rules deemed by the Minister to form part of those Amending Rules in

a subsequent instrument made by the Minister for the purposes of this section 1.43A.

1.43A.2. Where the Specified Amending Rules oblige AEMO or the Coordinator to develop or document a WEM Procedure then, notwithstanding that the relevant ESM Rule has not commenced, AEMO and the Coordinator must comply with their obligations in this section 1.43A, as if the relevant ESM Rule was in force.

1.43A.3. AEMO must, without limiting clause 1.43A.6:

(a) develop each procedure it is responsible for in accordance with the Specified Amending Rules prior to the commencement of the relevant Amending Rule in the Specified Amending Rules that requires AEMO to develop or document that procedure; and

(b) consult with Rule Participants and other relevant stakeholders in developing the procedures it is responsible for in accordance with the Specified Amending Rules.

1.43A.4. The Coordinator must, without limiting clause 1.43A.6:

(a) develop each procedure it is responsible for in accordance with the Specified Amending Rules prior to the commencement of the relevant Amending Rule in the Specified Amending Rules that requires the Coordinator to develop or document that procedure; and

(b) consult with Rule Participants and other relevant stakeholders in developing the procedures it is responsible for in accordance with the Specified Amending Rules.

1.43A.5. Each WEM Procedure that is required to be developed under clauses 1.43A.3(a) and 1.43A.4(a):

(a) without limiting clauses 1.43A.3(b) and 1.43A.4(b) may, but is not required to, be developed in accordance with the Procedure Change Process;

(b) is, from the commencement of the relevant Amending Rule in the Specified Amending Rules that requires the person to develop or document the procedure, deemed to be the relevant WEM Procedure required to be developed under the relevant clause in the Specified Amending Rules; and

(c) may, with industry consultation, be amended or replaced with a revised WEM Procedure without undertaking the Procedure Change Process by the party responsible for developing the WEM Procedure until six months after the New WEM Commencement Day provided that in determining a commencement date for the revised WEM Procedure, the party responsible for developing the WEM Procedure gives reasonable consideration of an appropriate commencement date that minimises the impact of the changes to the WEM Procedure on Rule Participants. To avoid doubt, after six months from the New WEM Commencement Day,

any amendment or replacement of the WEM Procedure must be made in accordance with the Procedure Change Process.

1.43A.6. In developing, amending or replacing a WEM Procedure in accordance with this section 1.43, AEMO or the Coordinator, as applicable, must:

(a) publish a call for submissions on the proposed or revised WEM Procedure and the due date for submissions must not be less than 15 Business Days from the date the proposed or revised WEM Procedure is published; and

(b) publish, together with the final WEM Procedure, a summary of the submissions received and the response of AEMO or the Coordinator, as applicable, to the issues raised in those submissions.

1.43B. Specific Transitional Provisions – Application of Section 1.43A to WEM Procedures for Particular Wholesale Electricity Market and Constrained Network Access Reform Amending Rules

1.43B.1. Where an Amending Rule in the *Wholesale Electricity Market (Tranche 6 Amendments) Rules 2022* and the *Wholesale Electricity Market (Tranche 6A Amendments) Rules 2023* requires or provides for a WEM Procedure to be developed or documented (however described) by the Coordinator, AEMO or a Network Operator, then the provisions of clause 1.43A will apply to that Amending Rule as if:

(a) the Amending Rule was a Specified Amending Rule as defined in clause 1.43A.1; and

(b) where the Amending Rule obliges a Network Operator to develop or document a WEM Procedure, section 1.43A was amended to apply to WEM Procedures required to be developed by a Network Operator.

1.44. Specific Transitional Provisions – Gate Closure

1.44.1. Notwithstanding that AEMO must publish and determine Gate Closure under clause 7.4.30, for the first 6 Trading Months commencing from the New WEM Commencement Day, Gate Closure will be 15 minutes for each Dispatch Interval.

1.44.2. After the 6 Trading Month period referred to in clause 1.44.1, Gate Closure will be the period determined by AEMO and published in accordance with clause 7.4.30.

1.45. Specific Transitional Provisions – Registration for the 2021 Reserve Capacity Cycle, the 2022 Reserve Capacity Cycle and the 2023 Reserve Capacity Cycle

1.45.1. In this section 1.45:

RCM Market Participant: Means a Market Generator or Market Customer deemed to be registered as an RCM Market Participant pursuant to clause 1.45.2(a) for the purpose of this section 1.45; and

RCM Facility Class: Means a Facility Class referred to in clause 1.45.3 that applies to:

(a) an RCM Market Participant under clause 1.45.2(b); or

(b) a facility or facility upgrade deemed to be assigned to the facility under clause 1.45.10(b).

1.45.2. For the 2021 Reserve Capacity Cycle, the 2022 Reserve Capacity Cycle and the 2023 Reserve Capacity Cycle only:

(a) a Market Generator and Market Customer registered under these ESM Rules on the New RCM Transition Date is deemed to be registered as an RCM Market Participant; and

(b) subject to clause 1.45.4, a Registered Facility that is registered to a Market Generator or Market Customer referred to in clause 1.45.2(a) is deemed to be registered under the equivalent RCM Facility Class set out in clause 1.45.3.

1.45.3. For the purpose of clause 1.45.2(b), the table below sets out the equivalent RCM Facility Class that is deemed to apply to a Registered Facility for the 2021 Reserve Capacity Cycle, the 2022 Reserve Capacity Cycle and the 2023 Reserve Capacity Cycle.

Facility Class as at the last Trading Interval immediately preceding the New RCM Transition Date	**Equivalent RCM Facility Class from the New RCM Transition Date**
Scheduled Generator	Scheduled Facility
Non-Scheduled Generator with a System Size below 10 MW	Non-Scheduled Facility
Non-Scheduled Generator with a System Size at or above 10 MW	Semi-Scheduled Facility
Demand Side Programme	Demand Side Programme

1.45.4. For the purpose of clause 1.45.2(b), where any of the following conditions apply to a Registered Facility, the RCM Market Participant for that Registered Facility must apply to AEMO to seek an assessment for an applicable RCM Facility Class in accordance with the timeframe and processes specified in the WEM Procedure under clause 4.8A.7:

(a) the Registered Facility's System Size is anticipated to increase or decrease;

(b) any new equipment is planned to be added to the Registered Facility;

(c) any equipment is planned to be removed from the Registered Facility; or

(d) the RCM Market Participant considers that registration in a different RCM Facility Class for that Registered Facility is more appropriate than the RCM Facility Class deemed by clause 1.45.3.

1.45.5. AEMO must process and assess any application for assessment it receives under clause 1.45.4 or clause 1.45.8 by the date and time specified in clause 4.1.7, in accordance with the WEM Procedure specified in clause 4.8A.7.

1.45.6. When conducting an assessment under clause 1.45.5, where AEMO considers that the RCM Facility Class assigned to that Registered Facility is no longer appropriate, or another RCM Facility Class is more appropriate, AEMO must assign that Registered Facility another RCM Facility Class which must be a Facility Class specified in clause 1.45.6A.

1.45.6A. The Facility Classes for the purposes of clause 1.45.6 are:

(a) a Scheduled Facility;

(b) a Semi-Scheduled Facility;

(c) a Non-Scheduled Facility; and

(d) a Demand Side Programme.

1.45.7. AEMO's determination of an RCM Facility Class under this section 1.45 is final.

1.45.8. A person intending to participate in the 2021 Reserve Capacity Cycle and/or the 2022 Reserve Capacity Cycle and/or the 2023 Reserve Capacity Cycle in respect of a facility that is unregistered as at the New RCM Transition Date, must, except where clauses 4.8A.1 or 4.8A.3 applies to the facility (including a facility upgrade), apply to AEMO for an indicative Facility Class and an indicative Facility Technology Type in accordance with the WEM Procedure specified in clause 4.8A.7.

1.45.9. AEMO must determine and assign an indicative Facility Class and one or more indicative Facility Technology Type to an unregistered facility pursuant to an application under clause 1.45.8 in accordance with the WEM Procedure specified in clause 4.8A.7.

1.45.10. For the 2021 Reserve Capacity Cycle, the 2022 Reserve Capacity Cycle and the 2023 Reserve Capacity Cycle:

(a) the indicative Facility Class assigned to a facility or facility upgrade by AEMO pursuant to clauses 1.45.9, 4.8A.1(a) or 4.8A.5(a) must be a Facility Class specified in clause 1.45.6A; and

(b) the indicative Facility Class assigned to a facility or facility upgrade by AEMO pursuant to clauses 1.45.9, 4.8A.1(a) or 4.8A.5(a) is deemed to be the RCM Facility Class assigned to the facility or facility upgrade.

1.45.11. For the 2021 Reserve Capacity Cycle, the 2022 Reserve Capacity Cycle and the 2023 Reserve Capacity Cycle only, AEMO must assign one or more Facility Technology Type to a Registered Facility by the date and time specified in clause 4.1.7, in accordance with the WEM Procedure specified in clause 4.8A.7.

1.46. Specific Transitional Provisions – Appendix 3

1.46.1. For the purposes of Appendix 3 and the 2022 Reserve Capacity Cycle:

(a) a Facility is to be deemed to be an NAQ Facility (as defined in Appendix 3) where the Facility:

i. was assigned Capacity Credits for the 2021 Reserve Capacity Cycle; and

ii. has been assigned Certified Reserve Capacity for the 2022 Reserve Capacity Cycle; and

(b) a Facility that is deemed to be an NAQ Facility (as defined in Appendix 3) under clause 1.46.1(a) is to be deemed to have a Network Access Quantity for the purposes of Step 3A(a) of Appendix 3, equal to:

i. for a Facility, other than a GIA Facility, the Initial Network Access Quantity determined by AEMO for the Facility under clause 4.1A.1; and

ii. for a GIA Facility, the Certified Reserve Capacity assigned to the Facility for the 2022 Reserve Capacity Cycle that is intended to be traded bilaterally in accordance with clause 4.14.1(c); and

(c) a Facility is to be deemed to be an Indicative NAQ Facility (as defined in Appendix 3) where the Facility was assigned Early Certified Reserve Capacity and Capacity Credits for a Reserve Capacity Cycle after the 2022 Reserve Capacity Cycle; and

(d) a Facility that is deemed to be an Indicative NAQ Facility (as defined in Appendix 3) under clause 1.46.1(c) is to be deemed to have an Indicative Network Access Quantity for the purposes of Step 3A(a) of Appendix 3, equal to the Early Certified Reserve Capacity assigned to the Facility for a Reserve Capacity Cycle by AEMO pursuant to an application for Early Certified Reserve Capacity under section 4.28C.

1.47. Specific Transitional Provisions – Registration from New WEM Commencement Day

1.47.1. In this section 1.47:

Post-Amended Rules: Means the ESM Rules as in force immediately after the New WEM Commencement Day.

Pre-Amended Rules: Means the ESM Rules as in force immediately before the New WEM Commencement Day.

1.47.2. With effect from the New WEM Commencement Day:

(a) a Rule Participant registered in the Market Customer class, Market Generator class or Ancillary Service Provider class under these ESM Rules is deemed to be registered in the Market Participant class;

(b) subject to clause 1.47.4, a Scheduled Generator, Non-Scheduled Generator or Demand Side Programme that is registered to a Rule Participant in the Market Customer class or Market Generator class referred to in clause 1.47.2(a) is deemed to be registered under the Facility Class set out in clause 1.47.3;

(c) subject to clauses 1.47.4 and 1.47.8, a Facility registered as a single Facility under the Pre-Amended Rules, is deemed to be registered as a single Facility under the Post-Amended Rules;

(d) subject to clauses 1.47.4 and 1.47.8, a Facility registered as an aggregated Facility under the Pre-Amended Rules, is deemed to be registered as an Aggregated Facility under the Post-Amended Rules; and

(e) a Facility registered as an Interruptible Load under the Pre-Amended Rules is deemed to be a Non-Dispatchable Load and no longer a Registered Facility under the Post-Amended Rules.

1.47.3. For the purposes of clause 1.47.2(b), the table below sets out the Facility Class that is deemed to apply to a Registered Facility.

Facility Class as at the last Trading Interval immediately preceding the New WEM Commencement Day	**Facility Class from the New WEM Commencement Day**
Scheduled Generator	Scheduled Facility
Non-Scheduled Generator with a System Size below 10 MW	Non-Scheduled Facility
Non-Scheduled Generator with a System Size at or above 10 MW	Semi-Scheduled Facility
Demand Side Programme	Demand Side Programme

1.47.4. For the purposes of clauses 1.47.2(b), 1.47.2(c) and 1.47.2(d), where any of the following conditions apply to a Registered Facility, the Market Participant for that Registered Facility must apply to AEMO to seek an assessment for an applicable Facility Class in accordance with the timeframe and processes specified in the WEM Procedure under clause 1.47.12:

(a) the Registered Facility's System Size is anticipated to increase or decrease; and

(b) the Market Participant considers that registration in a different Facility Class for that Registered Facility is more appropriate than the Facility Class deemed by clause 1.47.3.

1.47.5. AEMO must assess any application it receives under clause 1.47.4, in accordance with the WEM Procedure specified in clause 1.47.9.

1.47.6. When conducting an assessment under clause 1.47.5, where AEMO considers that the existing Facility Class assigned to that Registered Facility is no longer appropriate or another Facility Class is more appropriate, AEMO must assign that Registered Facility another Facility Class which must be a Facility Class specified in clause 2.29.1A.

1.47.7. A Market Participant intending to register a facility prior to 1 October 2023 with an intended effective registration date on or after 1 October 2023, must apply to AEMO for a Facility Class assessment in accordance with the timeframe specified in the WEM Procedure referred to in clause 1.47.12.

1.47.8. A Market Participant applying to:

(a) register a facility as an Aggregated Facility; or

(b) disaggregate an Aggregated Facility,

prior to 1 October 2023 with an intended effective date on or after 1 October 2023, must apply to AEMO for a Facility Class assessment in accordance with clause 1.47.7,and the timeframe specified in the WEM Procedure referred to in clause 1.47.9.

1.47.8A. A Market Participant or Ancillary Service Provider may apply to AEMO to:

(a) register a Facility as an Interruptible Load (as defined under the Post-Amended Rules) with an intended effective registration date on or after the New WEM Commencement Day;

(b) associate Non-Dispatchable Loads (as defined under the Post-Amended Rules) with the Interruptible Load; and

(c) accredit the Interruptible Load to provide Contingency Reserve Raise,

prior to the New WEM Commencement Day, with an intended effective date on or after the New WEM Commencement Day.

1.47.9. AEMO must assess an application it receives under clauses 1.47.7 or 1.47.8 and assign a Facility Class in accordance with the WEM Procedure referred to in clause 1.47.12.

1.47.10. AEMO may consult with, and request additional information or clarifications from, relevant Market Participants prior to making its determination under this section 1.47.

1.47.11. AEMO's determination of a Facility Class under this section 1.47 is final.

1.47.12. By 1 June 2023, AEMO must develop a WEM Procedure specifying:

(a) the information to be provided to AEMO, and the processes and timeframes a Market Participant must adhere to, when applying to AEMO for an assessment under clauses 1.47.4, 1.47.7 or 1.47.8;

(b) the process and timeframes AEMO must adhere to when conducting an assessment and assigning a Facility Class to a facility in respect of an application made under clauses 1.47.4, 1.47.7 or 1.47.8, which must take into account the Facility Technology Types comprising a facility;

(c) the process and timeframes AEMO and Market Participants must adhere to with respect to consultations and requests under clause 1.47.10; and

(d) any other matters that AEMO considers are relevant to this section 1.47.

1.48. Specific Transitional Provisions – Intermittent Loads

1.48.1. In this section 1.48:

Post-Amended Rules: Means the ESM Rules as in force immediately after the New WEM Commencement Day.

Pre-Amended Rules: Means the ESM Rules as in force immediately before the New WEM Commencement Day.

1.48.2. Notwithstanding clause 2.30B.1, a Non-Dispatchable Load or part of a Non-Dispatchable Load that was treated by AEMO as an Intermittent Load on the day before the New WEM Commencement Day is deemed to have met the requirements of clause 2.30B.2 for the relevant Non-Dispatchable Load or part of the Non-Dispatchable Load to be treated as an Intermittent Load from the New WEM Commencement Day.

1.48.3. An Energy Producing System that supplies an Intermittent Load referred to in clause 1.48.2 prior to the New WEM Commencement Day and was not registered as a Facility under the Pre-Amended Rules, will be deemed to be exempted from the requirement to register under clause 2.29.4 of the Post-Amended Rules.

1.48.4. For the avoidance of doubt, the purpose of clauses 1.48.2 and 1.48.3 is to clarify the status of Intermittent Loads under the Pre-Amended Rules on the New WEM Commencement Day and the clauses do not in any way constitute a perpetual exemption from complying with the obligations and requirements in section 2.30B of the Post-Amended Rules.

1.48.5. The Market Participant for an Intermittent Load referred to in clause 1.48.2 must provide the data specified in clause 2.30B.3 of the Post-Amended Rules to AEMO before 1 July 2023.

1.48.6. Notwithstanding clause 1.48.2, a Market Participant for a Facility containing an Intermittent Load must, where clause 2.30B.8E of the Post-Amended Rules applies, register the Facility or apply for an exemption as required by clause 2.30B.8E of the Post-Amended Rules.

1.48.7. Where a Market Participant registers a Facility containing an Intermittent Load referred to in clause 1.48.2 in accordance with clause 2.30B.8E of the Post-Amended Rules, the Market Participant may elect to register the Facility as either:

(a) a Non-Scheduled Facility even where its System Size or Nominated Export Quantity would otherwise require it to register as a Semi-Scheduled or Scheduled Facility; or

(b) a Semi-Scheduled Facility even where AEMO's controllability assessment would otherwise require it to register as a Scheduled Facility.

1.48A. Specific Transitional Provisions – Miscellaneous

1.48A.1. AEMO must document the WEM Procedure referred to in clause 4.11.3A(c) by the date specified in clause 4.1.4 for the 2021 Reserve Capacity Cycle.

1.48A.2. Notwithstanding clause 1.33.3, AEMO and each Network Operator must comply with their obligations under section 2.27A in performing their obligations under, or in connection with, section 4.4B.

1.49. Specific Transitional Provisions – Mandatory Essential System Services Accreditation for Specific Facilities

1.49.1. A Market Participant, other than Synergy, that owns, operates or controls an LFAS Facility at any time from 1 October 2020 to 30 September 2021, must, unless the Market Participant no longer owns, operates or controls the relevant LFAS Facility, at least 12 months prior to the New WEM Commencement Day:

(a) apply to AEMO for accreditation of its LFAS Facility to provide Regulation Raise and Regulation Lower; and

(b) conduct any tests or provide any information that AEMO reasonably requires to accredit the LFAS Facility for Regulation Raise and Regulation Lower,

in accordance with the processes set out in the WEM Procedure specified in clause 2.34A.13.

1.49.2. A Market Participant or Ancillary Service Provider, other than Synergy, that is contracted to provide Spinning Reserve or Load Rejection Reserve under an Ancillary Service Contract at any time from 1 October 2020 to 30 September 2021, must, unless the Market Participant or Ancillary Service Provider no longer owns, operates or controls the Facility the subject of the Ancillary Service Contract, at least 12 months prior to the New WEM Commencement Day:

(a) apply to AEMO for accreditation of its Facility to provide Contingency Reserve Raise or Contingency Reserve Lower, as applicable; and

(b) conduct any tests or provide any information that AEMO reasonably requires to accredit the Facility for Contingency Reserve Raise or Contingency Reserve Lower, as applicable,

in accordance with the processes set out in the WEM Procedure specified in clause 2.34A.13.

1.49.3. At any time from 1 October 2020 and prior to the New WEM Commencement Day, a Market Participant, other than Synergy, may request AEMO to accredit its Facility for RoCoF Control Service in accordance with section 2.34A and the WEM Procedure specified in clause 2.34A.13.

Specific obligations for Synergy

1.49.4. Unless otherwise agreed with AEMO under clause 1.49.5, for each Synergy Facility that is capable of providing LFAS, Spinning Reserve, Load Rejection Reserve or RoCoF Control Service, Synergy must, at least 12 months prior to the New WEM Commencement Day:

(a) apply to AEMO for accreditation of each such Facility to provide Regulation Raise, Regulation Lower, Contingency Reserve Raise, Contingency Reserve Lower or RoCoF Control Service, as applicable; and

(b) conduct any tests or provide any information that AEMO reasonably requires to accredit each such Facility for Regulation Raise, Regulation Lower, Contingency Reserve Raise, Contingency Reserve Lower or RoCoF Control Service, as applicable,

in accordance with the processes outlined by AEMO in the WEM Procedure specified under clause 2.34A.13.

1.49.5. Synergy must consult with AEMO to determine which of its Facilities are to be considered as capable of providing Regulation Raise, Regulation Lower, Contingency Reserve Raise, Contingency Reserve Lower or RoCoF Control Service, and must seek accreditation, for the purposes of clause 1.49.4.

AEMO's obligations

1.49.6. AEMO must process and determine applications made under this section 1.49 for accreditation of a Facility for any Frequency Co-optimised Essential System Services in accordance with the WEM Procedure specified in clause 2.34A.13.

1.49.7. AEMO may prioritise applications for accreditation of a Facility for any Frequency Co-optimised Essential System Services made under this section 1.49 over any applications for accreditation made under section 2.34A.

1.49.7A. Where AEMO has received an application for accreditation of a Frequency Co-optimised Essential System Service under clause 2.34A.2 and has prioritised an application for a Frequency Co-optimised Essential System Service made under this section 1.49 over that application, then:

(a) AEMO must notify the applicant that an application made under this section 1.49 has been prioritised over its application under clause 2.34A.2; and

(b) the timeframe for AEMO to accept or reject the applicant's application under clause 2.34A.4 does not apply, and instead will be the timeframe specified by AEMO, acting reasonably, in the notice from AEMO to the applicant under clause 1.49.7A(a).

1.49.8. Notwithstanding any other provisions in this section 1.49 or section 2.34A, AEMO may, but is not required to, process or determine any applications made under this section 1.49 or section 2.34A for accreditation of RoCoF Ride-Through Capability for a Non-Dispatchable Load, before 12 months after New WEM Commencement Day.

Obligation to offer in Frequency Co-optimised Essential System Service markets

1.49.9. For each Dispatch Interval in the six month period following the New WEM Commencement Day, a Market Participant must, in respect of each of its Facilities accredited for a Frequency Co-optimised Essential System Service pursuant to an application made under this section 1.49:

(a) submit offers in its Real-Time Market Submissions for each Frequency Co-optimised Essential System Service the Facility is accredited for; and

(b) ensure the quantity offered for each Frequency Co-optimised Essential System Service is the largest quantity of the Frequency Co-optimised Essential System Service that the Market Participant reasonably expects could be provided by its Facility in the Dispatch Interval, up to the maximum quantity the Facility is accredited for.

Application of this section 1.49

1.49.10. This section 1.49 applies for the initial accreditation by AEMO of the Facilities specified in clauses 1.49.1, 1.49.2, 1.49.3 and 1.49.4 for a Frequency Co-optimised Essential System Service. Without limiting section 2.34A, section 2.34A is to apply for:

(a) the accreditation of all Facilities for a Frequency Co-optimised Essential System Service or RoCoF Ride-Through Capability other than the Facilities specified in clauses 1.49.1, 1.49.2, 1.49.3 and 1.49.4; and

(b) any subsequent re-accreditation of a Facility initially accredited for a Frequency Co-optimised Essential System Service under this section 1.49.

1.50. Application of Section 1.43 to the WEM Procedures Specified in Clauses 2.34A.13, 2.35.4 and 2.36A.5

1.50.1. The WEM Procedures specified in clauses 2.34A.13, 2.35.4 and 2.36A.5 are each deemed to be a WEM Procedure forming part of the Amending Rules in the Tranches 2 and 3 Amending Rules (as defined in clause 1.43.1) to which section 1.43 applies.

1.50.2. Notwithstanding whether AEMO's obligation to develop the WEM Procedures specified in clauses 2.34A.13, 2.35.4 and 2.36A.5 have commenced, AEMO must, by 1 October 2021, develop those WEM Procedures in accordance with section 1.43. To avoid doubt, section 1.43 applies to the preparation and documentation of the WEM Procedures specified in clauses 2.34A.13, 2.35.4 and 2.36A.5, and will, from the commencement of clauses 2.34A.13, 2.35.4 and 2.36A.5, as applicable, that requires AEMO to develop or document the WEM Procedures, be deemed to be the relevant WEM Procedures required to be developed under clauses 2.34A.13, 2.35.4 and 2.36A.5, in accordance with clause 1.43.6(b).

1.51. Specific Transitional Provisions – Automatic Generation Control Dispatch

1.51.1. Where AEMO considers that it is necessary to test or implement operational controls required for AEMO and Market Participants to operate under any of the provisions of the Tranches 2 and 3 Amending Rules (as defined in clause 1.43.1) and associated WEM Procedures, AEMO may request approval from a Market Participant to control specified operations of the Market Participant's Registered Facility. Where a Market Participant approves AEMO's request, AEMO's operational control of the Registered Facility may include:

(a) the starting, loading and stopping of the Registered Facility; and

(b) limiting the injection of the Registered Facility.

1.51.2. AEMO's operational control of a Registered Facility pursuant to clause 1.51.1:

(a) does not remove AEMO's obligation to issue and record Dispatch Instructions for the Registered Facility during the period of AEMO's operational control; and

(b) does not affect, modify or limit a Market Participant's rights and obligations in respect of the Registered Facility under these ESM Rules including the obligation to comply with the most recently issued Dispatch Instruction.

1.51.3. Where AEMO has operational control of a Registered Facility pursuant to clause 1.51.1:

(a) AEMO is not required to issue a Dispatch Instruction to the Registered Facility with respect to an operational control that relates to the implementation of a previously issued Dispatch Instruction; and

(b) AEMO must seek to operate the Registered Facility in compliance with Dispatch Instructions recorded for the Registered Facility.

1.51.4. Where AEMO does not operate the Registered Facility in accordance with clause 1.51.3(b), the relevant Market Participant is not taken to be non-compliant with the relevant Dispatch Instruction.

1.52. Specific Transitional Provisions – Staged Commencement of Prescribed WEM Technical Standards

1.52.1. Notwithstanding any other provision of these ESM Rules:

(a) a reference to each of the provisions specified in clauses 2.8.14(b), 2.8.14(c), 2.8.14(d) and 2.8.14(e) is a reference to a Specific Amending Rule (as defined in clause 1.36C.1);

(b) clauses 2.4.3B and 2.5.1D do not apply to a Specific Amending Rule specified in clause 1.52.1(a) until the Specific Amending Rule (as defined in clause 1.36C.1) is a Commenced Amending Rule (as defined in clause 1.36C.1); and

(c) for the purposes of this clause 1.52.1 a Specific Amending Rule (as defined in clause 1.36C.1) includes any subsequent amendment or replacement of the Specific Amending Rule in a subsequent instrument made by the Minister under regulation 7(5) of the ESM Regulations.

1.53. Specific Transitional Provision – Early Certification of Reserve Capacity for the 2022 Reserve Capacity Cycle and any subsequent Reserve Capacity Cycle

1.53.1. Notwithstanding section 4.28C, an application for Early Certified Reserve Capacity for the 2022 Reserve Capacity Cycle and any subsequent Reserve Capacity Cycle cannot be made under section 4.28C prior to:

(a) where the application includes a nomination that the Facility is expected to be classified as a Network Augmentation Funding Facility pursuant to clause 4.4.1(d)(vi), 1 March 2022; and

(b) otherwise, 1 November 2021.

1.53.2. Notwithstanding clause 4.28C.15, AEMO is not required to document the processes relating to or in connection with the following clauses in a WEM Procedure until 1 March 2023:

(a) clause 4.28C.7A;

(b) clause 4.28C.7AA;

(c) clause 4.28C.7B;

(d) clause 4.28C.7C;

(e) clause 4.28C.7D; and

(f) clause 4.28C.8A (but only in respect of the processes relating to the lapsing of any Indicative Network Access Quantity determined for the Facility).

1.54. Specific Transitional Provisions – System Restart

1.54.1. Prior to the New WEM Commencement Day, AEMO must develop and consult with stakeholders on a standard form contract for System Restart Service submissions for a period of at least two weeks. The standard form contract must include, at a minimum, the matters specified in clause 3.7.30.

1.54.2. AEMO must publish the standard form contract on the WEM Website.

1.54.3. AEMO must take into account stakeholder feedback received during the consultation process and make any reasonable amendments to the standard form contract that it considers appropriate, and republish the standard form contact for System Restart Service submissions, before the New WEM Commencement Day.

1.54.4. Any existing System Restart Service Contracts on the New WEM Commencement Day continue to apply, and are deemed to comply with section 3.7, for the remainder of their contract term.

1.54.5. Any System Restart Service Contracts entered into after the New WEM Commencement Day are subject to section 3.7.

1.54A. Specific Transitional Provisions – Standing Data

1.54A.1. Where a Rule Participant is required to provide new Standing Data or modify current Standing Data in respect to a Rule Participant or Facility pursuant to the Tranches 2 and 3 Amending Rules (as defined in clause 1.43.1) or any other Amending Rules made by the Minister under regulation 7(5) of the ESM Regulations by a notice published in the Government Gazette prior to the New WEM Commencement Day, the Rule Participant must do so in accordance with the processes and by the times specified by AEMO under clause 1.54A.2.

1.54A.2. Not less than four months before the New WEM Commencement Day, AEMO must publish on the WEM Website:

(a) the Standing Data required to be provided to AEMO for a Rule Participant or Facility in relation to the Post-Amended Rules (as defined in clause 1.47.1); and

(b) the form and manner in which the Standing Data referred to in clause 1.54A.2(a) is to be provided to AEMO.

1.55. General Transitional Provisions – Operational Matters

1.55.1. In this section 1.55:

Commenced Amending Rule: Means a Specific Amending Rule that has commenced on the New WEM Commencement Day.

New WEM Commencement Month: Means the Trading Month in which the New WEM Commencement Day falls.

Post-Amended Rules: Means the ESM Rules as in force immediately after the New WEM Commencement Day.

Pre-Amended Rules: Means the ESM Rules as in force immediately before the New WEM Commencement Day.

Specific Amending Rule: Means an Amending Rule made by the Minister under regulation 7(5) of the ESM Regulations (whether made before or after the date this section 1.55 commenced) by a notice published in the Government Gazette as part of the program of work for the Wholesale Electricity Market and Constrained Network Access Reform.

1.55.2. Before 8:00 AM on the New WEM Commencement Day, notwithstanding that the Pre-Amended Rules continue to apply, each Rule Participant must, subject to clause 1.55.8, perform all obligations imposed on that Rule Participant under the Post-Amended Rules, in relation to the New WEM Commencement Day and subsequent Trading Days, that, if the Post-Amended Rules were in force, the Rule Participant would have been required to perform under the Post-Amended Rules. This includes, but is not limited to, obligations relating to:

(a) operation of the Real-Time Market under Chapter 7, including scheduling and dispatch of Market Services and Non-Co-optimised Essential System Services;

(b) PASA assessments and Outages under Chapter 3;

(c) operation of the STEM under Chapter 6;

(d) administration of the market under Chapter 2;

(e) administration of the Reserve Capacity Mechanism under Chapter 4; and

(f) settlement under Chapter 9.

1.55.3. If before 8:00 AM on the New WEM Commencement Day, notwithstanding that the Pre-Amended Rules continue to apply, a Rule Participant performs an obligation under the Post-Amended Rules under clause 1.55.2, then to the extent that the obligation is performed, the Rule Participant is not required to perform any equivalent obligation under the Pre-Amended Rules to the extent that these obligations relate to the New WEM Commencement Day or subsequent Trading Days.

1.55.4. Before 8:00 AM on the New WEM Commencement Day, notwithstanding that the Pre-Amended Rules continue to apply, a Rule Participant may, subject to clause 1.55.8, perform any of the discretionary actions that the Rule Participant is permitted to perform under the Post-Amended Rules, in relation to the New WEM Commencement Month and subsequent Trading Months, that, if the Post-Amended Rules were in force, the Rule Participant would be permitted to perform under the Post-Amended Rules.

1.55.5. If before 8:00 AM on the New WEM Commencement Day, notwithstanding that the Pre-Amended Rules continue to apply, a Rule Participant is required to perform an obligation that relates to the New WEM Commencement Day or any subsequent Trading Days that it will not be required to perform under the Post-Amended Rules, the Rule Participant is not required to perform the obligation to the extent that:

(a) it relates to the New WEM Commencement Day or any subsequent Trading Days; and

(b) to the extent that the obligation will not apply under the Post-Amended Rules.

1.55.6. After 8:00 AM on the New WEM Commencement Day, notwithstanding that the Post-Amended Rules apply, each Rule Participant must, subject to clause 1.55.8, perform all obligations imposed on that Rule Participant under the Pre-Amended Rules, arising in relation to each Trading Interval (or part of a Trading Interval) in a Trading Day, each Trading Day (or part of a Trading Day) or each Trading Month (or part of a Trading Month) up to but excluding the New WEM Commencement Day, that, if the Pre-Amended Rules were in force, the Rule Participant would have been required to perform under the Pre-Amended Rules. This includes, but is not limited to, obligations relating to, or in connection with:

(a) administration of the market under Chapter 2, including compliance monitoring and enforcement;

(b) dispatch under Chapter 7; and

(c) settlement under Chapter 9.

1.55.7. From the New WEM Commencement Day, notwithstanding that the Post-Amended Rules apply, each Rule Participant may, subject to clause 1.55.8, perform any of the discretionary actions that the Rule Participant is permitted to perform under the Pre-Amended Rules, in relation to each Trading Month up to but excluding the New WEM Commencement Month, that, if the Pre-Amended Rules were in force, the Rule Participant would have been permitted to perform under the Pre-Amended Rules.

1.55.8. Where a Rule Participant:

(a) intends to perform an obligation under the Post-Amended Rules pursuant to clause 1.55.4 or the Pre-Amended Rules pursuant to clause 1.55.7; or

(b) is required by clauses 1.55.2 or 1.55.6 or sections 1.56 or 1.57 to perform an obligation under the Pre-Amended Rules or the Post-Amended Rules, as applicable,

that utilises a market system or other software system maintained by AEMO, the Rule Participant is only permitted, or required, as applicable, to perform the obligation if the relevant market system or software system in respect of the obligation is available and fully operational, including all associated dependent links or interfaces, at the time the obligation is intended or required to be performed.

1.55.9. For any calculations or determinations under the Post-Amended Rules that require or rely on data or other market related information or documents produced or exchanged under the Pre-Amended Rules that contains a term that is defined under the Pre-Amended Rules that does not exist or have the same meaning under the Post-Amended Rules, AEMO may:

(a) use the term defined under the Post-Amended Rules that AEMO reasonably determines is intended to apply in respect of the relevant act, matter or thing, to give effect to the calculation or determination; and

(b) apply and use the data or other market related information or documents in a manner consistent with, or to give effect to, the term to be used by AEMO pursuant to clause 1.55.9(a).

1.55.10. Despite anything to the contrary in the Pre-Amended Rules, where any act, matter or thing is scheduled, expected or approved to occur before the New WEM Commencement Day or after the New WEM Commencement Day and AEMO reasonably determines that the act, matter or thing could adversely affect Power System Security or Power System Reliability from the New WEM Commencement Day, AEMO may:

(a) reject, decline, or not approve, a request by a Market Participant for the act, matter or thing;

(b) where the act, matter or thing was approved under the Pre-Amended Rules, notify the relevant Market Participant that AEMO's approval is withdrawn; or

(c) direct a Rule Participant to cease doing the act, matter or thing.

1.55.11. Notwithstanding any provision to the contrary, where a report or other document is required to be prepared under these ESM Rules that is to contain or be based on information concerning a period where the Pre-Amended Rules are in force and a period where the Post-Amended Rules will be in force, then:

(a) the report or other document does not need to include information that is not required to be included in the report or document, as applicable, under the Post-Amended Rules; and

(b) subject to clause 1.55.11(a), the report or document, as applicable, must contain or be based on the information relevant to the period where the Pre-Amended Rules were in force and the period where the Post-Amended Rules were in force even though the report or document may only be finalised or published (if applicable) under the Post-Amended Rules.

For the avoidance of doubt, for information based on a period where the Pre-Amended Rules were in force, AEMO may, acting reasonably, utilise or reflect that information in the report or document, as applicable, in a manner consistent with the utilisation or reflection of information based on a period under the Post-Amended Rules in that report or document, as applicable.

1.55.12. Where a Commenced Amending Rule requires the operation of one or more Specific Amending Rules that have not yet commenced, then regard may be had to those Specific Amending Rules to interpret or give effect to the Commenced Amending Rule even though the Specific Amending Rules have not yet commenced.

1.55.13. Where any Commenced Amending Rule requires the operation of ESM Rules which have been amended, repealed or replaced by one or more Commenced Amending Rules, regard may be had to those ESM Rules to interpret or give effect to the Commenced Amending Rule even though those ESM Rules have been amended, repealed or replaced.

1.56. Specific Transitional Provisions – Transition Schedule

1.56.1. In this section 1.56:

Post-Amended Rules: Means the ESM Rules as in force immediately after the New WEM Commencement Day.

Pre-Amended Rules: Means the ESM Rules as in force immediately before the New WEM Commencement Day.

1.56.2. Subject to clause 1.56.3, by 5:00 PM on 30 June 2023, AEMO must determine, and publish on the WEM Website, a document ("**Transition Schedule**") specifying:

(a) the acts, matters or things to be done, which includes information to be provided or published, by AEMO and other Rule Participants relating to key operational activities under the Post-Amended Rules in respect of the Scheduling Day for the Trading Day that is also the New WEM Commencement Day and any subsequent Trading Day for which activities are required to be done before commencement of the Post-Amended Rules;

(b) any other acts, matters or things to be done by AEMO or any other Rule Participant that are reasonably necessary or desirable to enable AEMO or any other Rule Participant to perform their respective functions under the Post-Amended Rules, including, without limitation:

i. operation of the Real-Time Market;

ii. scheduling and dispatch of Market Services and Non-Co-optimised Essential System Services;

iii. PASA assessments and Outages;

iv. operation of the STEM;

v. administration of the market under Chapter 2;

vi. administration of the Reserve Capacity Mechanism under Chapter 4; and

vii. settlement under Chapter 9; and

(c) the dates and times and, where applicable, the format, for when each of those acts, matters or things must be done.

1.56.3. Prior to publishing the Transition Schedule under clause 1.56.2, AEMO must obtain the Coordinator's approval of the Transition Schedule.

1.56.4. Subject to clause 1.56.5, AEMO may:

(a) amend the Transition Schedule to add or remove any acts, matters or things; and

(b) modify or extend the dates or times for any one or more of the acts, matters or things specified in Transition Schedule by publishing an updated Transition Schedule on the WEM Website.

Any such further acts, matters or things, or modified or extended dates and times, take effect from the date that the updated Transition Schedule is published.

1.56.5. Prior to making any amendments to the Transition Schedule pursuant to clause 1.56.4, AEMO:

(a) may consult with other Rule Participants or interested stakeholders on the proposed amendment; and

(b) must obtain the Coordinator's approval to the proposed amendment.

1.56.6. Each Rule Participant must perform their obligations specified in the Transition Schedule by the dates and times, and in accordance with, the Transition Schedule.

1.56.7. Except where expressed to be done under the Pre-Amended Rules or the WEM Procedures in place under the Pre-Amended Rules in the Transition Schedule, all

acts, matters or things specified in the Transition Schedule are to be done in accordance with the Post-Amended Rules or the WEM Procedures under the Post-Amended Rules that will apply on and from the New WEM Commencement Day notwithstanding that at the time the act, matter or thing is done the Post-Amended Rules or the WEM Procedures under the Post-Amended Rules have not yet commenced.

1.56.8. Without limiting clause 1.56.7, where any assessment or determination, which includes a decision to accept, approve or reject, specified in the Transition Schedule to be done by AEMO prior to the New WEM Commencement Day affects periods falling both before and after the New WEM Commencement Day, AEMO may specify in the Transition Schedule whether the act, matter or thing is to be done by AEMO in accordance with the Pre-Amended Rules or the Post-Amended Rules notwithstanding that at the time the act, matter or thing is done the Post-Amended Rules have not yet commenced.

1.56.9. Any information to be published by AEMO pursuant to the Transition Schedule under the Post-Amended Rules may, but is not required, to include any information that is also published under the Pre-Amended Rules.

1.56.10. For the settlement cycle timeline, which includes associated adjustment processes, to be published by AEMO pursuant to the Transition Schedule, AEMO may, but is not required to, publish a single timeline that sets out the settlement cycle timeline in respect of:

(a) each Trading Month (or part of a Trading Month) in the Financial Year that is to be settled under the Pre-Amended Rules;

(b) each Trading Week (or part of a Trading Week) in the Financial Year that is to be settled under the Post-Amended Rules,

provided that the timeline must comply with:

(c) the requirements in section 9.16 of the Pre-Amended Rules for each period referred to in clause 1.56.10(a); and

(d) the requirements in section 9.3 of the Post-Amended Rules for each period referred to in clause 1.56.10(b).

AEMO may amend the dates in the timeline if AEMO's expectation of the New WEM Commencement Day has changed since the time the most recent timeline was published. The amended settlement timeline will take effect from the date the amended timeline is published.

1.57. Specific Transitional Provisions – Key Operational Matters

1.57.1. In this section 1.57:

Post-Amended Rules: Means the ESM Rules as in force immediately after the New WEM Commencement Day.

Pre-Amended Rules: Means the ESM Rules as in force immediately before the New WEM Commencement Day.

1.57.2. Without limiting section 1.56:

(a) the Dispatch Plan for Synergy under the Pre-Amended Rules is not required to contain any Trading Intervals with effect from the New WEM Commencement Day, but to the extent it does contain any such Trading Intervals, Synergy is not required to comply with the Dispatch Plan for those Trading Intervals from 08:00 AM on the New WEM Commencement Day;

(b) each Market Participant must make reasonable endeavours to ensure its Balancing Submissions and LFAS Submissions, as applicable, under the Pre-Amended Rules for each Trading Interval falling within the period seven Trading Days prior to the New WEM Commencement Day result in dispatch outcomes that are consistent with forecast dispatch outcomes resulting from the Market Participant's Real-Time Market Submissions under the Post-Amended Rules that take effect from the New WEM Commencement Day; and

(c) each Market Participant, other than Synergy, that is subject to an Ancillary Service Contract that is in force under the Pre-Amended Rules as at the New WEM Commencement Day must make reasonable endeavours to ensure that the Market Participant's Real-Time Market Submissions are consistent with the terms of each such Ancillary Service Contract until the end of the last Trading Interval at the end of the New WEM Commencement Day.

1.57.3. Where a Reference Scenario for a Pre-Dispatch Interval or Dispatch Interval specified in the Transition Schedule published in accordance with section 1.56 determines that a Registered Facility will be cleared to provide a Market Service in the first Dispatch Interval of the New WEM Commencement Day, the Market Participant must ensure that its Registered Facility is ready and able to provide the Market Service in accordance with the Dispatch Instruction that will take effect from commencement of that Dispatch Interval.

1.57.4. For each Trading Interval that falls within three Trading Days prior to the New WEM Commencement Day, AEMO must, when scheduling and dispatching Registered Facilities in the Balancing Portfolio under the Pre-Amended Rules:

(a) take into account the expected dispatch of each such Registered Facility with effect from the New WEM Commencement Day; and

(b) make reasonable endeavours to ensure that notwithstanding the information provided by Synergy under clause 7.6A.2 of the Pre-Amended Rules, that each such Registered Facility is dispatched in a manner that will enable the Registered Facility to comply with the Dispatch Instruction

for that Registered Facility that will take effect from the commencement of the first Dispatch Interval of the New WEM Commencement Day.

1.57.5. Notwithstanding the provisions of the Pre-Amended Rules, between the start of the 4:00 AM Trading Interval and the end of the 7:30 AM Trading Interval on the Trading Day immediately prior to the New WEM Commencement Day, AEMO may dispatch a Registered Facility Out of Merit where the:

(a) expected position of the Registered Facility pursuant to the last Dispatch Instruction issued to the Registered Facility during those Trading Intervals; and

(b) expected starting dispatch position of the Registered Facility pursuant to a Dispatch Instruction under the Post-Amended Rules for the first Dispatch Interval of the New WEM Commencement Day,

differs by more than the Ramp Rate Limit of the Registered Facility as specified in the Standing Data for the Registered Facility at the relevant time.

1.57.6. In respect of any Market Advisories or Dispatch Advisories issued under the Pre-Amended Rules that are still in force at the New WEM Commencement Day:

(a) each such Market Advisory and Dispatch Advisory will be deemed to be withdrawn under the Pre-Amended Rules and will cease to apply from the New WEM Commencement Day; and

(b) prior to the New WEM Commencement Day, AEMO must assess, in the context of the criteria set out in section 7.11 of the Post-Amended Rules, whether the matters or circumstances specified in those Market Advisories or Dispatch Advisories continue to apply. Where the matter or circumstance continues to apply, AEMO must issue a Market Advisory in respect of that matter or circumstance in accordance with section 7.11 of the Post-Amended Rules.

1.57.7. For the purposes of carrying out a Medium Term PASA study or assessment under section 3.16 of the Pre-Amended Rules or the Post-Amended Rules:

(a) until the New WEM Commencement Day, AEMO:

i. must use the Medium Term PASA carried out under the Pre-Amended Rules in respect to any periods in that Medium Term PASA falling after the New WEM Commencement Day; and

ii. may take into account information in any Medium Term PASA carried out under the Post-Amended Rules in respect to any periods in that Medium Term PASA falling on or after the New WEM Commencement Day; and

(b) after the New WEM Commencement Day, AEMO may, but is not required to, consider information in any Medium Term PASA carried out under the

Pre-Amended Rules with respect to any Trading Interval commencing on or after the New WEM Commencement Day.

1.57.8. For the purposes of any assessments or determinations by AEMO prior to the New WEM Commencement Day relating to or in connection with Power System Security and Power System Reliability under the Post-Amended Rules for any period after the New WEM Commencement Day, AEMO may take into account information in any PASA carried out under the Pre-Amended Rules or the Post-Amended Rules that relates to Trading Intervals commencing on or after the New WEM Commencement Day.

1.57.9. AEMO must transfer and convert, as applicable, data and other information relating to or in connection with Outages under the Pre-Amended Rules to the relevant systems under the Post-Amended Rules ("**Outage Data Conversion**") that AEMO determines is necessary or desirable to:

(a) enable AEMO to perform its functions in respect of Outages under Chapter 3 of the Post-Amended Rules;

(b) enable a Market Participant to comply with its obligations in respect of Outages under Chapter 3 of the Post-Amended Rules; and

(c) enable a Network Operator to comply with its obligations in respect of Outages under Chapter 3 of the Post-Amended Rules.

1.57.10. AEMO must document, and publish on the WEM Website, the procedure ("**Outage Data Conversion Procedure**") in respect of the Outage Data Conversion by the date and time specified in the Transition Schedule. The Outage Data Conversion Procedure must include, without limitation:

(a) the processes to be followed by AEMO (which AEMO must follow), including how AEMO will convert any Outage-related data and other information having regard to any differences between the defined terms and requirements under the Pre-Amended Rules and the Post-Amended Rules;

(b) the processes to be followed by Market Participants (which Market Participants must follow), including with respect to any Outage-related data or information that the Market Participant must review or submit to AEMO for assessment;

(c) the processes and obligations with respect to the provision or management of any Outage-related data and information that is required to be provided but is to be excluded from the Outage Data Conversion;

(d) the dates and times by which acts, matters and things must be done, which may be specified in the Transition Schedule; and

(e) any other matters AEMO considers relevant.

For the avoidance of doubt, the Outage Data Conversion Procedure is not a WEM Procedure for the purposes of the Pre-Amended Rules or the Post-Amended Rules and consequently none of the provisions applying to WEM Procedures under the Pre-Amended Rules or the Post-Amended Rules will apply to the procedure.

1.57.11. In documenting the procedure referred to in clause 1.57.10, AEMO must:

(a) consult with the Coordinator and other Rule Participants; and

(b) take into account any feedback from the Coordinator or other Rule Participants.

1.57.12. Despite anything to the contrary in the Post-Amended Rules, on and from the New WEM Commencement Day, AEMO and other Rule Participants are not required to comply with their respective obligations specified in:

(a) clauses 3.18C.5(b) and 3.18C.12(c);

(b) section 3.19; and

(c) any other provisions relating to Outage Intention Plans under the Post-Amended Rules,

until after 1 January 2025.

1.57.13. Despite anything to the contrary in the Pre-Amended Rules, if, prior to the New WEM Commencement Day, a person submits an application for registration as a Market Participant under section 2.28 or for a Facility under section 2.29, or for a Facility transfer or de-registration as a Rule Participant or a Facility under section 2.31 of the Pre-Amended Rules and AEMO reasonably determines that the registration, transfer or de-registration process, as applicable, will not be fully completed prior to the New WEM Commencement Day, then:

(a) AEMO may reject the application; and

(b) the person who submitted the application must submit a new application in accordance with the relevant Post-Amended Rules after the New WEM Commencement Day.

1.58. Specific Transitional Provisions – Market Information

1.58.1. In this section 1.58:

Confidentiality Status List: Means the document published by AEMO on the WEM Website specifying the confidentiality status of market related information and documents produced or exchanged in accordance with the Pre-Amended Rules or Pre-Amended Procedures set by AEMO pursuant to Chapter 10 of the Pre-Amended Rules.

Post-Amended Rules: Means the ESM Rules as in force immediately after the New WEM Commencement Day.

Pre-Amended Rules: Means the ESM Rules as in force immediately before the New WEM Commencement Day.

Pre-Amended Procedures: Means the WEM Procedures as in force under the Pre-Amended Rules immediately prior to the New WEM Commencement Day.

1.58.2. On and from the New WEM Commencement Day, AEMO must continue to publish the Confidentiality Status List on the WEM Website that was published on the WEM Website immediately prior to the New WEM Commencement Day.

1.58.3. On and from the New WEM Commencement Day:

(a) all market related information and documents specified in the Confidentiality Status List as:

i. Rule Participant Market Restricted;

ii. Rule Participant Dispatch Restricted;

iii. System Operation Confidential;

iv. AEMO Confidential;

v. Rule Participant Network Restricted; and

vi. Coordinator Restricted,

in accordance with clause 10.2.1 and sections 10.7, 10.8 and 10.9 of the Pre-Amended Rules, as applicable, or otherwise prescribed to be so classified pursuant to the Pre-Amended Rules or Pre-Amended Procedures, will, on and from the New WEM Commencement Day, be deemed to be classified as Confidential Information by the Information Manager pursuant to Chapter 10 of the Post-Amended Rules, but only in so far as the market related information and documents were produced or exchanged under the Pre-Amended Rules or Pre-Amended Procedures;

(b) all market related information and documents specified in the Confidentiality Status List as Public in accordance with clause 10.2.1 and section 10.5 of the Pre-Amended Rules, or otherwise prescribed to be so classified pursuant to the Pre-Amended Rules or Pre-Amended Procedures, will, on and from the New WEM Commencement Day, be deemed to be classified as Public Information by the Information Manager pursuant to Chapter 10 of the Post-Amended Rules; and

(c) all other market related information and documents produced or exchanged in accordance with the Pre-Amended Rules or Pre-Amended Procedures is to be managed by the Information Manager in accordance with Chapter 10 of the Post-Amended Rules on and from the New WEM Commencement Day notwithstanding that the market related information and documents were produced or exchanged in accordance with the Pre-Amended Rules or Pre-Amended Procedures.

For the avoidance of doubt, all market related information and documents produced or exchanged under the Post-Amended Rules (however described) will be managed by the Information Manager pursuant to Chapter 10 of the Post-Amended Rules, which could result in market related information and documents being set or assigned a confidentiality status under the Post-Amended Rules that is different to the confidentiality status set for the same or similar type of market related information and documents produced or exchanged under the Pre-Amended Rules.

1.59. Specific Transitional Provisions – Compliance Monitoring

1.59.1. Notwithstanding clauses 2.16.2A and 2.16.2AA, the Coordinator and the Economic Regulation Authority are only required to develop, provide to AEMO and publish the initial combined list of data items and ESM Rules as required by and in accordance with clauses 2.16.2A and 2.16.2AA by the New WEM Commencement Day.

1.59.2. Notwithstanding clause 2.16.2B, AEMO is only required to ensure that the Coordinator and the Economic Regulation Authority have access to all data items in the Market Surveillance Data Catalogue in accordance with clause 2.16.2B by the New WEM Commencement Day.

1.60. Specific Transitional Provisions for Reviews of the Energy Price Limits and FCESS Offer Price Ceilings

1.60.1. In this section 1.60:

Post-Amended Rules: Means the ESM Rules as in force immediately after the New WEM Commencement Day.

1.60.2. Notwithstanding clause 6.20.6, the Economic Regulation Authority is not required to annually review the appropriateness of the value of the Maximum STEM Price and the Alternative Maximum STEM Price under clause 6.20.6 after 30 June 2023.

1.60.3. Notwithstanding clause 6.20.13, the Economic Regulation Authority is not required to annually review the value of the Minimum STEM Price under clause 6.20.13 after 1 February 2023.

1.60.4. Subject to clause 1.60.5, prior to the New WEM Commencement Day, the Economic Regulation Authority must determine the values of the Contingency Reserve Raise Offer Price Ceiling, Contingency Reserve Lower Offer Price Ceiling, RoCoF Control Service Offer Price Ceiling, Regulation Raise Offer Price Ceiling and Regulation Lower Offer Price Ceiling (as defined in the Post-Amended Rules) that will take effect from the New WEM Commencement Day, in accordance with clause 2.26.2A of the Post-Amended Rules.

1.60.5. Notwithstanding clause 2.26.2A, for the period commencing from the New WEM Commencement Day to the end of the Trading Interval starting at 7:30 AM on 1 March 2024, the value determined by the Economic Regulation Authority for each FCESS Offer Price Ceiling in accordance with clauses 1.60.4 and 2.26.2A must be a single identical price.

1.61. Specific Transitional Provisions for the Market Price Limits

1.61.1. In this section 1.61:

Pre-Amended Rules: Means the ESM Rules as in force immediately before the New WEM Commencement Day.

1.61.2. Notwithstanding clause 2.26.1, the Economic Regulation Authority must complete its first review of the Energy Offer Price Ceiling under clause 2.26.1 by 1 January 2025.

1.61.3. Notwithstanding clause 2.26.2A, the Economic Regulation Authority must complete its first review of the FCESS Offer Price Ceilings under clause 2.26.2A by 1 June 2026.

1.61.4. Notwithstanding clause 2.26.2C, the Economic Regulation Authority must complete its first review of the Energy Offer Price Floor under clause 2.26.2C by 1 June 2025.

1.61.5. For the purposes of section 2.26, the last review of the Minimum STEM Price in accordance with clause 6.20.6 of the Pre-Amended Rules will be taken to be the previous review of the Energy Offer Price Floor until the first review of the Energy Offer Price Floor under clause 2.26.2C has been completed.

1.61.6. Subject to clause 2.26.2V, the Energy Offer Price Ceiling that will apply from the New WEM Commencement Day is deemed to be the value equal to the Alternative Maximum STEM Price under the Pre-Amended Rules immediately prior to the New WEM Commencement Day.

1.61.7. Subject to clause 2.26.2V, the Energy Offer Price Floor that will apply from the New WEM Commencement Day is deemed to be the value equal to the Minimum STEM Price that applied under the Pre-Amending Rules immediately prior to the New WEM Commencement Day.

1.62. Specific Transitional Provisions for Portfolio Assessments

1.62.1. Notwithstanding section 2.16B, the Economic Regulation Authority is not required to:

(a) complete its initial assessment to identify each Portfolio operating in the Wholesale Electricity Market in accordance with clause 2.16B.1 until 1 December 2023; and

(b) complete its initial assessment to identify each Constrained Portfolio in accordance with clause 2.16B.2 until 10 Business Days after the end of the first Rolling Test Window commencing on the New WEM Commencement Day.

1.63. General Transitional Provisions – Operational Matters

1.63.1. Notwithstanding clause 4.5.12(d), the ESR Duration Requirement for the 2024 Reserve Capacity Cycle is 8 Trading Intervals.

1.63.2. Notwithstanding clause 4.16.1, the ERA is not required to publish a Flexible Benchmark Reserve Capacity Price for the 2024 Reserve Capacity Cycle.

1.63.3. For the purposes of Steps B.1.2 and B.1.3 of Appendix 9, notwithstanding clause 7.13.6, AEMO must estimate the output of a Facility for any Trading Interval before the New WEM Commencement Day in which the Facility was either:

(a) affected by a Consequential Outage under the ESM Rules as in force immediately before the New WEM Commencement Day, in which case AEMO must treat the Facility as if the Facility was restricted by a Network limitation; or

(b) a GIA Facility and was issued an Operating Instruction under a Network Control Service Contract under the ESM Rules as in force immediately before the New WEM Commencement Day, in which case AEMO must treat the Facility as if the Facility was restricted by a Dispatch Instruction.

1.63.4. If a Facility specified in an application for Certified Reserve Capacity is subject to clause 4.10.1B, AEMO is not required to provide the details of the Facility to the Network Operator under clause 4.4B.7(a).

1.63.4A. Notwithstanding any other provision of these ESM Rules, for each Electric Storage Resource assigned Capacity Credits for the 2021 Reserve Capacity Cycle, for each Trading Day in the Capacity Year commencing on 1 October 2023, the Peak Electric Storage Resource Obligation Duration is the eight contiguous Trading Intervals commencing at 4:30 PM on the Trading Day.

1.63.5. For all prior Reserve Capacity Cycles up to and including the 2024 Reserve Capacity Cycle:

(a) Certified Reserve Capacity previously assigned in that Reserve Capacity Cycle is deemed to be Peak Certified Reserve Capacity; and

(b) Capacity Credits previously assigned in that Reserve Capacity Cycle are deemed to be Peak Capacity Credits.

1.63.6. In the first Reserve Capacity Cycle in which AEMO is required to calculate an expected Forced Outage rate pursuant to clause 4.5.9(c)(ii), AEMO must use an expected Forced Outage rate of 7.6%.

1.63.7. Notwithstanding clause 4.1.26, Reserve Capacity Obligations relating to Flexible Capacity do not apply prior to 1 October of Year 3 of the first Reserve Capacity Cycle in which AEMO assigns Flexible Capacity Credits to the Market Participant.

1.63.8. AEMO is not required to carry out reviews under:

(a) clause 4.11.8(a) for Facilities that commenced operations before 1 October 2024; or

(b) clause 4.11.8(b) for a Facility that entered Commercial Operation before 1 October 2020.

1.63.9. Notwithstanding clause 4.29.2, for the 2025 Reserve Capacity Cycle:

(a) the value of $\text{ForecastCPI}_{\text{cy-2}}$ for the purpose of clause 4.29.1C(f) is to be set as 0.11; and

(b) the value of $\text{ActualCPI}_{\text{cy-2}}$ for the purpose of clause 4.29.1C(g) is to be determined as:

$$\text{ActualCPI}_{\text{cy-2}} = 1.167 \times \left(1 + \text{ActualCPI}_{[\text{year}]}\right) - 1$$

where $\text{ActualCPI}_{[\text{year}]}$ is the latest decimal value of the published annual percentage change in the Australian Bureau of Statistics quarterly Consumer Price Index for the Australian all groups (not seasonally adjusted), for June of that year.

1.63.10. For the 2025 Reserve Capacity Cycle, if the Flexible Reserve Capacity Price is less than or equal to the Peak Reserve Capacity Price then in respect of the 2027 Capacity Year:

(a) Market Participants are not required to fulfil any further obligations relating to Flexible Capacity Credits;

(b) AEMO must not procure supplementary Flexible Capacity under section 4.24;

(c) AEMO must not procure Non-Co-optimised Essential System Services relating to Flexible Capacity for the 2027 Capacity Year;

(d) AEMO must not consider Flexible Capacity Outage Capabilities or the availability of Flexible Capacity when conducting Outage Evaluations under section 3.18E;

(e) subject to clause 1.64.10(f), AEMO is not required to determine or publish, for the 2027 Capacity Year:

i. Flexible Capacity Outage Quantities, Flexible Capacity Adjusted Forced Outage Quantities, and Flexible Capacity Adjusted Planned Outage Quantities under section 3.21;

ii. Flexible IRCR Intervals under clause 4.1.23AA;

iii. the 3 High-Ramp Trading Days under clause 4.1.23BA;

iv. Entity Daily Flexible Reserve Capacity Prices under clause 4.29.1A and the Floating Daily Flexible Reserve Capacity Price under clause 4.29.1F;

v. Indicative Flexible Individual Reserve Capacity Requirements under clause 4.1.23C(b);

vi. Flexible Individual Reserve Capacity Requirements under clause 4.1.24(b) or clause 4.28.11B;

vii. Flexible Reserve Capacity Obligation Quantities under clauses 4.12.7, 4.12.8 and 4.12.9 and Flexible Reserve Capacity Obligation Quantity estimates under clause 6.3A.3(h);

viii. the Transitional Daily Flexible Reserve Capacity Price under clause 4.29.1G and Fixed Daily Flexible Reserve Capacity Prices under clause 4.29.1H;

ix. the values described in clauses 4.20.5A(b)(iiiA) and 4.20.5A(b)(v);

ixA. the Flexible Facility Reserve Capacity Deficit Refund under clause 4.26.4;

x. the Flexible Targeted Reserve Capacity Cost or Flexible Shared Reserve Capacity Cost under clause 4.28.1A; and

xi. the Flexible Capacity Provider Payment or Flexible Capacity Purchaser Payment under clause 9.8.2;

~~(e) subject to clause 1.63.10(f), AEMO is not required to determine or publish:~~

~~i. [Blank]~~

~~ii. [Blank]~~

~~iii. [Blank]~~

~~iv. Entity Daily Flexible Reserve Capacity Prices under clause 4.29.1E and the Floating Daily Flexible Reserve Capacity Price under clause 4.29.1F;~~

~~v. [Blank]~~

~~vi. [Blank]~~

~~vii. [Blank]~~

~~viii. the Transitional Daily Flexible Reserve Capacity Price under clause 4.29.1G and Fixed Daily Flexible Reserve Capacity Prices under clause 4.29.1H; and~~

~~ix. the values described in clauses 4.20.5A(b)(iiiA) and 4.20.5A(b)(v);~~

(eA) a standard form Supplementary Capacity Contract is not required to specify aspects relating to supplementary Flexible Capacity outlined under clauses 4.24.13 (g) and 4.24.13(h)(i)(2);

(f) AEMO must determine and publish:

i. the forecast highest Four-Hour Demand Increase as required by section 7.3 and section 3.16; and

ii. the Flexible Reserve Capacity Price under clause 4.29.1(b)(ii);

~~(f) AEMO must determine and publish:~~

~~i. [Blank]~~

~~ii. the Flexible Reserve Capacity Price under clause 4.29.1(b)(ii); and~~

(g) AEMO is not required to update or publish WEM Procedures relating to the activities in clauses 1.63.10(b), 1.63.10(d), 1.63.10(e)(iv) or 1.63.10(e)(viii) until 1 January 2026;~~.~~

(h) AEMO must not conduct Reserve Capacity Tests under clause 4.25.1B or clause 4.25.2BA;

(i) Market Participants must not apply to AEMO for a reduction in Flexible Capacity Credits under clause 4.25.4A;

(j) Market Participants must not submit Capacity Credit Allocation Submissions in respect of Flexible Capacity Credits; and

(k) AEMO must not issue Dispatch Instructions under 7.6.11(b)(ii).

1.63.11. In the 2025 Reserve Capacity Cycle, AEMO must publish the minimum eligibility requirements for receiving Flexible Certified Reserve Capacity by 31 January 2025.

1.64. Specific Transitional Provisions - Capacity Investment Scheme

1.64.1. In this section 1.64:

Capacity Investment Scheme means the Capacity Investment Scheme Program prescribed under section 33 of the *Industry Research and Development Act 1986* (Cth) and as described in the *Industry Research and Development (Capacity Investment Scheme Program) Instrument 2023* (as may be amended).

CIS WA Target means the target for renewable generation capacity and clean dispatchable capacity in the Wholesale Electricity Market to be delivered through the Capacity Investment Scheme.

1.64.2. AEMO is conferred the function in respect of planning and market and system operations to advise on and assist with the implementation and operation of the Capacity Investment Scheme as it relates to the Wholesale Electricity Market, including tender design, tender processes and assessment, market design and investment contract management in respect of Market Participants to assist in the delivery of the CIS WA Target.

1.65. Specific Transitional Provisions disapplying section 2.22A – determination of AEMO's budget

1.65.1. Subject to clause 1.65.2, section 2.22A does not apply to the determination of AEMO's Allowable Revenue and Forecast Capital Expenditure or budget.

1.65.2. The Regulatory Reporting Guideline issued by the Economic Regulation Authority under clause 2.22A.9(b), effective 21 September 2022, will continue to apply as contemplated in this section 1.65.

1.65.3. By 31 October 2025, AEMO must publish on the WEM Website a financial report showing actual financial performance of AEMO against its budget for the previous Financial Year (including, without limitation, the actual amount paid to a Delegate compared to the budgeted amount) and including supporting information detailing why actual financial performance varied from its budget for the previous Financial Year. The report must be in accordance with the Regulatory Reporting Guideline referred to in clause 1.65.2.

1.65.4. Notwithstanding clause 2.24.2(f), for the purpose of clause 2.24.2(a), for each Financial Year FY starting with the Financial Year commencing on 1 July 2025, the Market Participant Market Fee rate will be determined as follows:

$$
\begin{aligned}
&MP\ Market\ Fee\ rate(FY) \\
&\quad = \Big(\big(0.5 \times MP\ Market\ Fee\ rate(FY-1)\big) \\
&\quad \times \big(1 + WPI(March\ quarter\ FY-1)\big)\Big) \\
&\quad + \Big(\big(0.5 \times MP\ Market\ Fee\ rate(FY-1)\big) \\
&\quad \times \big(1 + CPI(March\ quarter\ FY-1)\big)\Big)
\end{aligned}
$$

where:

(a) MP Market Fee Rate(FY) is the Market Participant Market Fee rate of the Financial Year FY;

(b) WPI(March quarter FY-1) is the latest decimal value of the published annual percentage change in the Australian Bureau of Statistics Wage Price Index for the Australian all sectors excluding bonuses (original) for the March Quarter immediately preceding the start of the Financial Year (FY);

(c) CPI(March quarter FY-1) is the latest decimal value of the published annual percentage change in the Australian Bureau of Statistics Consumer Price Index for the Australian all groups (not seasonally adjusted) for the March Quarter immediately preceding the start of the Financial Year (FY); and

(d) MP Market Fee rate(FY-1) is the Market Participant Market Fee rate for the Financial Year preceding the Financial Year FY.

1.65.5. Notwithstanding clause 2.24.2(f), for the purpose of clause 2.24.2(d), for each Financial Year FY starting with the Financial Year commencing on 1 July 2025, the maximum amount AEMO can determine for each Application Fee is:

$$Max_AF(t,FY) = \Big(\big(0.5 \times AF(t,FY-1)\big) \times \big(1 + WPI(March\ quarter\ FY-1)\big)\Big) + \Big(\big(0.5 \times AF(t,FY-1)\big) \times \big(1 + CPI(March\ quarter\ FY-1)\big)\Big)$$

where:

(a) Max_AF(t,FY) is the maximum Application Fee for the application type t for the Financial Year FY;

(b) WPI(March quarter FY-1) is the latest decimal value of the published annual percentage change in the Australian Bureau of Statistics Wage Price Index for the Australian all sectors excluding bonuses (original) for the March Quarter immediately preceding the start of the Financial Year (FY);

(c) CPI(March quarter FY-1) is the latest decimal value of the published annual percentage change in the Australian Bureau of Statistics Consumer Price Index for the Australian all groups (not seasonally adjusted) for the March Quarter immediately preceding the start of the Financial Year (FY);

(d) AF(t,FY-1) is the Application Fee for the application type t for the Financial Year preceding the Financial Year FY; and

(e) t is the application type.

1.66. Specific Transitional Provisions for the WEM Procedures affected by the RCM Reviews Sequencing Amending Rules

1.66.1. In this section 1.66:

RCM Reviews Sequencing Amending Rules (Schedule 1): means the Amending Rules in Schedule 1 of the Wholesale Electricity Market Amendment (RCM Reviews Sequencing) Rules.

1.66.2. Notwithstanding clauses 2.9.2A and 2.9.3, AEMO is not required to amend or develop any WEM Procedures to reflect the RCM Reviews Sequencing Amending Rules (Schedule 1) until 1 July 2025.

1.67. Transitional Provision - Nomination for determination of Relevant Demand

1.67.1. In this section 1.67:

Post-Amended Rules: Means the ESM Rules in force immediately after 8:00 AM on 1 October 2026.

Unadjusted Baseline Method: Has the meaning in the Post-Amended Rules.

1.67.2. A Market Participant with Capacity Credits for a Demand Side Programme may nominate a method for the determination of the Relevant Demand of the Demand Side Programme in accordance with clause 2.29.5AG of the Post-Amended Rules under this clause 1.67.2 until 1 October 2026.

1.67.3. Where a Market Participant nominates a method for the determination of the Relevant Demand of the Demand Side Programme in accordance with clause 1.67.2, AEMO must process the nomination in accordance with clause 2.29.5AH of the Post-Amended Rules.

1.67.4. If a Market Participant has not nominated a method for the determination of the Relevant Demand of the Demand Side Programme in accordance with clause 1.67.2, then AEMO must use the Unadjusted Baseline Method.

1.68. Transitional Provisions for the Economic Regulation Authority's Determination of the Benchmark Reserve Capacity Prices for the 2026 Reserve Capacity Cycle

1.68.1. Clause 4.16.1 is modified so that the Economic Regulation Authority must publish the Benchmark Reserve Capacity Prices for the 2026 Reserve Capacity Cycle prior to 16 March 2026.

1.68.2. Clause 4.16.9(b) is modified so that the Economic Regulation Authority must review the WEM Procedure referred to in clause 4.16.3 within the timeframe required to meet the requirement of clause 1.68.1.

1.68.3. Clause 4.3.1(f) does not apply to the 2026 Reserve Capacity Cycle.

1.69. Transitional provision for Demand Side Programmes in the 2024 Reserve Capacity Cycle and the 2025 Reserve Capacity Cycle

1.69.1. Clause 2.29.5AC does not apply to the 2024 Reserve Capacity Cycle and the 2025 Reserve Capacity Cycle.

1.70. Specific Transitional Provisions for the WEM Procedures affected by the Tranche 9 Amending Rules

1.70.1. In this section 1.70:

Tranche 9 Amending Rules (Schedule 1): means the Amending Rules in Schedule 1 of the Electricity System and Market Amendment (Tranche 9) Rules 2025.

1.70.2. Notwithstanding clauses 2.9.2A and 2.9.3, AEMO is not required to amend or develop any WEM Procedures to reflect the Tranche 9 Amending Rules (Schedule 1) until 1 May 2026.

1.71. Transitional Provisions for Standard Small User Facility WEM Procedure

1.71.1. Notwithstanding clauses 2.9.2C, 2.9.3 and 2.11.4:

(a) a Distribution System Operator is not required to publish the Procedure Change Report for the initial WEM Procedure developed by the Distribution System Operator under clause 3.25.2 until 1 February 2026; and

(b) an initial WEM Procedure developed under clause 3.25.2 must commence at 8:00 AM on 1 May 2026.

1.71.2. A Market Participant is not required under clause 2.13.23 to report a breach, or suspected breach, of a WEM Procedure referred to in clause 3.25.2 if the breach occurs, or is suspected to have occurred, before 1 May 2027.

1.72. Transitional provision for the WEM Procedure developed under clause 4.16.3

1.72.1. In this section 1.72:

Tranche 10 Schedule 1 Commencement: means the date and time the Amending Rules in Schedule 1 of the Electricity System and Market Amendment (Tranche 10) Rules 2026 commence.

1.72.2. The WEM Procedure that was developed by the Economic Regulation Authority in accordance with clause 4.16.3 and in force immediately prior to Tranche 10 Schedule 1 Commencement is deemed to have been developed by the Coordinator in accordance with these ESM Rules.

1.72.3. Subject to clause 1.72.4, any reference to the Economic Regulation Authority in the WEM Procedure referred to in clause 1.72.2 is deemed to be a reference to the Coordinator.

1.72.4. Clause 1.72.3 ceases to apply from the date and time the Coordinator first replaces or amends the WEM Procedure following Tranche 10 Schedule 1 Commencement.

1.73. Specific Transitional Provisions for the WEM Procedures affected by the Tranche 10 Amending Rules

1.73.1. In this section 1.73:

Tranche 10 Amending Rules (Schedules 1 and 2): means the Amending Rules in Schedules 1 and 2 of the Electricity System and Market Amendment (Tranche 10) Rules 2026.

1.73.2. Notwithstanding clauses 2.9.2A and 2.9.3, AEMO is not required to amend or develop any WEM Procedures to reflect the Tranche 10 Amending Rules (Schedules 1 and 2) until 1 February 2027.

2. Administration

Functions and Governance

2.1. [Blank]

2.1A. Australian Energy Market Operator

2.1A.1. AEMO is conferred functions in respect of the Wholesale Electricity Market under the ESM Regulations and AEMO Regulations.

2.1A.1A. The function of ensuring that the SWIS operates in a secure and reliable manner for the purposes of the ESM Regulations is conferred on AEMO.

2.1A.2. The ESM Regulations also provide for the ESM Rules to confer additional functions on AEMO. The functions conferred on AEMO are:

(a) to operate the Reserve Capacity Mechanism, the Short Term Energy Market and the Real-Time Market;

(b) to settle such transactions as it is required to under these ESM Rules;

(c) to carry out a Long Term PASA study and to publish the Statement of Opportunities Report;

(d) to do anything that AEMO determines to be conducive or incidental to the performance of the functions set out in this clause 2.1A.2;

(e) to process applications for participation, and for the registration, de-registration, transfer and Essential System Services accreditation of facilities;

(eA) to procure, schedule and dispatch Essential System Services to meet the Essential System Service Standards;

(eB) to monitor Rule Participants' compliance with the ESM Rules in accordance with clause 2.13.7;

(eC) to trigger and administer the SESSM in accordance with section 3.15A;

(eD) to procure, schedule and dispatch Non-Co-optimised Essential System Services in accordance with these ESM Rules;

(f) to release information required to be released by these ESM Rules;

(g) to publish information required to be published by these ESM Rules;

(h) to develop WEM Procedures, and amendments and replacements for them, where required by these ESM Rules;

(i) to make available copies of the WEM Procedures, as are in force at the relevant time;

(iA) to monitor Rule Participants' compliance with ESM Rules relating to dispatch and Power System Security and Power System Reliability;

(j) to support:

i. the Economic Regulation Authority's monitoring of other Rule Participants' compliance with the ESM Rules;

ii. the Economic Regulation Authority's investigation of potential breaches of the ESM Rules (including by reporting potential breaches to the Economic Regulation Authority); and

iii. any enforcement action taken by the Economic Regulation Authority under the Regulations and these ESM Rules;

(k) to support the Economic Regulation Authority in its market surveillance role, including providing any market related information required by the Economic Regulation Authority;

(l) to support the Coordinator and the Economic Regulation Authority in their roles of monitoring market effectiveness, including providing any market related information required by the Coordinator or the Economic Regulation Authority;

(lA) to contribute to the development and improve the effectiveness of the operation and administration of the Wholesale Electricity Market, by:

i. developing Rule Change Proposals;

ii. providing support and assistance to other parties to develop Rule Change Proposals;

iii. providing information to the Coordinator as required to support the Coordinator's functions under these ESM Rules; and

iv. providing information and assistance to the Coordinator and the Economic Regulation Authority as required to support the reviews they carry out under the ESM Rules;

(lB) to develop and maintain a Congestion Information Resource;

(lC) to establish, maintain and update a DER Register in accordance with clause 3.24;

(lD) to participate in the Technical Rules Committee and provide advice on Technical Rules Change Proposals as required by the Economic Regulation Authority under the Access Code, to provide submissions as part of the public consultation process in respect of Technical Rules Change Proposals and to develop and submit Technical Rules Change Proposals relating to System Operation Functions;

(lE) to support each Network Operator in relation to the standard or technical level of performance in respect of a Technical Requirement applicable to

Transmission Connected Generating Systems and perform the associated functions set out in Chapter 3A of these ESM Rules;

(IF) to advise and consult with each Network Operator in respect of AEMO's System Operation Functions as contemplated under the Technical Rules applicable to their Network;

(IG) to provide information and assistance to the Coordinator relating to the preparation of the Whole of System Plan by the Coordinator;

(IH) to contribute to, provide information and assist with, the development of the Transmission System Plan in accordance with section 4.5B;

(II) to support the Coordinator's role, and to facilitate and implement decisions by the Coordinator and the Minister regarding the evolution and development of the Wholesale Electricity Market and the ESM Rules, and the management of Power System Security and Power System Reliability in the SWIS; and

(m) to carry out any other functions conferred, and perform any obligations imposed, on it under these ESM Rules.

2.1A.3. AEMO may delegate any of its functions under the ESM Rules (other than the power to do the things indicated as not able to be delegated in the ESM Regulations) to a Delegate. A function performed by a Delegate is to be taken to be performed by AEMO. A Delegate performing a function under this clause 2.1A.3 is to be taken to do so in accordance with the terms of the delegation unless the contrary is shown. Nothing in this clause 2.1A.3 limits the ability of AEMO to perform a function through an officer, employee or agent.

2.1A.4. Where AEMO appoints a Delegate, AEMO must publish on the WEM Website information as to:

(a) the appointment of the Delegate;

(b) the identity of the Delegate; and

(c) the scope of the delegation, including, without limitation, the activities in relation to which the delegation applies.

2.1A.5. Where AEMO appoints a Delegate:

(a) AEMO may notify a Market Participant of the scope of the delegation and require that the communications from the Market Participant to AEMO are made through the Delegate; and

(b) a Market Participant must ensure that any communications from the Market Participant to AEMO under these ESM Rules within the scope of the delegation are made through the Delegate to the extent notified to the Market Participant by AEMO.

2.1A.6. A Delegate must carry out the relevant function, and other rights and obligations, in respect of which it has been appointed by AEMO, in accordance with the provisions of these ESM Rules, the WEM Procedures, and the instrument of delegation.

2.1A.7. A Delegate is a "market governance participant" for the purposes of section 126 of the Electricity Industry Act to the extent that it performs a function conferred on it under clause 2.1A.3.

2.1A.8. Notwithstanding that AEMO may have appointed a Delegate, AEMO remains liable under these ESM Rules for the performance of any function conferred on the Delegate under clause 2.1A.3.

2.2. [Blank]

2.2A. The Economic Regulation Authority

2.2A.1. The following functions are conferred on the Economic Regulation Authority under these ESM Rules:

(a) to monitor other Rule Participants' compliance with these ESM Rules, to investigate potential breaches of these ESM Rules, and if thought appropriate, initiate enforcement action under the Regulations and these ESM Rules;

(b) [Blank]

(bA) [Blank]

(bB) to contribute to the development and improve the effectiveness of the operation and administration of the Wholesale Electricity Market and these ESM Rules, by developing Rule Change Proposals;

(bC) to support the Coordinator's role, and to facilitate and implement decisions by the Coordinator and the Minister regarding the evolution and development of the Wholesale Electricity Market and the ESM Rules;

(c) to carry out any other functions conferred, and perform any obligations imposed, on it under these ESM Rules; and

(d) to do anything that the Economic Regulation Authority determines to be conducive or incidental to the performance of the functions set out in this clause 2.2A.1.

2.2B. [Blank]

2.2C. Network Operators

2.2C.1. The ESM Regulations provide for the ESM Rules to confer functions on registered participants of a specified class. The functions conferred on each Network Operator are to:

(a) calculate and provide Loss Factors to AEMO;

(b) provide Limit Advice to AEMO;

(bA) provide information and assistance to the Coordinator relating to the preparation of the Whole of System Plan by the Coordinator;

(bB) procure Non-Co-optimised Essential System Services in accordance with sections 3.11A and 3.11B;

(bC) develop and publish a Transmission System Plan in accordance with section 4.5B;

(bD) to facilitate and support the Coordinator's role under clause 2.2D.1(h), and to prepare for and enable the evolution and development of the Wholesale Electricity Market and the ESM Rules;

(c) develop WEM Procedures, and amendments to and replacements for them, as required by these ESM Rules;

(cA) perform the functions in relation to the standard or technical level of performance in respect of a Technical Requirement applicable to Transmission Connected Generating Systems electrically connected to the Network that the Network Operator operates as set out in Chapter 3A and Appendix 12 of these ESM Rules;

(d) do anything that the Network Operator determines to be conducive or incidental to the performance of the functions set out in this clause 2.2C.1; and

(e) carry out any other functions conferred, and perform any other obligations imposed, on Network Operators under these ESM Rules.

2.2C.2. Western Power is the Distribution System Operator for each of its Distribution Networks.

2.2D. Coordinator of Energy

2.2D.1. The ESM Regulations provide for the ESM Rules to confer functions on the Coordinator. The functions conferred on the Coordinator are to:

(a) carry out the tasks necessary to establish the dispute resolution mechanism contained in section 1.42 including but not limited to the appointment of arbitrators and establishment of any expert panels;

(b) provide any administrative services deemed necessary by the Coordinator to facilitate the referral of disputes to an arbitrator in accordance with section 1.42;

(c) develop WEM Procedures, and amendments to and replacements for them, as required by these ESM Rules;

(d) do anything that the Coordinator determines to be conducive or incidental to the performance of the functions set out in this clause 2.2D.1;

(e) develop and publish a Whole of System Plan in accordance with section 4.5A;

(f) administer these ESM Rules;

(g) develop amendments to these ESM Rules and replacements for them;

(h) consider and, in consultation with the Market Advisory Committee, progress the evolution and development of the Wholesale Electricity Market and these ESM Rules;

(i) provide MAC Secretariat services to the Market Advisory Committee and support its independent Chair;

(iA) trigger the procurement of Non-Co-optimised Essential System Services in accordance with section 3.11A;

(iB) to perform any obligations imposed on the Coordinator under section 4.5B;

(j) undertake reviews and consultation as required under these ESM Rules; and

(k) carry out any other functions conferred, and perform any other obligations imposed, on the Coordinator under these ESM Rules.

2.3. The Market Advisory Committee

2.3.1. The Market Advisory Committee is a committee of industry representatives convened by the Coordinator to advise the Coordinator regarding matters concerning, and the Coordinator's plans for, the evolution, development and operation of the South West Interconnected System, the Wholesale Electricity Market and these ESM Rules, and to:

(a) advise the Coordinator regarding Rule Change Proposals;

(b) advise AEMO, the Economic Regulation Authority, the Coordinator, Distribution System Operators and Network Operators regarding Procedure Change Proposals;

(c) advise the Coordinator, AEMO and the Economic Regulation Authority on the development of Rule Change Proposals when requested by the Coordinator, AEMO or the Economic Regulation Authority in accordance with clauses 2.5.1A or 2.5.1B or 2.5.1C; and

(d) provide assistance to the Coordinator in its monitoring role under clauses 2.16.13A and 2.16.13B.

2.3.1A. The Market Advisory Committee is a non-voting committee.

2.3.1B. The Market Advisory Committee must endeavour where practicable to reach a consensus position on any issue before it.

2.3.1C. If, after allowing a reasonable time for discussion, the independent Chair of the Market Advisory Committee determines that a consensus position either will not be achieved, or is unlikely to be achieved within a time which is reasonable in the circumstances, then the independent Chair must provide advice to the Coordinator which reflects any majority view and which includes or is accompanied by the dissenting views.

2.3.1D. Any advice provided by the Market Advisory Committee must be consistent with the State Electricity Objective.

2.3.2. The Coordinator must develop and publish a constitution for the Market Advisory Committee detailing matters including:

(a) the process for convening the Market Advisory Committee;

(b) the terms of reference of the Market Advisory Committee;

(c) the membership terms of Market Advisory Committee members;

(d) the process for appointing and replacing Market Advisory Committee members by the Coordinator;

(e) the conduct of Market Advisory Committee meetings;

(f) the role of the MAC Secretariat in respect of the Market Advisory Committee;

(g) the interaction between the Market Advisory Committee and the Coordinator, AEMO, the Economic Regulation Authority and Network Operators;

(h) the ability of the Market Advisory Committee to delegate any of the roles described in clause 2.3.1 to a Working Group; and

(i) the governance arrangements to apply between the Market Advisory Committee and any Working Groups where the Market Advisory Committee delegates any of the roles described in clause 2.3.1 to a Working Group.

2.3.3. The constitution of the Market Advisory Committee must be consistent with the ESM Rules.

2.3.4. The Coordinator must invite public submissions when developing or amending the constitution of the Market Advisory Committee.

2.3.5. Subject to clause 2.3.13, the Market Advisory Committee must comprise:

(a) at least eight and not more than ten members representing Market Participants, or prospective Market Participants;

(b) at least one member and not more than two representing Contestable Customers;

(c) at least one and not more than two members representing Network Operators, of whom one must represent Western Power;

(d) [Blank]

(e) at least two independent members to represent small-use consumers;

(f) [Blank]

(g) two members representing AEMO;

(h) one member representing Synergy, in its role as the only supplier of electricity to Non-Contestable Customers; and

(i) an independent Chair, to be appointed by the Minister under clause 2.3.8A.

2.3.5A. Subject to clause 2.3.13, when appointing or removing members of the Market Advisory Committee of the class described in clause 2.3.5(a), the Coordinator must use its reasonable endeavours to ensure that:

(a) the Market Advisory Committee membership includes a diverse but balanced representation of Market Participants or prospective Market Participants;

(b) the Market Advisory Committee membership is representative of the range Facility Classes, and existing and emerging technology types in the Wholesale Electricity Market; and

(c) the Market Advisory Committee membership includes at least one Market Participant or prospective Market Participant that sells, or intends to sell, electricity to customers but has not registered, and does not intend to register, a Scheduled Facility, Semi-Scheduled or Non-Scheduled Facility in the Wholesale Electricity Market.

2.3.5B. The same organisation cannot be represented by more than one member on the Market Advisory Committee simultaneously (other than the 2 members representing AEMO under clause 2.3.5(g)).

2.3.5C. Candidates for appointment under clauses 2.3.5(c), 2.3.5(g) and 2.3.5(h) must be proposed to the Coordinator by Western Power, AEMO and Synergy respectively.

2.3.6. The Minister may appoint a representative to attend Market Advisory Committee meetings as an observer.

2.3.7. The Economic Regulation Authority may appoint a representative to attend Market Advisory Committee meetings as an observer.

2.3.7A. The Coordinator or the independent Chair of the Market Advisory Committee may invite a person to attend Market Advisory Committee meetings as an observer, either for a specified meeting or meetings or until further notice.

2.3.8. The Coordinator may appoint and remove members of the Market Advisory Committee in consultation with the independent Chair.

2.3.8A. The Minister must appoint an independent Chair of the Market Advisory Committee, who in the opinion of the Minister:

(a) is free from any business or other relationship that could materially interfere with the independent exercise of the independent Chair's judgment; and

(b) has the skills and experience necessary to carry out the responsibilities and functions of the independent Chair of the Market Advisory Committee.

2.3.8B. Each independent Chair of the Market Advisory Committee will be appointed for a term of three years, with the possibility of one three-year extension.

2.3.8C. The Minister may remove an independent Chair of the Market Advisory Committee at any time in the following circumstances:

(a) the person becomes an undischarged bankrupt; or

(b) the person becomes of unsound mind or his or her estate is liable to be dealt with in any way under law relating to mental health;

(c) an event specified in the independent Chair terms of engagement; or

(d) in the Minister's opinion the person no longer adequately meets the criteria in clause 2.3.8A.

2.3.8D. The Minister may appoint an interim Chair of the Market Advisory Committee in the event that the independent Chair becomes temporarily unavailable or the position is otherwise vacant for any reason. The interim Chair may be appointed for an initial term of up to six months and may be reappointed for further six months. The interim Chair must meet, so far as is practicable, the criteria in clause 2.3.8A.

2.3.9. The Coordinator must annually review the composition of the Market Advisory Committee in consultation with the independent Chair of the Market Advisory Committee and may remove and appoint members following the review.

2.3.10. When appointing and removing members of the Market Advisory Committee, the Coordinator must consult with the independent Chair of the Market Advisory Committee, and (except in the case of candidates for appointment under clauses 2.3.5(c), 2.3.5(e), 2.3.5(g) or 2.3.5(h)) take nominations from Rule Participants and industry groups, that it considers relevant to the Wholesale Electricity Market, and, if practicable, must choose members from persons nominated.

2.3.11. The Coordinator may remove a member of the Market Advisory Committee at any time in the following circumstances:

(a) the person becomes an undischarged bankrupt;

(b) the person becomes of unsound mind or his or her estate is liable to be dealt with in any way under law relating to mental health; or

(c) an event specified for this purpose in the constitution for the Market Advisory Committee occurs; or

(d) in the Coordinator's opinion the person no longer adequately represents the person or class of persons that they were appointed to represent in accordance with clause 2.3.5.

2.3.12. A member of the Market Advisory Committee may resign by giving notice to the Coordinator in writing.

2.3.13. Where a position on the Market Advisory Committee is vacant at any time, the Coordinator must use its reasonable endeavours to appoint a person to fill the position, but the Market Advisory Committee may continue to perform its functions under this clause 2.3 despite any vacancy.

2.3.14. [Blank]

2.3.15. The independent Chair must convene the Market Advisory Committee:

(a) on any occasion where these ESM Rules require a meeting to discuss a Rule Change Proposal;

(aA) on any occasion where these ESM Rules require a meeting to discuss a Procedure Change Proposal;

(b) [Blank];

(c) on any occasion when two or more members of the Market Advisory Committee have informed the independent Chair in writing that they wish to bring a matter regarding the evolution or the development of the Wholesale Electricity Market or these ESM Rules before the Market Advisory Committee for discussion; and

(d) on any occasion the Coordinator has informed the independent Chair that she or he wishes to bring a matter regarding the evolution or the development of the Wholesale Electricity Market or these ESM Rules before the Market Advisory Committee for discussion.

2.3.16. Subject to her or his obligations of confidentiality under these Rules and otherwise, the Coordinator must use reasonable endeavours to provide the Market Advisory Committee any information in the Coordinator's possession obtained in the course of performing a function under these ESM Rules that is pertinent to the issues being addressed by the Market Advisory Committee.

2.3.17. The Market Advisory Committee may:

(a) establish one or more Working Groups comprising representatives of Rule Participants and other interested persons, to assist the Market Advisory Committee in advising the Coordinator, Economic Regulation Authority, AEMO, Distribution System Operators and Network Operators on any of the matters listed in clause 2.3.1 of these ESM Rules; and

(b) disband any Working Groups where it considers that the Working Group is no longer required, or will no longer be required, to assist the Market Advisory Committee in advising the Coordinator, Economic Regulation Authority, AEMO, Distribution System Operators and Network Operators on any of the matters listed in clause 2.3.1 of these ESM Rules.

Market Documents

2.4. ESM Rules made by the Coordinator

2.4.1. The Coordinator:

(a) is responsible for maintaining and publishing the ESM Rules;

(b) is responsible for ensuring the development of amendments of, and replacements for, the ESM Rules; and

(c) may make amending rules (as defined in the Regulations) ("**Amending Rules**") in accordance with this Chapter.

2.4.2. The Coordinator must not make Amending Rules unless it is satisfied that the ESM Rules, as proposed to be amended or replaced, are consistent with the State Electricity Objective.

2.4.3. In deciding whether to make Amending Rules, the Coordinator must have regard to the following:

(a) any applicable statement of policy principles given to the Coordinator under clause 2.5.2;

(aA) any advice provided by the Market Advisory Committee regarding the evolution or the development of the Wholesale Electricity Market or these ESM Rules;

(b) the practicality and cost of implementing the Rule Change Proposal;

(c) the views expressed in any submissions on the Rule Change Proposal;

(d) any advice by the Market Advisory Committee where the Market Advisory Committee met to consider the Rule Change Proposal;

(dA) whether the advice from the Market Advisory Committee provided under clause 2.4.3(d) reflects a consensus view or a majority view, and, if the

latter, any dissenting views included in or accompanying the advice and how these views have been taken into account by the Coordinator;

(e) any technical studies that the Coordinator considers are necessary to assist in assessing the Rule Change Proposal; and

(f) any advice or information provided by AEMO or a Network Operator under clause 2.4.3C.

2.4.3A. Without limiting clause 2.4.3, in deciding whether or not to make Amending Rules, the Coordinator may seek information or advice, and the Coordinator may have regard to that information or advice, from any person that the Coordinator considers is appropriate to assist it in assessing the relevant Rule Change Proposal.

2.4.3B. If the Coordinator considers that making Amending Rules will directly or indirectly affect a WEM Technical Standard, the Coordinator must request advice, which may include a request to provide information, from AEMO and each Network Operator that the Coordinator considers will be affected by the relevant Amending Rules to assist the Coordinator in assessing the relevant Rule Change Proposal. The following applies to a request:

(a) the Coordinator must consult with each recipient of the request, on the requirements in the request and the timeframes for responding to the request; and

(b) the Coordinator may, at her or his discretion, require each recipient of the request to provide the advice jointly or independently.

2.4.3C. Subject to clause 2.4.3D, each recipient of a request under clause 2.4.3B must provide the advice or information requested by the Coordinator under clause 2.4.3B in accordance with the timeframes and any other requirements specified in the request.

2.4.3D. If a recipient of a request under clause 2.4.3B requires a longer timeframe to provide the advice or information requested by the Coordinator under clause 2.4.3B, the recipient:

(a) may seek an extension to the timeframe from the Coordinator; and

(b) must outline the reasons for seeking the extension.

2.4.3E. The Coordinator may, in her or his sole discretion, approve or decline a request for an extension of time made under clause 2.4.3D.

2.4.4. The Coordinator must maintain on the Coordinator's Website a Rule Change Proposal form which must include:

(a) contact details for proposing rule changes; and

(b) information that must be provided in proposing a change, including:

i. the name of the person submitting the Rule Change Proposal, and where relevant, details of the organisation that person represents;

ii. the issue to be addressed;

iii. the degree of urgency of the proposed change;

iv. any proposed specific changes to particular rules;

v. a description of how the rule change would allow the ESM Rules to better address the State Electricity Objective; and

vi. any identifiable costs and benefits of the change.

2.4A. ESM Rules made by the Minister

2.4A.1. [Blank]

2.4A.2. Despite anything in these ESM Rules, the Minister may develop and make Amending Rules in accordance with regulation 7(5) of the ESM Regulations.

2.5. Rule Change Proposals

2.5.1. Any person may make a Rule Change Proposal by completing a Rule Change Proposal form and submitting it to the Coordinator.

2.5.1A. AEMO must, before commencing the development of a Rule Change Proposal or providing material support or assistance to another party to develop a Rule Change Proposal, consult with the Market Advisory Committee on:

(a) the matters to be addressed by the Rule Change Proposal and if applicable the nature and scope of the support or assistance requested by the other party;

(b) what options exist to resolve the matters to be addressed by the Rule Change Proposal;

(c) AEMO's estimated costs of developing the Rule Change Proposal or providing the support or assistance requested by the other party;

(d) whether and when AEMO should develop the Rule Change Proposal or if AEMO should provide the support or assistance requested by the other party; and

(e) whether and how the Market Advisory Committee will be consulted during the development of the Rule Change Proposal,

and take into account any advice, comments or objections provided by any member or observer of the Market Advisory Committee in deciding whether, when and how to develop the Rule Change Proposal or provide material support or assistance to another party to develop the Rule Change Proposal.

2.5.1B. The Economic Regulation Authority must, before commencing the development of a Rule Change Proposal or providing material support or assistance to another party to develop a Rule Change Proposal, consult with the Market Advisory Committee on:

(a) the matters to be addressed by the Rule Change Proposal and if applicable the nature and scope of the support or assistance requested by the other party;

(b) what options exist to resolve the matters to be addressed by the Rule Change Proposal;

(c) the Economic Regulation Authority's estimated costs of developing the Rule Change Proposal or providing the support or assistance requested by the other party;

(d) whether and when the Economic Regulation Authority should develop the Rule Change Proposal or if the Economic Regulation Authority should provide the support or assistance requested by the other party; and

(e) whether and how the Market Advisory Committee will be consulted during the development of the Rule Change Proposal,

and take into account any advice, comments or objections provided by any member or observer of the Market Advisory Committee in deciding whether, when and how to develop the Rule Change Proposal or provide material support or assistance to another party to develop the Rule Change Proposal.

2.5.1C. The Coordinator must, before commencing the development of a Rule Change Proposal or providing material support or assistance to another party to develop a Rule Change Proposal, consult with the Market Advisory Committee on:

(a) the matters to be addressed by the Rule Change Proposal and if applicable the nature and scope of the support or assistance requested by the other party;

(b) what options exist to resolve the matters to be addressed by the Rule Change Proposal;

(c) the Coordinator's estimated costs to be recovered through Coordinator Fees of developing the Rule Change Proposal or providing the support or assistance requested by the other party;

(d) whether and when the Coordinator should develop the Rule Change Proposal or if the Coordinator should provide the support or assistance requested by the other party; and

(e) whether and how the Market Advisory Committee will be consulted during the development of the Rule Change Proposal,

and take into account any advice, comments or objections provided by any member or observer of the Market Advisory Committee in deciding whether, when

and how to develop the Rule Change Proposal or provide material support or assistance to another party to develop the Rule Change Proposal.

2.5.1D. Where AEMO or a Network Operator wishes to make a Rule Change Proposal that may directly or indirectly affect a WEM Technical Standard, then, without limiting any other requirements applying to a Rule Change Proposal in these ESM Rules or a WEM Procedure, AEMO or the Network Operator must, before making the Rule Change Proposal:

(a) where AEMO wishes to make a Rule Change Proposal, AEMO must consult in good faith with each Network Operator that may be directly or indirectly affected by the relevant proposed Amending Rules; and

(b) where a Network Operator wishes to make a Rule Change Proposal, the Network Operator must consult in good faith with AEMO and each other Network Operator that may be directly or indirectly affected by the relevant proposed Amending Rules.

2.5.2. The Minister may issue a statement of policy principles to the Coordinator with respect to the development of the market. The statement of policy principles must not be inconsistent with the State Electricity Objective. Before giving a statement of policy principles, the Minister may provide a draft of the proposed statement to the Market Advisory Committee and seek the Market Advisory Committee's views on it.

2.5.3. The Coordinator must have regard to any statement of policy principles given by the Minister in making Amending Rules in accordance with this Chapter.

2.5.3A. The Coordinator must have regard to any advice received from the Market Advisory Committee regarding the evolution or the development of the Wholesale Electricity Market or these ESM Rules.

2.5.3B. The independent Chair of the Market Advisory Committee may develop and submit Rule Change Proposals based on advice received from the Market Advisory Committee regarding the development of the Wholesale Electricity Market or these ESM Rules.

2.5.4. Where the Coordinator considers that a change to the ESM Rules is required, the Coordinator may develop a Rule Change Proposal and must publish it in accordance with clause 2.5.7.

2.5.5. Where necessary, the Coordinator may contact the person submitting a Rule Change Proposal and request clarification of any aspect of the Rule Change Proposal. Any clarification received is to be deemed to be part of the Rule Change Proposal.

2.5.6. Within five Business Days of the later of:

(a) receiving the Rule Change Proposal; and

(b) any clarification under clause 2.5.5,

the Coordinator must:

(c) decide whether to progress the Rule Change Proposal any further; and

(d) notify the person who submitted the Rule Change Proposal whether the Coordinator will progress the Rule Change Proposal any further.

2.5.7. When it has developed a Rule Change Proposal, or within seven Business Days of receiving a Rule Change Proposal under clause 2.5.1, the Coordinator must publish notice of the Rule Change Proposal on the Coordinator's Website. The notice must include:

(a) the date that the Rule Change Proposal was submitted, if applicable;

(b) the name, and where relevant, the organisation, of the person who made the Rule Change Proposal;

(c) details of the Rule Change Proposal, including relevant references to clauses of the ESM Rules and any proposed specific changes to those clauses;

(d) the description of how the rule change would allow the ESM Rules to better address the State Electricity Objective given by the person submitting the proposed rule change;

(e) whether the Rule Change Proposal will be progressed and the reason why the Rule Change Proposal will or will not be progressed; and

(f) if the Rule Change Proposal will be progressed further:

i. whether the Rule Change Proposal is to be subject to the Fast Track Rule Change Process in accordance with clause 2.5.9 and the reasons for this decision;

ii. if the Rule Change Proposal is subject to the Fast Track Rule Change process, and the Rule Change Proposal did not include proposed specific changes to clauses, the Coordinator’s proposed Amending Rules to implement the Rule Change Proposal; and

iii. if the Rule Change is not subject to the Fast Track Rule Change process, a call for submissions in relation to the Rule Change Proposal. The due date for submissions must be:

1. 30 Business Days after the notification; or

2. if a longer timeframe is determined in accordance with clause 2.5.10, at a time that is consistent with that timeframe.

2.5.8. Where a Rule Change Proposal that will be progressed relates to a Protected Provision the Coordinator must notify the Minister at the same time as it gives the notice described in clause 2.5.7.

2.5.8A. A decision by the Coordinator to accept a Rule Change Proposal (in proposed or modified form), which was initiated by the Coordinator, does not take effect until it receives the Minister's approval.

2.5.9. The Coordinator may subject a Rule Change Proposal to the Fast Track Rule Change Process if, in her or his opinion, the Rule Change Proposal:

(a) is of a minor or procedural nature; or

(b) is required to correct a manifest error; or

(c) is urgently required and is essential for either:

i. the safe operation; or

ii. the effective operation; or

iii. the reliable operation,

of the market or the SWIS.

2.5.10. Subject to clause 2.5.12, the Coordinator may at any time after deciding to progress a Rule Change Proposal decide to extend the normal timeframe for processing Rule Change Proposals. If the Coordinator decides to do so, then she or he may modify the times and time periods under sections 2.6, 2.7 or 2.8 in respect of the Rule Change Proposal and publish details of the modified times and time periods.

2.5.11. If a Rule Change Proposal was subject to the Fast Track Rule Change Process, and the Coordinator decides to extend the timeframe, she or he must either:

(a) extend the timeframe by no more than 15 Business Days; or

(b) reclassify the Rule Change Proposal as not being subject to the Fast Track Rule Change Process, and must progress it in accordance with section 2.7.

2.5.12. The Coordinator must publish a notice of an extension determined in accordance with clause 2.5.10, and must update any information already published in accordance with clause 2.5.7(f).

2.5.13. A notice of extension must include:

(a) the reasons for the proposed extension;

(b) the views of any Rule Participants consulted on the extension;

(c) the proposed length of any extension; and

(d) the proposed work program.

2.5.14. A Rule Change Proposal that the Coordinator decides is subject to the Fast Track Rule Change Process is to be progressed in accordance with section 2.6, and section 2.7 does not apply.

2.5.15. A Rule Change Proposal that the Coordinator decides is not subject to the Fast Track Rule Change Process is to be progressed in accordance with section 2.7, and section 2.6 does not apply.

2.6. Fast Track Rule Change Process

2.6.1. Within five Business Days of publishing the notice referred to in clause 2.5.7, the Coordinator must notify those Rule Participants or members of the Market Advisory Committee that she or he considers have an interest in the Rule Change Proposal of her or his intention to consult with them concerning the Rule Change Proposal.

2.6.2. Within five Business Days of publishing the notice referred to in clause 2.5.7, a Rule Participant may notify the Coordinator that they wish to be consulted concerning the Rule Change Proposal.

2.6.3. Within 15 Business Days of publishing the notice referred to in clause 2.5.7, the Coordinator must have completed such consultation as the Coordinator considers appropriate in the circumstances with the Rule Participants described in clauses 2.6.1 and 2.6.2.

2.6.3A. Within 20 Business Days of publishing the notice referred to in clause 2.5.7, the Coordinator must:

(a) decide whether to:

i. accept the Rule Change Proposal in the proposed form; or

ii. accept the Rule Change Proposal in a modified form; or

iii. reject the Rule Change Proposal; and

(b) prepare and publish a Final Rule Change Report on the Rule Change Proposal.

2.6.4. The Final Rule Change Report must contain:

(a) the information in the notice of the Rule Change Proposal under clause 2.5.7;

(b) any analysis of the Rule Change Proposal that the Coordinator has carried out;

(c) the identities of Rule Participants that were consulted;

(d) information on any objections expressed by the Rule Participants consulted, and the Coordinator’s response to the objections;

(e) the Coordinator's assessment of the Rule Change Proposal in light of clauses 2.4.2 and 2.4.3;

(f) the decision made by the Coordinator under clause 2.6.3A(a) on the Rule Change Proposal;

(g) the Coordinator's reasons for the decision; and

(h) if the Coordinator decides to make Amending Rules arising from the Rule Change Proposal:

i. the wording of the Amending Rules; and

ii. the proposed date and time that the Amending Rules will commence.

2.7. Standard Rule Change Process

2.7.1. Any person may make a submission to the Coordinator relating to a Rule Change Proposal within the time frame specified under clause 2.5.7(f)(iii).

2.7.2. Subject to its obligations of confidentiality under these ESM Rules and otherwise, the Coordinator must release to the public all information submitted under clause 2.7.1.

2.7.3. The Coordinator may hold public forums or workshops concerning a Rule Change Proposal.

2.7.4. Within one Business Day after the publication of a notice of a Rule Change Proposal in accordance with clause 2.5.7, the Coordinator must notify the members and observers of the Market Advisory Committee as to whether the Coordinator considers the Rule Change Proposal requires convening a meeting of the Market Advisory Committee and the reasons why.

2.7.5. The independent Chair of the Market Advisory Committee must convene a meeting of the Market Advisory Committee concerning a Rule Change Proposal before the due date for submissions in relation to the Rule Change Proposal if:

(a) the independent Chair or the Coordinator considers that advice on the Rule Change Proposal is required from the Market Advisory Committee; or

(b) two or more members of the Market Advisory Committee have informed the independent Chair in writing that they consider that advice on the Rule Change Proposal is required from the Market Advisory Committee.

2.7.6. Within 20 Business Days following the close of submissions, the Coordinator must:

(a) prepare and publish a Draft Rule Change Report on the Rule Change Proposal; and

(b) publish a deadline for further submissions in relation to the Rule Change Proposal, where that deadline must be at least 20 Business Days after the date the deadline is published.

2.7.7. The Draft Rule Change Report must contain:

(a) the information in the notice of the Rule Change Proposal under clause 2.5.7;

(b) all submissions received before the due date for submissions, a summary of those submissions, and the Coordinator's response to issues raised in those submissions (and the report may in the Coordinator's discretion contain any or all of this material in respect of a submission received after the due date);

(c) a summary of any public forums or workshops held;

(cA) a summary of any advice provided by AEMO or a Network Operator under clause 2.4.3C, and reasons if the Coordinator does not propose to follow partially or fully the advice;

(d) a summary of the views expressed by the members of the Market Advisory Committee where the Market Advisory Committee met to consider the Rule Change Proposal and, if the Market Advisory Committee has delegated its role to consider the Rule Change Proposal to a Working Group under clause 2.3.17(a), a summary of the views expressed by that Working Group;

(dA) reasons if the Coordinator does not propose to follow partially or fully the advice received from the Market Advisory Committee;

(e) the Coordinator's assessment of the Rule Change Proposal in light of clauses 2.4.2 and 2.4.3;

(f) a proposal as to whether the Rule Change Proposal should be accepted in the form proposed. The proposal may be that:

i. the Rule Change Proposal be accepted in the proposed form; or

ii. the Rule Change Proposal be accepted in a modified form; or

iii. the Rule Change Proposal be rejected; and

(g) if the Coordinator proposes to make Amending Rules arising from the Rule Change Proposal:

i. the wording of the proposed Amending Rules; and

ii. a proposed date and time the proposed Amending Rules will commence.

2.7.7A. Within 20 Business Days of the deadline specified under clause 2.7.6(b), the Coordinator must:

(a) decide whether to:

i. accept the Rule Change Proposal in the proposed form; or

ii. accept the Rule Change Proposal in a modified form; or

iii. reject the Rule Change Proposal; and

(b) prepare and publish a Final Rule Change Report on the Rule Change Proposal.

2.7.8. The Final Rule Change Report must contain:

(a) the information in the Draft Rule Change Report;

(b) all submissions received before the deadline for submissions specified in relation to the relevant Draft Rule Change Report under clause 2.7.6(b), a summary of those submissions, and the Coordinator's response to the issues raised in those submissions (and the report may in the Coordinator's discretion contain any or all of this material in respect of a submission received after the deadline);

(bA) reasons if the Coordinator has decided not to follow partially or fully the advice received from the Market Advisory Committee;

(bB) reasons if the Coordinator has decided not to follow partially or fully any advice provided by AEMO or a Network Operator under clause 2.4.3C;

(c) any further analysis or modification to the Rule Change Proposal;

(d) the Coordinator's assessment of the Rule Change Proposal in light of clauses 2.4.2 and 2.4.3;

(e) the decision made by the Coordinator under clause 2.7.7A(a) on the Rule Change Proposal;

(f) the Coordinator's reasons for the decision; and

(g) if the Coordinator decides to make Amending Rules arising from the Rule Change Proposal:

i. the wording of the Amending Rules; and

ii. the proposed date and time that the Amending Rules will commence.

2.8. Review of Coordinator Rule Amendment Decisions, Ministerial Approval and Coming into Force of Rule Amendments

2.8.1. A Rule Participant may apply to the Electricity Review Board for a Procedural Review of a decision by the Coordinator contemplated by clause 2.5.6(c), 2.5.9, 2.6.3A(a) or 2.7.7A(a) within the time specified in regulation 44 of the ESM Regulations, on the grounds that the Coordinator has not followed the rule change process set out in sections 2.5, 2.6 and 2.7.

2.8.2. Following an application for a Procedural Review under clause 2.8.1, if the Electricity Review Board finds that the Coordinator has not followed the rule change process set out in sections 2.5, 2.6 and 2.7 the Electricity Review Board may set aside the Coordinator's decision and direct the Coordinator to reconsider the relevant Rule Change Proposal in accordance with the process set out in sections 2.5, 2.6 and 2.7.

2.8.3. The Coordinator must submit a Rule Change Proposal, together with the Final Rule Change Report, to the Minister for approval where Amending Rules in the Final Rule Change Report:

(a) amend or replace a Protected Provision, or, in the Coordinator's opinion, would have the effect of changing the meaning or effect of one or more Protected Provisions; or

(b) are subject to the requirements in clause 2.5.8A.

2.8.4. Subject to clause 2.8.6, the Minister must consider the Rule Change Proposal within 20 Business Days and decide whether the ESM Rules, as amended or replaced by the proposed Amending Rules, are consistent with the State Electricity Objective.

2.8.5. Where a Rule Change Proposal is submitted under clause 2.8.3, the Minister may:

(a) approve the proposed Amending Rules;

(b) not approve the proposed Amending Rules; or

(c) send back to the Coordinator the proposed Amending Rules with any revisions the Minister considers are required to ensure the ESM Rules, as amended or replaced by the proposed Amending Rules, are consistent with the State Electricity Objective.

2.8.6. The Minister may extend the time for a decision on a Rule Change Proposal under clause 2.8.4 by a further period of up to 20 Business Days by notice to the Coordinator. The Minister may extend the time for a decision in respect of a Rule Change Proposal more than once.

2.8.7. The Coordinator must publish notice of any extension under clause 2.8.6 on the Coordinator's Website.

2.8.8. Where the Minister does not make a decision by the original date determined in accordance with clause 2.8.4, or by an extended date determined in accordance with clause 2.8.6, as applicable, then the proposed Amending Rules will be taken to have been approved by the Minister.

2.8.9. Where the Minister does not approve the proposed Amending Rules or sends proposed Amending Rules back to the Coordinator under clause 2.8.5(c), the

Minister must give reasons, and the Coordinator must publish a notice of the Minister's decision and the reasons given by the Minister.

2.8.10. Where the Minister sends proposed Amending Rules back to the Coordinator in accordance with clause 2.8.5(c), the Coordinator must:

(a) publish the revised Amending Rules and call for submissions on the revised Amending Rules within 15 Business Days of publication; and

(b) provide a revised Final Rule Change Report, including any submissions received on the Minister's revised Amending Rules to the Minister within 25 Business Days of the close of the consultation period and clauses 2.8.4 to this clause 2.8.10 apply to the revised Final Rule Change Report.

2.8.11. Amending Rules are made:

(a) for Rule Change Proposals to which clause 2.8.3 applies, when the Minister has either approved, or is taken by clause 2.8.8 to have approved, the Amending Rules; and

(b) for Rule Change Proposals to which clause 2.8.3 does not apply, when the Coordinator has decided to make the Amending Rules as notified under clause 2.6.3A(b) or clause 2.7.7A(b).

2.8.12. Subject to clause 2.8.2, Amending Rules commence at the time and date determined by the Coordinator. The Coordinator must publish notice of the time and date Amending Rules commence.

2.8.13. The following clauses are Protected Provisions:

(a) clauses 1.1.1, 1.1.2, 1.2.1, 1.4.1, 1.4.2, 1.6.2, 1.7.3A, 1.8.1, 1.8.3, 1.8.4, 1.28.1 to 1.28.3, 1.28.5, 1.28.6, 1.42.2, 1.42.3, 1.42.5 to 1.42.7, 1.42.9, 1.42.10, 1.42.28, 1.43A.2, 1.43A.4 to 1.43A.6;

(b) clauses 2.2D.1, 2.3.1, 2.3.2 to 2.3.5A, 2.3.6, 2.3.7A to 2.3.11, 2.3.13, 2.3.16, 2.4.1 to 2.4.4, 2.5.1C, 2.5.2 to 2.5.3A, 2.5.4 to 2.5.15, 2.6.1, 2.6.3, 2.6.4, 2.7.2 to 2.7.4, 2.7.6 to 2.7.8, 2.8.1 to 2.8.14, 2.9.2CB, 2.9.2F, 2.9.4, 2.9.5, 2.9.7C, 2.10.1, 2.10.2A, 2.10.3, 2.10.5E, 2.10.7, 2.10.10, 2.10.12E, 2.10.13, 2.10.17 to 2.10.20, 2.11.1 to 2.11.4, 2.16.2A, 2.16.2D, 2.16.2E, 2.16.6, 2.16.7, 2.16.13A, 2.16.13B, 2.16.13D to 2.16.14, 2.16.15A, 2.21.11, 2.21.12, 2.24.5B to 2.24.5E, 2.24.6A, 2.25.1C, 2.44.1;

(c) clauses 3.11A.1 to 3.11A.10, 3.15.1 to 3.15.5, 3.18GA.1 to 3.18GA.3;

(d) clauses 4.5A1 to 4.5A16, 4.13B.1 to 4.13B.6;

(e) clauses 10.1.1, 10.2.1, 10.2.1B, 10.2.3, 10.2.6, 10.2.8 to 10.2.12, 10.3.1 to 10.3.4, 10.4.1, 10.4.2, 10.4.5, 10.4.7 to 10.4.11, 10.4.14 to 10.4.26, 10.5.1 to 10.5.14 ; and

(f) any other clauses of these ESM Rules that must not be amended, repealed or replaced without the approval of the Minister in accordance with the ESM Regulations.

2.8.14. The following clauses are WEM Technical Standards:

(a) section 3.1;

(b) clause 3.2.5;

(c) clauses 3.3.3 and 3.4.3;

(d) section 3.6;

(e) section 3.7;

(f) chapter 3A and appendix 12; and

(g) chapter 3B.

2.8.15. If Amending Rules have yet to commence, or the Coordinator has proposed Amending Rules which are yet to be made, and those Amending Rules or proposed Amending Rules require the Economic Regulation Authority, AEMO, a Network Operator or a Distribution System Operator to undertake consultation with a Market Participant, notwithstanding that the Amending Rules are not in force, the Economic Regulation Authority, AEMO, the Network Operator or the Distribution System Operator may initiate the consultation process prior to the commencement or making of those Amending Rules as if those Amending Rules were in force.

2.9. WEM Procedures

2.9.1. [Blank]

2.9.2. [Blank]

2.9.2A. AEMO must manage the development of, amendment of, and replacement for WEM Procedures which these ESM Rules require be developed by AEMO.

2.9.2B. The Economic Regulation Authority must manage the development of, amendment of, and replacement for WEM Procedures which these ESM Rules require to be developed by the Economic Regulation Authority.

2.9.2C. [Blank]

2.9.2CA. Each Network Operator must manage the development of, amendment of, and replacement for WEM Procedures which these ESM Rules require be developed by a Network Operator.

2.9.2CB. The Coordinator must manage the development, amendment and replacement of any WEM Procedures which these ESM Rules require be developed and maintained by the Coordinator.

2.9.2CC. Each Distribution System Operator must manage the development of, amendment of, and replacement for WEM Procedures which these ESM Rules require be developed by a Distribution System Operator.

2.9.2D. AEMO must develop and maintain on the WEM Website a list of all WEM Procedures that AEMO is required to develop or maintain under the ESM Rules. For each WEM Procedure the list must:

(a) state the name of the WEM Procedure;

(b) give a brief description of the WEM Procedure; and

(c) specify:

i. each head of power clause in the ESM Rules pursuant to which the WEM Procedure has been developed; and

ii. if not already covered under clause 2.9.2D(c)(i), each clause in the ESM Rules which requires that an obligation, process or requirement be documented in a WEM Procedure, that has been documented in that WEM Procedure.

2.9.2E. AEMO must maintain and keep up to date the list referred to in clause 2.9.2D.

2.9.2F. The Economic Regulation Authority, the Coordinator, each Distribution System Operator and each Network Operator must publish any WEM Procedures they are required to document or develop under these ESM Rules on their respective websites.

2.9.3. WEM Procedures:

(a) must:

i. be developed, amended or replaced in accordance with the process in these ESM Rules;

ii. be consistent with the State Electricity Objective; and

iii. be consistent with these ESM Rules, the Electricity Industry Act and Regulations; and

(b) may be amended or replaced in accordance with section 2.10 and must be amended or replaced in accordance with section 2.10 where a change is required to maintain consistency with Amending Rules.

2.9.4. The Coordinator must maintain on the Coordinator's Website a Procedure Change Submission form.

2.9.5. The Coordinator must develop a WEM Procedure setting out the procedure for developing and amending WEM Procedures.

2.9.6. AEMO, the Economic Regulation Authority, the Coordinator, a Distribution System Operator or a Network Operator (as applicable) may initiate the Procedure Change Process under section 2.10 to develop, amend or replace a WEM Procedure as required to comply with proposed Amending Rules published by the Coordinator, but must not complete the Procedure Change Process by publishing a Procedure Change Report until the relevant Amending Rules are made.

2.9.7. [Blank]

2.9.7A. AEMO must comply with WEM Procedures applicable to it.

2.9.7B. The Economic Regulation Authority must comply with WEM Procedures applicable to it.

2.9.7C. The Coordinator must comply with WEM Procedures applicable to it.

2.9.7D. A Network Operator must comply with WEM Procedures applicable to it.

2.9.7E. A Distribution System Operator must comply with WEM Procedures applicable to it.

2.9.8. A Rule Participant, other than AEMO or a Network Operator, must comply with WEM Procedures applicable to it.

2.10. Procedure Change Process

2.10.1. AEMO, the Economic Regulation Authority, the Coordinator, a Distribution System Operator or a Network Operator, as applicable, may initiate the Procedure Change Process by developing a Procedure Change Proposal.

2.10.2. Rule Participants may notify AEMO, the Economic Regulation Authority, the Coordinator, the relevant Distribution System Operator or the relevant Network Operator, as applicable, where they consider an amendment to or replacement of a WEM Procedure would be appropriate.

2.10.2A. Within 20 Business Days of receipt of a notification under clause 2.10.2, AEMO, the Economic Regulation Authority, the Coordinator, the Distribution System Operator or the Network Operator, as applicable, must:

(a) determine whether the suggested amendment to or replacement of a WEM Procedure is appropriate; and

(b) publish details of whether a Procedure Change Proposal will be progressed with respect to the suggested amendment to or replacement of a WEM Procedure and the reasons for that decision on AEMO's, the

Economic Regulation Authority's, the Coordinator's, the Distribution System Operator's or the Network Operator's website, as applicable.

2.10.3. If an Amending Rule requires AEMO, the Economic Regulation Authority, the Coordinator, a Distribution System Operator or a Network Operator to develop new WEM Procedures or to amend or replace existing WEM Procedures, then AEMO, the Economic Regulation Authority, the Coordinator, the Distribution System Operator or the Network Operator, as applicable, is responsible for the development of, amendment of or replacement for, WEM Procedures so as to comply with the Amending Rule.

2.10.4. [Blank]

2.10.5. [Blank]

2.10.5A. AEMO must publish Procedure Change Proposals that AEMO develops.

2.10.5B. The Economic Regulation Authority must publish Procedure Change Proposals that the Economic Regulation Authority develops.

2.10.5C. A Distribution System Operator must publish Procedure Change Proposals that the Distribution System Operator develops.

2.10.5D. A Network Operator must publish Procedure Change Proposals that the Network Operator develops.

2.10.5E. The Coordinator must publish Procedure Change Proposals that the Coordinator develops.

2.10.6. A Procedure Change Proposal must include:

(a) a proposed WEM Procedure or an amendment to or replacement for a WEM Procedure , indicating the proposed amended words, or a proposed WEM Procedure; and

(b) the reason for the proposed WEM Procedure or an amendment to or replacement for a WEM Procedure or proposed WEM Procedure.

2.10.7. At the same time as it publishes a Procedure Change Proposal notice, AEMO, the Economic Regulation Authority, the Coordinator, the Distribution System Operator or the Network Operator, as applicable, must publish a call for submissions on that proposal. The due date for submissions must be 20 Business Days from the date the call for submissions is published. Any person may make a submission to AEMO, the Economic Regulation Authority, the Coordinator, the Distribution System Operator or the Network Operator, as applicable, relating to a Procedure Change Proposal. A Procedure Change Submission may be made using the Procedure Change Submission form maintained on the Coordinator's Website in accordance with clause 2.9.4.

2.10.8. [Blank]

2.10.9. The independent Chair of the Market Advisory Committee must convene a meeting of the Market Advisory Committee concerning any Procedure Change Proposal before the due date for submissions in relation to the Procedure Change Proposal if:

(a) the independent Chair, the Coordinator, AEMO or the Economic Regulation Authority considers that advice on the Procedure Change Proposal is required from the Market Advisory Committee;

(aA) a Network Operator considers that advice on the Procedure Change Proposal prepared by a Network Operator is required from the Market Advisory Committee; or

(aB) a Distribution System Operator considers that advice on the Procedure Change Proposal prepared by a Distribution System Operator is required from the Market Advisory Committee; or

(b) two or more members of the Market Advisory Committee have informed the independent Chair in writing that they consider that advice on the Procedure Change Proposal is required from the Market Advisory Committee.

2.10.10. Following the closing date for submissions, the Coordinator, AEMO, the Economic Regulation Authority, the Distribution System Operator or the Network Operator, as applicable, must prepare a Procedure Change Report on the Procedure Change Proposal.

2.10.11. [Blank]

2.10.12. [Blank]

2.10.12A. AEMO must publish Procedure Change Reports that AEMO prepares.

2.10.12B. The Economic Regulation Authority must publish Procedure Change Reports that the Economic Regulation Authority prepares.

2.10.12C. A Distribution System Operator must publish Procedure Change Reports that the Distribution System Operator prepares.

2.10.12D. A Network Operator must publish Procedure Change Reports that the Network Operator prepares.

2.10.12E. The Coordinator must publish Procedure Change Reports that the Coordinator prepares.

2.10.13. The Procedure Change Report must contain:

(a) the wording of the proposed WEM Procedure or amendment to or replacement for the WEM Procedure;

(b) the reason for the proposed WEM Procedure or amendment to or replacement for the WEM Procedure;

(c) all submissions received before the due date for submissions, a summary of those submissions, and the response of the Coordinator, AEMO, the Economic Regulation Authority, the Distribution System Operator or the Network Operator, as applicable, to the issues raised in those submissions;

(d) a summary of the views expressed by the Market Advisory Committee and, if the Market Advisory Committee has delegated its role to consider the Procedure Change Proposal to a Working Group under clause 2.3.17(a), a summary of the views expressed by that Working Group;

(dA) whether any advice from the Market Advisory Committee regarding the Procedure Change Proposal reflects a consensus view or a majority view, and, if the latter, any dissenting views included in or accompanying the advice and how these views have been taken into account by the Coordinator, AEMO, the Economic Regulation Authority, the Distribution System Operator or the Network Operator, as applicable;

(e) [Blank]

(f) [Blank]

(g) in the case of a Procedure Change Proposal developed by AEMO, a proposed date and time for the WEM Procedure or amendment or replacement to commence, which must, in AEMO's opinion, allow sufficient time after the date of publication of the Procedure Change Report for Rule Participants to implement changes required by it;

(h) in the case of a Procedure Change Proposal developed by the Economic Regulation Authority, a proposed date and time for the WEM Procedure or amendment or replacement to commence, which must, in the Economic Regulation Authority's opinion, allow sufficient time after the date of publication of the Procedure Change Report for Rule Participants to implement changes required by it;

(i) in the case of a Procedure Change Proposal developed by a Network Operator, a proposed date and time for the WEM Procedure or amendment or replacement to commence, which must, in the Network Operator's opinion, allow sufficient time after the date of publication of the Procedure Change Report for Rule Participants to implement changes required by it;

(j) in the case of a Procedure Change Proposal developed by the Coordinator, a proposed date and time for the WEM Procedure or amendment or replacement to commence, which must, in the Coordinator's opinion, allow sufficient time after the date of publication of the Procedure

Change Report for Rule Participants to implement changes required by it; and

(k) in the case of a Procedure Change Proposal developed by a Distribution System Operator, a proposed date and time for the WEM Procedure or amendment or replacement to commence, which must, in the Distribution System Operator's opinion, allow sufficient time after the date of publication of the Procedure Change Report for Rule Participants to implement changes required by it.

2.10.14. [Blank]

2.10.15. [Blank]

2.10.16. [Blank]

2.10.17. If AEMO, the Economic Regulation Authority, the Coordinator, a Distribution System Operator or a Network Operator, as applicable, considers, at any time after publishing a Procedure Change Proposal, that it is necessary to extend the normal timeframes for processing the Procedure Change Proposal because:

(a) issues of sufficient complexity or difficulty have been identified relating to the Procedure Change Proposal;

(b) further public consultation on an issue associated with the Procedure Change Proposal is required; or

(c) the Procedure Change Proposal cannot be dealt with adequately without an extension because of any other special circumstance,

then AEMO, the Economic Regulation Authority, the Coordinator, the Distribution System Operator or the Network Operator, as applicable, may modify the times and time periods under clause 2.10.7 in respect of the Procedure Change Proposal and publish details of the modified times and time periods.

2.10.18. AEMO, the Economic Regulation Authority, the Coordinator, a Distribution System Operator or a Network Operator, as applicable, must publish a notice of an extension determined in accordance with clause 2.10.17 and must update any information already published in accordance with clause 2.10.7.

2.10.19. A notice of extension under clause 2.10.18 must include:

(a) the reasons for the proposed extension;

(b) the views of any Rule Participant consulted on the extension;

(c) the proposed length of any extension; and

(d) the proposed work program.

2.11. Coming into Force of Procedure Amendments

2.11.1. A Rule Participant may apply to the Electricity Review Board for a Procedural Review of a decision by AEMO, the Economic Regulation Authority, the Coordinator, a Distribution System Operator or a Network Operator, as applicable, contemplated by clauses 2.10.2A(a) or 2.10.13 within the time specified in regulation 44 of the ESM Regulations, on the grounds that AEMO, the Economic Regulation Authority, the Coordinator, the Distribution System Operator or the Network Operator, as applicable, has not followed the process set out in section 2.10 or the WEM Procedure specified in clause 2.9.5.

2.11.2. Following an application for a Procedural Review under clause 2.11.1, if the Electricity Review Board finds that AEMO, the Economic Regulation Authority, the Coordinator, a Distribution System Operator or a Network Operator has not followed the process set out in section 2.10 or the WEM Procedure specified in clause 2.9.5, the Electricity Review Board may set aside AEMO's decision, the Economic Regulation Authority's decision, the Coordinator's decision, the Distribution System Operator's decision or the Network Operator's decision and direct AEMO, the Economic Regulation Authority, the Coordinator, the Distribution System Operator or the Network Operator to reconsider the relevant Procedure Change Proposal in accordance with section 2.10 and the WEM Procedure specified in clause 2.9.5.

2.11.3. Subject to clauses 2.11.2 and 2.11.4, a WEM Procedure or an amendment of or replacement for a WEM Procedure commences at the time and date specified under clauses 2.10.13(g), 2.10.13(h), 2.10.13(i), 2.10.13(j) or 2.10.13(k) (as applicable).

2.11.4. If at any time, AEMO, the Economic Regulation Authority, the Coordinator, a Distribution System Operator or a Network Operator considers that Rule Participants will not have sufficient time to implement any necessary changes required by the WEM Procedure that AEMO, the Economic Regulation Authority, the Coordinator, the Distribution System Operator or the Network Operator, as applicable, are required to publish, or amendment or replacement of the WEM Procedure, then AEMO, the Economic Regulation Authority, the Coordinator, the Distribution System Operator or the Network Operator, as applicable, may extend the time and date when that WEM Procedure, amendment or replacement commences by publishing notice of the revised time and date when the amendment of or replacement for that WEM Procedure commences.

Monitoring, Enforcement and Audit

2.12. [Blank]

2.13. Compliance Monitoring and Enforcement

ERA monitoring of compliance

2.13.1. The Economic Regulation Authority must monitor other Rule Participants' behaviour (including AEMO's and each Network Operator's behaviour) for compliance with the ESM Rules and WEM Procedures in accordance with the WEM Procedure referred to in clause 2.15.1.

2.13.2. The Economic Regulation Authority must investigate any market behaviour of a Rule Participant if it considers that the behaviour has resulted in the market not functioning effectively.

2.13.3. The Economic Regulation Authority must ensure it has processes and systems in place to allow it to monitor Rule Participants' behaviour (including AEMO's and each Network Operator's behaviour) for compliance with the ESM Rules and WEM Procedures in accordance with the WEM Procedure referred to in clause 2.15.1.

2.13.4. Without limiting clause 2.13.8, AEMO must co-operate with the Economic Regulation Authority and facilitate any processes and systems put in place by the Economic Regulation Authority under clause 2.13.3, including by providing any market related data, information and document produced or exchanged in accordance with the ESM Rules or WEM Procedures in AEMO's possession or control that the Economic Regulation Authority has reason to believe may assist the Economic Regulation Authority to monitor Rule Participants' behaviour (including AEMO's and each Network Operator's behaviour) for compliance with the ESM Rules and WEM Procedures.

2.13.5. Each Network Operator must co-operate with the Economic Regulation Authority and facilitate any processes and systems put in place by the Economic Regulation Authority under clause 2.13.3, including by providing any data, information or document in the Network Operator's possession or control that the Economic Regulation Authority would be entitled to receive under Chapter 10 and has reason to believe may assist the Economic Regulation Authority to monitor the Network Operator's behaviour for compliance with the provisions of the ESM Rules and WEM Procedures.

2.13.6 Where the Economic Regulation Authority requests AEMO to provide the Economic Regulation Authority with market related data, information or documents in accordance with clause 2.13.4 and the market related data, information or documents:

(a) is not one of the types disclosed in the combined list referred to in clause 2.16.2A(b); and

(b) relate to a specific Rule Participant (or group of Rule Participants),

then the Economic Regulation Authority must notify that Rule Participant (or group of Rule Participants).

AEMO monitoring of compliance

2.13.7. AEMO must, in accordance with the WEM Procedure referred to in clause 2.15.4:

(a) monitor Rule Participants' behaviour for compliance with the ESM Rules specified in the list referred to in clause 2.16.2A(aA);

(b) monitor Rule Participants' behaviour for compliance with clauses 4.12.2(d) and 7.10.6B;

(c) ensure it has processes and systems in place to enable it to monitor Rule Participants' behaviour in accordance with clauses 2.13.7(a) and 2.13.7(b) and in accordance with the list of ESM Rules that AEMO must monitor for compliance provided under clause 2.16.2A(aA) including developing systems for monitoring;

(d) support the Economic Regulation Authority's monitoring of Rule Participants' behaviour, including having processes and systems to provide the Economic Regulation Authority with data, information, documents or analysis under clauses 2.13.4, 2.13.7, 2.13.8(a), 2.13.8(b) or 2.13.14, as applicable; and

(e) subject to clause 2.13.12, record and report to the Economic Regulation Authority any alleged breach of the ESM Rules or WEM Procedures resulting from its monitoring under clauses 2.13.7(a) and 2.13.7(b).

2.13.8. Where the Economic Regulation Authority has reason to believe AEMO may be able to assist it to monitor Rule Participants' behaviour (including each Network Operator's behaviour) for compliance with the ESM Rules and WEM Procedures, it may request AEMO to:

(a) undertake analysis of any market related data, information and document produced or exchanged under clause 2.13.4; or

(b) provide any specific market related data, information and document produced or exchanged in accordance with the ESM Rules or WEM Procedures in AEMO's possession or control not provided by AEMO to the Economic Regulation Authority under clause 2.13.4,

to assist to monitor a Rule Participant's compliance with a specific obligation or requirement. For the avoidance of doubt, the Economic Regulation Authority is not permitted to delegate the monitoring of Rule Participant behaviour to AEMO.

2.13.9. AEMO must comply with a request by the Economic Regulation Authority under clause 2.13.8 by the time specified in the request, which must be a reasonable time having regard to the nature of the request, or such alternative time as mutually agreed.

2.13.10. AEMO is not required to monitor a Network Operator's behaviour for compliance with the WEM Procedures developed by the Network Operator.

2.13.11. Where a Registered Facility operates within the Tolerance Range or Facility Tolerance Range applicable to the Registered Facility during a Dispatch Interval, any deviation is not considered to be a breach of clause 7.10.1 or of a provision of section 3.21 by reason of the deviation only.

2.13.12. AEMO is not required to report to the Economic Regulation Authority an alleged breach by a Rule Participant of:

(a) section 3.21 if the alleged breach is limited to occurring within a single Trading Interval and the extent of the alleged breach is either within the Tolerance Range of the Facility Tolerance Range for that Facility; or

(b) section 7.10 if the alleged breach does not exceed six consecutive Dispatch Intervals unless the alleged breach is considered by AEMO, in its reasonable opinion, to be material or likely to impact Power System Security or Power System Reliability.

2.13.13. Subject to clause 2.13.11, nothing in clause 2.13.12 relieves:

(a) AEMO from its obligation to monitor Rule Participants' compliance in accordance with clause 2.13.7(a) and clause 2.13.7(b); or

(b) Rule Participants from the obligation to fully comply with the ESM Rules and the WEM Procedures, regardless of whether AEMO is required under the ESM Rules to report any alleged breach to the Economic Regulation Authority.

2.13.14. AEMO may, but is not required to, notify the Economic Regulation Authority of any alleged breach under clause 2.13.7 or clause 2.13.15 where the Economic Regulation Authority is in possession or control of any market related data, information or other documents or analysis that allows the Economic Regulation Authority to identify an alleged breach of the ESM Rules or WEM Procedures.

2.13.15. Except where clause 2.13.14 applies, where AEMO becomes aware of an alleged breach of the ESM Rules (other than a provision of the ESM Rules referred to in clause 2.13.7) or the WEM Procedures developed by AEMO then it must notify the Economic Regulation Authority in accordance with the WEM Procedure referred to in clause 2.15.4.

2.13.15A. Clauses 2.13.13, 2.13.14 and 2.13.15 do not apply in respect of alleged breaches of clauses 3A.10.6, 3A.11.21(a), 3A.11.21(b), 3A.11.21(c) and 3A.12.2.

Tolerance Ranges

2.13.16. AEMO may determine the Tolerance Range to apply to all Facilities for the purpose of AEMO's reporting of alleged breaches of clause 7.10.1 or a provision of section 3.21 to the Economic Regulation Authority. When determining the appropriate Tolerance Range to apply for all Market Participants, AEMO must:

(a) consult with Rule Participants prior to setting the Tolerance Range; and

(b) publish on the WEM Website at least 14 Business Days prior to the date from which change to the Tolerance Range becomes effective, the following:

i. all submissions received from Rule Participants;

ii. the Tolerance Range; and

iii. an effective date for the commencement of the Tolerance Range.

2.13.17. AEMO may determine a Facility Tolerance Range to apply to a specific Facility. A Facility Tolerance Range will apply for a specific Facility in place of the Tolerance Range determined under clause 2.13.16. When determining the Facility Tolerance Range to apply for the specific Facility, AEMO must:

(a) consult with Market Participants prior to setting the Facility Tolerance Range; and

(b) publish on the WEM Website at least 14 Business Days prior to the date from which any changes to the Facility Tolerance Range become effective the following:

i. the reasons for AEMO's decision;

ii. any submissions received from Market Participants;

iii. the applicable Facility Tolerance Range; and

iv. an effective date for the commencement of the applicable Facility Tolerance Range.

2.13.18. AEMO must not show bias towards a Market Participant in respect to a Facility Tolerance Range.

2.13.19. AEMO must document in a WEM Procedure:

(a) the process for determining, consulting on, and reviewing the Tolerance Range and any Facility Tolerance Ranges under clauses 2.13.16, 2.13.17 and 2.13.21; and

(b) matters, events or circumstances that may trigger a review of the Tolerance Range or a Facility Tolerance Range.

2.13.20. A Market Participant may request in writing that the Economic Regulation Authority assess a decision by AEMO in relation to the determination of a Facility Tolerance Range, for that Market Participant's Facility. Following a request:

(a) the Economic Regulation Authority must consult with AEMO and the Market Participant concerning the Facility Tolerance Range;

(b) the Economic Regulation Authority may give a direction to AEMO to set or vary a Facility Tolerance Range where it finds that:

i. AEMO has not followed the relevant ESM Rules or any relevant WEM Procedures in relation to determining the Facility Tolerance Range; or

ii. based on the information provided by the Market Participant and AEMO, that the Facility Tolerance Range is not reasonable;

(c) the Economic Regulation Authority must use best endeavours to complete the assessment within 10 Business Days from receipt of the request; and

(d) the Economic Regulation Authority must direct AEMO to publish any direction provided to AEMO to set or vary a Facility Tolerance Range on the WEM Website within five Business Days of issuing that direction.

2.13.21. Where the Economic Regulation Authority reasonably considers that the Tolerance Range or Facility Tolerance Range applicable to a Registered Facility is inappropriate having regard to the historical operation of the Registered Facility and the Market Participant's compliance with clause 7.10.3, the Economic Regulation Authority must request AEMO to review the Tolerance Range or Facility Tolerance Range applicable to the Registered Facility.

2.13.22. AEMO must comply with a request by the Economic Regulation Authority under clause 2.13.21, and may vary the applicable Tolerance Range or any Facility Tolerance Range following its review in accordance with the WEM Procedure referred to in clause 2.13.19.

Breach reporting

2.13.23. Subject to clause 2.13.26, a Rule Participant (including AEMO and a Network Operator) who is aware that it has breached, or has reasonable cause to suspect it may have breached, the ESM Rules or a WEM Procedure, must notify the Economic Regulation Authority in writing unless the Economic Regulation Authority has notified the Rule Participant that the breach or suspected breach is already under investigation. A Rule Participant may, at any time after notifying the Economic Regulation Authority, provide updated information to the Economic Regulation Authority in relation to the breach or suspected breach.

2.13.24. A Rule Participant (other than AEMO, but including each Network Operator) may inform the Economic Regulation Authority in writing if it considers that another Rule Participant has breached the ESM Rules or a WEM Procedure, and must provide reasonable information in support of that alleged breach.

2.13.25. A notification of an alleged breach by a Rule Participant to the Economic Regulation Authority under clause 2.13.23 or clause 2.13.24 may be provided in the form described in clause 2.15.3, but must include the information a Rule Participant is required to provide in reporting an alleged breach as specified in the WEM Procedure referred to in clause 2.15.1.

2.13.26. Where a Market Participant considers that it has been non-compliant, or has reasonable cause to suspect it may have been non-compliant, with a Registered Generator Performance Standard or the Generator Monitoring Plan approved by AEMO for its Transmission Connected Generating System, the Market Participant must follow the relevant process set out in Chapter 3A.

Compliance investigation

2.13.27. Subject to section 3A.12, if the Economic Regulation Authority becomes aware of an alleged breach of the ESM Rules or WEM Procedures, then:

(a) it must record the alleged breach;

(b) subject to clause 2.13.32, it must investigate the alleged breach in accordance with the risk rating assigned to the type of alleged breach in the WEM Procedure referred to in clause 2.15.1;

(c) notwithstanding clause 2.13.27(b), subject to clause 2.13.32, it may investigate the alleged breach where the ERA considers this is reasonably required;

(d) if the Economic Regulation Authority investigates an alleged breach, and the investigation is not suspended or closed under clause 2.13.33, then it must determine whether a breach of the ESM Rules or WEM Procedures has occurred; and

(e) it must record the results of each investigation.

2.13.28. If reasonably required, as part of an investigation into alleged breaches of the ESM Rules or WEM Procedures, the Economic Regulation Authority may:

(a) require information and records from Rule Participants; and

(b) conduct an inspection of a Rule Participant’s equipment.

2.13.29. If the Economic Regulation Authority becomes aware of an alleged breach of the ESM Rules or the WEM Procedures, then it may meet with the relevant Rule Participant on one or more occasions to discuss the alleged breach and possible actions to rectify the alleged breach.

2.13.30. Rule Participants (including AEMO and each Network Operator) must cooperate with an investigation into an alleged breach of the ESM Rules or WEM Procedures, including:

(a) providing the Economic Regulation Authority with information requested under clause 2.13.28 relating to the alleged breach in a timely manner; and

(b) allowing reasonable access to equipment for the purpose of an inspection carried out under clause 2.13.28.

2.13.31. A Rule Participant (including AEMO and each Network Operator) must not engage in conduct under clause 2.13.30 that is false or misleading in a material particular.

2.13.32. Where a Rule Participant does not comply with clause 2.13.30, the Economic Regulation Authority may appoint a person to investigate the matter and provide a report or such other documentation as the Economic Regulation Authority may require. If the Economic Regulation Authority does so, then:

(a) the Rule Participant must assist the person to undertake the investigation and prepare the report or other documentation; and

(b) the cost of the investigation and the preparation of the report or other documentation must be met by the Rule Participant unless the Economic Regulation Authority determines otherwise.

2.13.33. The Economic Regulation Authority may suspend or close an investigation of an alleged breach:

(a) where the alleged breach is self-reported to the Economic Regulation Authority by a Rule Participant under clause 2.13.23, and the Economic Regulation Authority is reasonably satisfied that:

i. where the breach can be rectified, the Rule Participant:

1. has rectified the alleged breach; or

2. undertakes to rectify the alleged breach by taking actions agreed to by the Economic Regulation Authority; and

ii. where required by the Economic Regulation Authority, the Rule Participant agrees to take actions agreed to by the Economic Regulation Authority that are intended to prevent a recurrence of the alleged breach; or

(b) in any other circumstances that may be specified in the WEM Procedure referred to in clause 2.15.1.

2.13.34. If the Economic Regulation Authority suspends or closes an investigation in accordance with clause 2.13.33 it must notify the relevant Rule Participant.

2.13.35. Where the Economic Regulation Authority determines a breach has not taken place, the Economic Regulation Authority must notify its decision to the Rule Participant that reported the alleged breach in accordance with clause 2.13.23.

Enforcement action

2.13.36. Where the Economic Regulation Authority determines that a breach of the ESM Rules or WEM Procedures has occurred in accordance with clause 2.13.27(d), the Economic Regulation Authority may:

(a) issue a warning to the Rule Participant to rectify the contravention and record the response of the Rule Participant to any warning issued under this clause. The warning must:

i. identify the clause or clauses of the ESM Rules or the WEM Procedures that the Economic Regulation Authority believes has been, or are being, contravened;

ii. describe the behaviour that comprises the contravention;

iii. where the Economic Regulation Authority considers relevant, request an explanation; and

iv. where the Economic Regulation Authority considers relevant, request that the contravention be rectified and specify a time (which the Economic Regulation Authority considers reasonable) by which the contravention should be rectified;

(b) [Blank]

(c) issue a civil penalty notice where the contravention relates to a Category A, Category B or Category C ESM Rule, in accordance with the ESM Regulations; and

(d) apply to the Electricity Review Board for one or more orders by the Electricity Review Board under regulation 33 of the ESM Regulations.

2.13.37. [Blank]

2.13.38. [Blank]

2.13.39. The orders that the Electricity Review Board may make for a breach of the ESM Rules and the matters the Electricity Review Board must have regard to before making an order are set out in the ESM Regulations.

2.13.40. The Economic Regulation Authority may direct a Rule Participant to do or to refrain from doing anything that the Economic Regulation Authority thinks necessary or desirable to give effect or to assist in giving effect to any order of the Electricity Review Board.

2.13.41. A Rule Participant must comply with a direction of the Economic Regulation Authority given under clause 2.13.40.

2.13.42. Before the Economic Regulation Authority issues a civil penalty notice under clause 2.13.36(c), the Economic Regulation Authority must have regard to all relevant matters, including:

(a) the nature and extent of the breach, including whether the breach is ongoing;

(b) whether the Rule Participant has self-reported or has taken any mitigating actions;

(c) the nature and extent of any loss or damage suffered as a result of the breach;

(d) the impact and potential impact of the breach on the market and the power system;

(e) the circumstances in which the breach took place;

(f) whether the relevant Rule Participant has previously been found by the Economic Regulation Authority, or the Electricity Review Board in proceedings under the Electricity Industry Act, to have engaged in any similar conduct; and

(g) whether a daily amount, as provided for under the ESM Regulations, should be imposed in the circumstances, which must include consideration of:

i. the financial impact of the total civil penalty on the Rule Participant, if a daily amount were to be imposed; and

ii. any benefit gained by the Rule Participant as a result of the breach.

2.13.43. If the Economic Regulation Authority issues a civil penalty notice under clause 2.13.36(c) or the Electricity Review Board makes an order for the payment of a civil penalty under regulation 33(1)(a) of the ESM Regulations, the Economic Regulation Authority must:

(a) determine the persons to whom the Civil Penalty Amount is to be distributed and the portion of the Civil Penalty Amount to be distributed to each person; and

(b) inform AEMO of:

i. the imposition of the civil penalty by the Economic Regulation Authority or Electricity Review Board (as applicable);

ii. the Rule Participant liable for the civil penalty;

iii. the Civil Penalty Amount;

iv. the date on which the notice was issued or the order made (as applicable);

v. the identity of each person who is to receive a portion of the Civil Penalty Amount, and the amount that person is to receive; and

vi. contact details for each person identified under clause 2.13.43(b)(v) who is not a Rule Participant.

2.13.43A. In determining how a Civil Penalty Amount is to be distributed, the Economic Regulation Authority must:

(a) have regard to:

i. the extent of any detriment suffered by persons as a result of the contravention, relative to other persons;

ii. any benefits (including financial gains or avoided costs) obtained by persons as a result of the contravention; and

iii. any other matter the Economic Regulation Authority considers relevant; and

(b) ensure that each distributed portion is greater than the Minimum Transaction Cost.

2.13.44. Where the Economic Regulation Authority issues a civil penalty notice under clause 2.13.36(c), the Rule Participant to whom the civil penalty notice is issued may seek a review of the Economic Regulation Authority's decision to issue the civil penalty notice by the Electricity Review Board in accordance with the ESM Regulations.

2.13.45. The Economic Regulation Authority must release a report at least once every six months setting out a summary for the preceding six months of:

(a) investigations completed by the Economic Regulation Authority;

(b) breaches or contraventions of the ESM Rules the Economic Regulation Authority concludes have occurred;

(c) warnings issued by the Economic Regulation Authority under clause 2.13.36(a);

(d) proceedings that have been brought before the Electricity Review Board;

(e) findings of the Electricity Review Board on matters referred to them;

(f) orders made by the Electricity Review Board;

(g) unless they have been set aside by the Electricity Review Board, civil penalties imposed by the Economic Regulation Authority under clause 2.13.36(c); and

(h) for each civil penalty ordered by Electricity Review Board under regulation 33(1)(a) of the ESM Regulations or imposed by the Economic Regulation Authority under clause 2.13.36(c):

i. the Rule Participant liable for the civil penalty;

ii. the Civil Penalty Amount; and

iii. an explanation of the Economic Regulation Authority's determination under clause 2.13.43(a) and the reasons for that determination.

2.13.46. In considering the circulation of the report under clause 2.13.45 and 2.13.47, the Economic Regulation Authority must have regard to the State Electricity Objective.

2.13.47. In addition to the regular publication described in clause 2.13.45, the Economic Regulation Authority may release a report on any one or more matters where the Economic Regulation Authority has taken one or more actions under clause 2.13.36 or which have been referred to the Electricity Review Board, the findings of the Economic Regulation Authority and the Electricity Review Board, as applicable, on those matters and any sanctions imposed by the Economic Regulation Authority or the Electricity Review Board in relation to those matters.

2.13.48. The Economic Regulation Authority must, and is entitled to, make available the reports referred to in clauses 2.13.45 or 2.13.47 to all Rule Participants and interested parties. However, the Economic Regulation Authority is not required to include details in a report to such a person if the Economic Regulation Authority considers it is inappropriate in the circumstances, including without limitation, where there may be confidentiality issues.

Public register

2.13.49. The Economic Regulation Authority must keep a public register of:

(a) breaches of the ESM Rules where the Economic Regulation Authority issued a civil penalty notice under clause 2.13.36(c), that was not set aside by the Electricity Review Board;

(b) any other breaches or contraventions of the ESM Rules the Economic Regulation Authority concludes have occurred where the Economic Regulation Authority reasonably considers that:

i. the benefit to the Wholesale Electricity Market in disclosing the breach outweighs any detriment to the Rule Participant that committed the breach; or

ii. whether, having regard to the nature and impact of the breach, in the Economic Regulation Authority's reasonable opinion, it would expect a breach to be disclosed on the public register.

2.13.49A. The Economic Regulation Authority must keep a public register of:

(a) investigations commenced by the Economic Regulation Authority of alleged breaches of these ESM Rules by Rule Participants, provided that any information identifying Rule Participants is redacted or otherwise anonymised;

(b) investigations closed by the Economic Regulation Authority, where it was determined by the Economic Regulation Authority that no breach had occurred, including any reasons for its determination; and

(c) investigations closed or suspended by the Economic Regulation Authority under clause 2.13.33, including its reasons for closing or suspending the investigation.

2.13.50. Subject to clause 2.13.51, the public register referred to in clause 2.13.49 must include the following information in relation to each breach recorded on the public register:

(a) the name of the Rule Participant that committed the breach;

(b) each provision of the ESM Rules or WEM Procedure that was breached;

(c) all relevant information relating to the time the breach occurred and duration of the breach, including impacted Trading Days and Dispatch Intervals as relevant;

(d) a summary of any action taken by the Rule Participant to remedy the breach, or to prevent a recurrence of the breach; and

(e) the action taken by the Economic Regulation Authority as a result of the breach.

2.13.51. Information must not be included in the public register referred to in clause 2.13.49 if:

(a) the relevant Rule Participant has provided evidence to the Economic Regulation Authority that to do so would contravene a court order or law suppressing or prohibiting the publication of the information; or

(b) the information has been given a class of confidentiality status under Chapter 10 of these ESM Rules other than Public.

2.13.52. Claims for confidentiality of information which may be published under clauses 2.13.45, 2.13.47 or 2.13.53 must be dealt with in accordance with sections 10.2, 10.4 and 10.5.

2.13.53. The public register kept by the Economic Regulation Authority under clause 2.13.49 must be published on its website.

2.13.54. No Rule Participant or former Rule Participant is entitled to make any claim against the Economic Regulation Authority for any loss or damage incurred by the

Rule Participant from the publication of any information pursuant to clauses 2.13.45, 2.13.47 or 2.13.53 if the publication was done in good faith. No action or other proceeding will be maintainable by the person or Rule Participant referred to in the publication on behalf of or against the Economic Regulation Authority or any person publishing or circulating the publication on behalf of the Economic Regulation Authority and this clause operates as a release for any such publication except where the publication is not done in good faith.

2.14. Market Audit and Compliance Reports

2.14.1. AEMO must appoint one or more Market Auditors that may be used to conduct the audit described in clause 2.14.2.

2.14.2. AEMO must ensure that the Market Auditor carries out the audits of the matters identified under clause 2.14.3 no less than annually.

2.14.3. AEMO must ensure that the Market Auditor carries out the audits of such matters as AEMO considers appropriate, which must include:

(a) the compliance of AEMO's internal procedures and business processes with the ESM Rules;

(b) AEMO's compliance with the ESM Rules and WEM Procedures; and

(c) AEMO's market software systems and processes for software management.

2.14.4. The Market Auditor must provide AEMO with a report, and AEMO must within 30 Business Days of receiving the report either:

(a) accept the report and any recommendations contained in it; or

(b) prepare a separate report setting out the matters raised in the Market Auditor's report which AEMO accepts and those which it does not accept and setting out AEMO's reasons for that view.

2.14.5. AEMO must publish the Market Auditor's report on the WEM Website and any report it prepared under clause 2.14.4(b) within 30 Business Days of receiving the Market Auditor's report.

2.14.5A. The Economic Regulation Authority must annually provide to the Minister a report on the Economic Regulation Authority's compliance with the ESM Rules and WEM Procedures and publish the report on its website.

2.14.5B. The Economic Regulation Authority must annually prepare a report for the Minister on AEMO's compliance with the ESM Rules and WEM Procedures. The report must contain:

(a) reports published in clause 2.14.5; and

(b) the results of any investigations of AEMO's compliance with the ESM Rules and WEM Procedures carried out by the Economic Regulation Authority.

2.14.5C. The Economic Regulation Authority must provide AEMO with the report prepared in accordance with clause 2.14.5B, and AEMO must within 20 Business Days of receiving the report either:

(a) accept the report and any recommendations contained in it; or

(b) prepare a separate report setting out the matters raised in the report which AEMO accepts and those which it does not accept and setting out AEMO's reasons for that view and provide it to the Economic Regulation Authority.

2.14.5D. The Economic Regulation Authority must, within 10 Business Days following the date specified in clause 2.14.5C:

(a) provide to the Minister the report prepared in accordance with clause 2.14.5B and any report prepared by AEMO under clause 2.14.5C(b); and

(b) publish the reports provided to the Minister under clause 2.14.5D(a) on its website.

2.14.6. The Economic Regulation Authority must annually prepare a report for the Minister on each Network Operator’s self-reported compliance with the ESM Rules and WEM Procedures. The report must contain the results of any investigations of each Network Operator’s compliance with the ESM Rules and WEM Procedures carried out by the Economic Regulation Authority.

2.14.7. A Network Operator must cooperate with the Economic Regulation Authority in respect of the Economic Regulation Authority’s preparation of the report on the Network Operator's compliance with the ESM Rules and the WEM Procedures under clause 2.14.6, including providing any information requested by the Economic Regulation Authority for the purposes of the report.

2.14.8. The Economic Regulation Authority must provide each Network Operator with that relevant Network Operator’s report prepared by it under clause 2.14.6, and the relevant Network Operator must within 20 Business Days of receiving the report either:

(a) accept the report and any recommendations contained in it; or

(b) prepare a separate report setting out the matters raised in the report which the Network Operator accepts and those which it does not accept and setting out the Network Operator’s reasons for that view and provide it to the Economic Regulation Authority.

2.14.9. The Economic Regulation Authority must, within 10 Business Days following the date specified in clause 2.14.8:

(a) provide to the Minister the report prepared in accordance with clause 2.14.6 and any report prepared by a Network Operator under clause 2.14.8(b); and

(b) publish the reports provided to the Minister under clause 2.14.9(a) on its website.

2.14.10. The reports to be prepared by the Economic Regulation Authority for the Minister under clauses 2.14.5B and 2.14.6 may, at the Economic Regulation Authority's discretion, be a single report or multiple reports. Where a report provided to AEMO or each relevant Network Operator under clauses 2.14.5C or 2.14.8 contains information in respect to the compliance of a Rule Participant other than AEMO or the relevant Network Operator, as applicable, the Economic Regulation Authority must redact the report to remove the information that does not relate to the compliance of AEMO or the relevant Network Operator, as applicable.

2.15. Monitoring and Reporting WEM Procedures

2.15.1. The Economic Regulation Authority must maintain and implement a monitoring protocol in a WEM Procedure.

2.15.2. The purpose of the WEM Procedure specified in clause 2.15.1 is to state how the Economic Regulation Authority will implement its obligations under these ESM Rules to monitor, investigate and enforce Rule Participants' behaviour for compliance with the ESM Rules and WEM Procedures.

2.15.3. The WEM Procedure specified in clause 2.15.1 must specify:

(a) the Economic Regulation Authority's monitoring processes for assessing compliance with the ESM Rules and WEM Procedures by Rule Participants, which must include:

i. a process for notice to be given by the Economic Regulation Authority to a Rule Participant that identifies the alleged breach to be investigated by the Economic Regulation Authority; and

ii. a process through which a Rule Participant may make submissions to the Economic Regulation Authority to explain an alleged breach, prior to the Economic Regulation Authority reaching a decision on whether a Rule Participant has breached the ESM Rules or WEM Procedures;

(b) a process for Rule Participants to report alleged breaches of the ESM Rules or WEM Procedures under clauses 2.13.15, 2.13.23 and 2.13.24 including the required information a Rule Participant must provide to the Economic Regulation Authority;

(c) the form that may be used by Rule Participants to report a breach, or suspected breach, of the ESM Rules or WEM Procedures by the Rule

Participant to the Economic Regulation Authority in accordance with clause 2.15.3(b);

(d) the processes for the Economic Regulation Authority to assign a risk rating to each alleged breach, including the matters the Economic Regulation Authority will take into account, that will determine whether the alleged breach is required to be investigated by the Economic Regulation Authority;

(e) the processes for investigations of alleged breaches of the ESM Rules or WEM Procedures;

(f) the processes for suspending or closing investigations of alleged breaches of the ESM Rules or WEM Procedures under clause 2.13.33, including the matters the Economic Regulation Authority may take into account in making a decision;

(g) the processes and timeframes applying to a suspended investigation of an alleged breach of the ESM Rules or WEM Procedures, including the timeframes under which a suspended investigation may be resumed;

(h) guidelines for the Economic Regulation Authority when issuing warnings about alleged breaches of the ESM Rules or WEM Procedures to Rule Participants under clause 2.13.36(a);

(i) the process for bringing proceedings before the Electricity Review Board for an order to be made by the Electricity Review Board under the ESM Regulations;

(j) the processes to be followed by the Economic Regulation Authority, including the matters the Economic Regulation Authority may take into account and the circumstances it may have regard to, when deciding to issue a civil penalty notice under clause 2.13.36(c) and determining the Civil Penalty Amount to be imposed;

(k) the processes for keeping a public register of breaches under clause 2.13.49 and publishing the public register in accordance with clause 2.13.53;

(l) the processes it will require AEMO and the Network Operator to implement to assist the Economic Regulation Authority in monitoring and assessing Rule Participants' compliance with the ESM Rules and WEM Procedures; and

(m) any other relevant matters under sections 2.13, 2.14 and 2.15.

2.15.4. AEMO must develop a WEM Procedure to set out:

(a) how AEMO will carry out its obligations to monitor Rule Participants' behaviour for compliance under clause 2.13.7;

(b) how AEMO will monitor dispatch compliance before, during or after a Dispatch Instruction event;

(c) how AEMO will carry out its obligations to support the Economic Regulation Authority under clauses 2.13.4, 2.13.8 and 2.13.9;

(d) the notification and reporting processes that AEMO will use to notify the Economic Regulation Authority under clause 2.13.14 and 2.13.15;

(e) the situations where AEMO considers it does not need to notify the Economic Regulation Authority of an alleged breach under clause 2.13.14; and

(f) any other matters relevant to AEMO's obligations in section 2.13.

2.16. Monitoring the Effectiveness of the Market

2.16.1. AEMO is responsible for collection of, and providing access to, data in accordance with this section 2.16. AEMO must compile the data identified in the Market Surveillance Data Catalogue and provide access to that data to the Coordinator and the Economic Regulation Authority.

2.16.2. AEMO must develop a Market Surveillance Data Catalogue, which identifies data to be compiled concerning the market.

2.16.2A. The Coordinator and the Economic Regulation Authority, as relevant, must:

(a) in the case of the Coordinator and the Economic Regulation Authority, provide to AEMO a combined list of data items to be included by AEMO in the Market Surveillance Data Catalogue, being information required by the Coordinator and the Economic Regulation Authority to perform their functions under these ESM Rules;

(aA) in the case of the Economic Regulation Authority, provide to AEMO a list of the ESM Rules that AEMO must monitor for compliance, and is required to report any alleged breaches of, to the Economic Regulation Authority; and

(b) publish a combined list of the data items under clause 2.16.2A(a) and ESM Rules under 2.16.2A(aA) on their respective websites.

2.16.2AA. In developing the list of ESM Rules under clause 2.16.2A(aA) and for any subsequent updates to the list, the Economic Regulation Authority must, in consultation with AEMO:

(a) reach agreement in respect of the proposed date and time for AEMO to commence monitoring each of the ESM Rules on the list, which must allow a reasonable time for AEMO to implement any required monitoring changes; and

(b) consider the practicality and cost for AEMO to monitor compliance with each of the ESM Rules on the list.

2.16.2B. AEMO must provide access to all data items in the Market Surveillance Data Catalogue, including the items in the combined list of data items provided to AEMO under clause 2.16.2A(a), to the Coordinator and the Economic Regulation Authority.

2.16.2C. Where AEMO does not provide access to all of the data items required to be provided to the Coordinator or the Economic Regulation Authority through the Market Surveillance Data Catalogue under clause 2.16.2B, AEMO must notify the Coordinator and the Economic Regulation Authority:

(a) of the reasons why the data items are not available; and

(b) when AEMO expects that the data items will be available to access in the Market Surveillance Data Catalogue.

2.16.2D. The Coordinator or the Economic Regulation Authority may request access to historical versions of data items in the Market Surveillance Data Catalogue from AEMO. AEMO must provide access to historical versions of those data items to both the Coordinator and the Economic Regulation Authority (regardless of who made the request), as soon as practicable.

2.16.2E. The Coordinator or the Economic Regulation Authority may, from time to time, request AEMO to include new data items in the Market Surveillance Data Catalogue, and the Economic Regulation Authority may update the list of ESM Rules referred to in clause 2.16.2A(aA), by:

(a) updating the combined list of data items under clause 2.16.2A(a) or, in the case of the Economic Regulation Authority, by updating the list of ESM Rules referred to in clause 2.16.2A(aA), and providing the updated combined list to AEMO and the Coordinator or Economic Regulation Authority (as relevant); and

(b) publishing the updated combined list of data items and ESM Rules on their respective websites.

2.16.2F. On receipt of an updated combined list of data items and ESM Rules under clause 2.16.2E(a) from the Coordinator or the Economic Regulation Authority, AEMO must update the Market Surveillance Data Catalogue as applicable, and advise both the Coordinator and the Economic Regulation Authority of the date on which access to the new data items will be available.

2.16.3. AEMO must maintain the Market Surveillance Data Catalogue, and must update it whenever it changes in accordance with clause 2.16.2E. AEMO must:

(a) develop, maintain and provide access to a data dictionary for the data items in the Market Surveillance Data Catalogue contained in AEMO's WEM systems. The data dictionary must:

i. contain sufficient information to enable a reasonable person to understand and locate the data items contained in AEMO's WEM systems;

ii. define all data items, including, if applicable, a cross reference to the relevant ESM Rules under which the data is produced or exchanged;

iii. where applicable, provide details of any preprocessing or analysis applied to data items; and

iv. where applicable, provide a means of identifying any revisions of data items and the timing of any such revisions;

(b) maintain the accuracy and quality of all data items to which access is provided to the Coordinator and the Economic Regulation Authority in accordance with clause 2.16.2B; and

(c) where it becomes aware that any of the data items is incorrect or inconsistent, correct or make consistent, as applicable, the data item as soon as practicable.

2.16.3A. If, in the performance of its functions under these ESM Rules, AEMO identifies an issue which has, or is likely to have, an adverse effect on the operation of the Wholesale Electricity Market or achievement of the State Electricity Objective, AEMO must notify the Coordinator and the Economic Regulation Authority as soon as practicable after it becomes aware of the issue.

2.16.3B. The Coordinator or the Economic Regulation Authority may request further information from AEMO, including documents, data or analysis, regarding an issue notified under clause 2.16.3A, and must specify the date and time by which the information must be provided.

2.16.3C. Before making a request under clause 2.16.3B, the Coordinator or the Economic Regulation Authority, as applicable, must consult with AEMO and, taking into account the practicality and cost of the request, agree:

(a) the scope of the request; and

(b) the date and time by which the information must be provided.

2.16.3D. AEMO must comply with a request made under clause 2.16.3B before the date and time specified in the request.

2.16.3E. If AEMO provides information to the Coordinator or the Economic Regulation Authority under clauses 2.16.3A or 2.16A.3D, AEMO must identify what, if any, of the information provided is Confidential Information.

2.16.4. [Blank]

2.16.5. [Blank]

2.16.6. Where the Coordinator or the Economic Regulation Authority (as applicable) considers that it is necessary or desirable for the performance of its functions under these ESM Rules, the ESM Regulations or the Electricity Industry Act, or the functions of AEMO under this section 2.16, the Coordinator or the Economic Regulation Authority (as applicable) may collect additional information from Rule Participants as follows:

(a) the Coordinator or the Economic Regulation Authority (as applicable) may issue a notice to one or more Rule Participants requiring them to provide specified data to the Coordinator or the Economic Regulation Authority (as applicable) by a date (which the Coordinator or the Economic Regulation Authority (as applicable) considers to be reasonable);

(b) Market Participants must provide any information requested by the Coordinator or the Economic Regulation Authority (as applicable) by the date specified in the notice;

(bA) subject to its obligations of confidentiality under these ESM Rules or otherwise, the Coordinator must use reasonable endeavours to provide any information requested by the Economic Regulation Authority by the date specified in the notice; and

(c) the Coordinator or the Economic Regulation Authority (as applicable) must provide this information to AEMO where the Coordinator or the Economic Regulation Authority (as applicable) considers that it is necessary or desirable for the performance of AEMO's functions under this section 2.16.

2.16.7. Without limitation, additional information that can be collected by the Coordinator or the Economic Regulation Authority (as applicable) includes:

(a) cost data for Synergy, including actual fuel costs by Trading Interval;

(b) AEMO’s operational records (whether held by AEMO or which AEMO may require from another person under these ESM Rules), including SCADA records, of the level of utilisation and fuel related data for each of Synergy’s Registered Facilities by Trading Interval; and

(c) the terms of Bilateral Contracts entered into by Synergy.

2.16.8. Rule Participants may notify AEMO or the Economic Regulation Authority of behaviour that they consider reduces the effectiveness of the market, including behaviour related to market power, and the Economic Regulation Authority, with the assistance of AEMO, must investigate the behaviour identified in each relevant notification.

2.16.8A. AEMO must notify the Economic Regulation Authority of any behaviour a Rule Participant notifies it about under clause 2.16.8.

2.16.9. The Economic Regulation Authority must investigate any market behaviour if it considers that the behaviour has resulted in the market not functioning effectively. The Economic Regulation Authority, with the assistance of AEMO, must monitor:

(a) the criteria and processes used by AEMO for the procurement of Essential System Services through the Real-Time Market, the SESSM, and under any contracts entered into by AEMO; and

(b) inappropriate and anomalous market behaviour, including behaviour related to market power and the exploitation of shortcomings in the ESM Rules or WEM Procedures by Rule Participants.

2.16.9A. [Blank]

2.16.9B. [Blank]

2.16.9C. [Blank]

2.16.9D. [Blank]

2.16.9E. Where the Economic Regulation Authority conducts an investigation after receiving a notification from a Rule Participant under clause 2.16.8, or from AEMO under clause 2.16.8A, then, without limitation, the Economic Regulation Authority must examine any information provided in the notification, any information or data in its possession, including any data or information the Economic Regulation Authority requests from the relevant Rule Participant under clause 2.16.6, or from AEMO under clause 2.16.8, to assist in the investigation.

2.16.9F. Subject to clause 2.16.9FA, the Economic Regulation Authority must publish the results of its investigations within six months from receiving a notification from a Rule Participant under clause 2.16.8, or from AEMO under clause 2.16.8A. If that day is not a Business Day, then the next Business Day following that six month period will apply.

2.16.9FA. Subject to clause 2.16.9FB, the Economic Regulation Authority may extend the timeframe for an investigation under clause 2.16.9E for a period of up to six months, to the nearest Business Day following that six month extension period. Where the Economic Regulation Authority makes such an extension it must publish a notice of the extension on its website. The Economic Regulation Authority may extend the timeframe for an investigation more than once.

2.16.9FB. A notice of extension under clause 2.16.9FA must not include any information identifying the Rule Participant under investigation.

2.16.10. [Blank]

2.16.11. The Economic Regulation Authority must provide to the Coordinator and the Minister a report on the effectiveness of the market and dealing with the matters

identified in clause 2.16.9, if the Economic Regulation Authority considers that any specific events, or systemic behaviour or matters have impacted on the effectiveness of the market.

2.16.12. [Blank]

2.16.13. In carrying out its responsibilities under clause 2.16.9(b), the Economic Regulation Authority must:

(a) estimate the prevalence of such behaviour;

(b) estimate the cost to end users of such behaviour;

(c) estimate the impact of such behaviour on the effectiveness of the market in meeting the State Electricity Objective;

(d) consult with Market Participants on the impacts of such behaviour;

(e) estimate the benefits and costs of any recommended measure to reduce such behaviour. The Economic Regulation Authority:

i. may use market simulation tools to estimate the benefits and costs;

ii. must give consideration to:

1. the probability of success of the measure in reducing the behaviour;

2. the implications on the efficiency of the market of implementing the measure; and

3. the costs of compliance as a result of implementing the measure;

(f) where the benefits of any change are estimated to exceed the cost, make recommendations to the Coordinator and the Minister for implementing the measures in a report under clause 2.16.11; and

(g) provide details of its findings in a report to the Coordinator and the Minister under clause 2.16.11.

2.16.13A. The Coordinator is responsible for the development of the market and, with the assistance of the Economic Regulation Authority and AEMO, must monitor market design problems or inefficiencies.

2.16.13B. In carrying out its responsibilities under clause 2.16.13A, the Coordinator must also monitor:

(a) the effectiveness of the compliance monitoring and enforcement measures in the ESM Rules and Regulations, including, but not limited to:

i. the effectiveness of the Economic Regulation Authority's surveillance activities under sections 2.16A to 2.16D; and

ii. the appropriateness of the parameters for determining a Material Portfolio and Material Constrained Portfolio under clauses 2.16C.1 and 2.16C.2;

(b) the effectiveness of AEMO in carrying out its functions under the Regulations, the ESM Rules and WEM Procedures;

(c) the effectiveness of Network Operators in carrying out their functions under the ESM Rules and WEM Procedures; and

(d) the efficiency and effectiveness of the methodologies for determining the Market Price Limits and the Benchmark Reserve Capacity Prices.

2.16.13C. If in the performance of its functions under these ESM Rules the Economic Regulation Authority identifies a market design problem or inefficiency, the Economic Regulation Authority may provide to the Coordinator and the Minister a report describing the problem or inefficiency and must publish the report on its website.

2.16.13D. The Coordinator must provide to the Minister a report dealing with the matters identified in clauses 2.16.13A and 2.16.13B at least once in every three years, with the first such report due by 1 July 2025.

2.16.13E. A report referred to in clause 2.16.13D must address, but is not limited to, the following matters:

(a) market trends, which may include:

i. a summary of the information and data compiled by AEMO and the Economic Regulation Authority under clause 2.16.1; and

ii. any other matter or information the Coordinator considers relevant and appropriate to include;

(b) any recommended measures to increase the effectiveness of the market in meeting the State Electricity Objective to be considered by the Minister.

2.16.13F. The Coordinator must ensure that an independent person carries out an audit of the effectiveness of the ESM Rule change process and Procedure Change Process no less than every three years, with the first such audit completed by 1 October 2030. The independent person must provide the Coordinator with a report, and the Coordinator must within 30 Business Days of receiving the report either:

(a) accept the report and any recommendations contained in it; or

(b) prepare a separate report setting out the matters raised in the independent person's report which the Coordinator accepts and those which it does not accept and setting out Coordinator's reasons for that view; and

(c) publish the independent person's report and any report it prepared under clause 2.16.13F(b) within 30 Business Days of receiving the independent person's report.

2.16.14. The Coordinator or the Economic Regulation Authority (as applicable) may use any information collected under this section 2.16, including information provided to it by AEMO, for the purpose of carrying out any of its functions under the ESM Rules. The Coordinator or the Economic Regulation Authority (as applicable) must treat information collected under this section 2.16 as confidential and must not publish any of that information other than in accordance with this section 2.16 or where required in the performance of the Coordinator's functions or the Economic Regulation Authority's functions (as applicable) under the ESM Rules. AEMO must use information provided to it by the Coordinator or the Economic Regulation Authority under clause 2.16.6(c) only for the purpose of carrying out its functions under this section 2.16. AEMO must treat information provided to it by the Coordinator or the Economic Regulation Authority under clause 2.16.6(c) as confidential and must not publish any of that information other than in accordance with this section 2.16.

2.16.15. Where the Economic Regulation Authority provides a report to the Minister in accordance with clause 2.16.11, it must, after consultation with the Minister, publish a version of the report which has confidential or sensitive data aggregated or removed. An assessment of the results of the Economic Regulation Authority's monitoring under clause 2.16.9(b) must be included in the published version of the report.

2.16.15A. Where the Coordinator provides a report to the Minister in accordance with clause 2.16.13D, it must, after consultation with the Minister, publish a version of the report which has confidential or sensitive data aggregated or removed.

2.16.16. In respect of any reports published under this section 2.16, only aggregate or summary statistics of confidential data may be published. The aggregation must be at a level sufficient to ensure the underlying data cannot be identified. Where aggregated data is derived from confidential data collected from three or less Market Participants, then this data should not be published.

Market Power Mitigation

2.16A. General Trading Obligations

2.16A.1. [Blank]

2.16A.2. [Blank]

2.16A.3. A Market Participant must not engage in conduct in the STEM or Real-Time Market that:

(a) is false, misleading or deceptive, or likely to mislead or deceive;

(b) is fraudulent, dishonest or in bad faith; or

(c) has the purpose, or has or is likely to have the effect, of distorting or manipulating prices in the Wholesale Electricity Market.

2.16A.3A. A Market Participant must not vary its Demand Side Programme's consumption or withdrawal on the day of a DSP Dispatch Event for the sole purpose of increasing its Relevant Demand as defined in Appendix 10.

2.16A.4. In determining whether a Market Participant has engaged in conduct prohibited by clause 2.16A.3, the Economic Regulation Authority may take into account:

(a) historical STEM Submissions or Real-Time Market Submissions made by the Market Participant with effect on or after the New WEM Commencement Day, including changes to STEM Submissions and Real-Time Market Submissions in which there is, or there appears to be, a pattern of behaviour that may indicate such conduct was engaged in;

(b) the timeliness and accuracy of notification of Forced Outages by the Market Participant;

(c) information regarding whether the Market Participant did not comply with a Dispatch Instruction in respect of its Facility and the reasons for the non-compliance; and

(d) any other information the Economic Regulation Authority considers relevant to its determination.

2.16A.5. A STEM Submission or a Real-Time Market Submission is not made in bad faith under clause 2.16A.3(b) if, at the time it is submitted, the Market Participant had a genuine intention to honour the terms of that STEM Submission or Real-Time Market Submission if the material conditions and circumstances upon which the STEM Submission or Real-Time Market Submission was based remained unchanged until the relevant Trading Interval.

2.16A.6. A Market Participant may be taken to have made a STEM Submission or a Real-Time Market Submission in bad faith notwithstanding that the intention of the Market Participant is ascertainable only by inference from:

(a) the conduct of the Market Participant;

(b) the conduct of any other person; or

(c) the relevant circumstances.

2.16A.7. If a Market Participant does not have reasonable grounds for a price, quantity, or Ramp Rate Limit, as applicable, it has included in a Real-Time Market Submission at the time it submits that Real-Time Market Submission, then the Market Participant is, for the purposes of clause 2.16A.3(a), taken to have known that the

Real-Time Market Submission was likely to lead to another Rule Participant being misled or deceived as to the existence or non-existence of a material fact relating to the Real-Time Market.

2.16A.8. For the purposes of clause 2.16A.7, a Market Participant must adduce evidence that it had reasonable grounds for including a price, quantity or Ramp Rate Limit, as applicable, in the Real-Time Market Submission. To avoid doubt, the effect of this clause is to place an evidentiary burden on a Market Participant, and this clause does not have the effect that, merely because such evidence is adduced, the Market Participant who submitted the Real-Time Market Submission is taken to have had reasonable grounds for including a price, quantity or Ramp Rate Limit, as applicable.

2.16A.9. Clause 2.16A.7 does not imply that merely because a Market Participant had reasonable grounds for making the representation or the conduct referred to in Chapter 7, in respect of the Real-Time Market, and in particular putting the price, quantity or Ramp Rate Limit, as applicable, in a Real-Time Market Submission submitted by the Market Participant, that such representation or conduct is not misleading.

2.16B. Portfolio Assessment

2.16B.1. The Economic Regulation Authority must, in accordance with the WEM Procedure referred to in clause 2.16D.15:

(a) by 1 October each year, identify each Portfolio operating in the Wholesale Electricity Market by applying the following principles:

i. each Scheduled Facility, Semi-Scheduled Facility and Non-Scheduled Facility must be allocated to a Portfolio;

ii. [Blank]

iii. [Blank]

iv. Registered Facilities which are:

1. registered to the same Market Participant;

2. wholly or partly owned by the same entity (either directly or indirectly); or

3. wholly or partly controlled by the same entity (either directly or indirectly),

must be allocated to the same Portfolio; and

v. a Registered Facility must not be allocated to a Portfolio containing another Registered Facility unless it is required by clause 2.16B.1(a)(iv); and

(b) within 10 Business Days of identifying each Portfolio under clause 2.16B.1(a), publish a list on its website specifying the name of each Registered Facility within each identified Portfolio.

2.16B.2. Within 20 Business Days of the Settlement Date determined under clause 9.3.1(d) for the Trading Week containing the last Trading Day of each Rolling Test Window, the Economic Regulation Authority must, in accordance with the WEM Procedure referred to in clause 2.16D.15, identify:

(a) each Constraint Equation for a Network Constraint that bound during one or more Dispatch Intervals in the Rolling Test Window; and

(b) each Constrained Portfolio for each Constraint Equation identified under clause 2.16B.2(a).

2.16B.3. The Economic Regulation Authority may, in carrying out its obligations under clause 2.16B.2, specify a Registered Facility within more than one Constrained Portfolio.

2.16B.4. A Market Participant must provide a declaration to the Economic Regulation Authority, in accordance with the WEM Procedure referred to in clause 2.16D.15:

(a) by 1 August of each year;

(b) within 30 Business Days of a new Scheduled Facility, Semi-Scheduled Facility or Non-Scheduled Facility being registered to the Market Participant; and

(c) within 30 Business Days of a change in the registration, or the ownership or control (either directly or indirectly), of a Scheduled Facility, Semi-Scheduled Facility or Non-Scheduled Facility currently registered in the Wholesale Electricity Market.

2.16B.5. Within 20 Business Days of receiving a declaration from a Market Participant under clause 2.16B.4(b) or 2.16B.4(c), the Economic Regulation Authority must update the list published under clause 2.16B.1(b).

2.16C. Materiality Test

2.16C.1. The Economic Regulation Authority must, in accordance with the WEM Procedure referred to in clause 2.16D.15:

(a) within 10 Business Days of identifying each Portfolio p under clause 2.16B.1(a), calculate Portfolio p's percentage share of the total maximum sent out capacity of all Registered Facilities assigned to a Portfolio as follows:

$$\text{MSOC_Share}(p) = \frac{\sum_{f \in p} \text{MSOC}(f)}{\sum_{f \in \text{Facilities}} \text{MSOC}(f)} \times 100$$

where:

i. MSOC(f) is the maximum sent out capacity specified for Registered Facility f in Appendix 1(b)(v), Appendix 1(c)(v) or Appendix 1(d)(v) as applicable;

ii. f∈p denotes all Scheduled Facilities, Semi-Scheduled Facilities and Non-Scheduled Facilities f assigned to Portfolio p; and

iii. f∈Facilities denotes all Scheduled Facilities, Semi-Scheduled Facilities and Non-Scheduled Facilities assigned to a Portfolio identified under clause 2.16B.1(a);

(b) identify each Portfolio where the value determined under clause 2.16C.1(a) is equal to or greater than 10% ("**Material Portfolio**"); and

(c) within 10 Business Days of identifying each Material Portfolio under clause 2.16C.1(b):

i. publish a list specifying the name of each Registered Facility within each identified Portfolio and the results of the calculations carried out under clause 2.16C.1(a) on its website; and

ii. notify each Market Participant that has a Registered Facility assigned to a Material Portfolio identified under clause 2.16C.1(b).

2.16C.1A. Each set of Material Portfolios identified by the Economic Regulation Authority under clause 2.16C.1(b) replaces the previous set of Material Portfolios identified by the Economic Regulation Authority under clause 2.16C.1(b) (if any) with effect from the time that the Economic Regulation Authority publishes the results of the relevant calculations under clause 2.16C.1(c)(i).

2.16C.2. The Economic Regulation Authority must, not more than 20 Business Days after the Settlement Date determined under clause 9.3.1(d) for the Trading Week containing the last Trading Day of a Rolling Test Window, in accordance with the WEM Procedure referred to in clause 2.16D.15:

(a) calculate for that Rolling Test Window and for any relevant Fixed Assessment Period, as a percentage, the Constrained Uplift Payment Ratio for each Constrained Portfolio identified under clause 2.16B.2(b) as follows:

$$\text{Constrained Uplift Payment Ratio} = \frac{CP_UP}{NC} \times 100$$

where:

i. CP_UP is the number of Dispatch Intervals in the Rolling Test Window or Fixed Assessment Period (as applicable) in which:

1. the Constraint Equation relevant to the identification of the Constrained Portfolio identified under clause 2.16B.2(a) bound; and

2. a Registered Facility in the Constrained Portfolio received an Energy Uplift Payment; and

ii. NC is the total number of Dispatch Intervals in the Rolling Test Window or Fixed Assessment Period (as applicable) in which the Constraint Equation relevant to the identification of the Constrained Portfolio bound;

(b) identify each Constrained Portfolio with a Constrained Uplift Payment Ratio equal to or greater than 10% as calculated under clause 2.16C.2(a) ("**Material Constrained Portfolio**");

(c) publish the results of the calculations carried out under clauses 2.16C.2(a) and 2.16C.2(b) on its website; and

(d) notify each Market Participant that has a Registered Facility assigned to a Material Constrained Portfolio identified under clause 2.16.2C(b).

2.16C.2A. Each set of Material Constrained Portfolios identified by the Economic Regulation Authority under clause 2.16C.2(b) replaces the previous set of Material Constrained Portfolios identified by the Economic Regulation Authority under clause 2.16C.2(b) (if any) with effect from the time that the Economic Regulation Authority publishes the results of the relevant calculations under 2.16C.2(c).

2.16C.3. By no later than three months from the date of receipt of a notice from the Economic Regulation Authority under clause 2.16C.1(c)(ii) or clause 2.16C.2(d), subject to clause 2.16C.3A, a Market Participant must, in accordance with the WEM Procedure referred to in clause 2.16D.15:

(a) maintain adequate records (that are capable of independent verification) of the internal governance arrangements the Market Participant has in place to comply with its obligations under clause 2.16C.5;

(b) maintain adequate records (that are capable of independent verification) of the methods, assumptions and cost inputs the Market Participant used to develop the prices in the Portfolio Supply Curve offered in its STEM Submissions or Standing STEM Submissions, including, for each relevant Facility; and

(c) maintain adequate records (that are capable of independent verification) of the methods and cost inputs the Market Participant used to develop the prices offered, quantities and Ramp Rate Limits in its Real-Time Market Submissions or Standing Real-Time Market Submissions, including, for each relevant Facility.

2.16C.3A. A Market Participant is not required to maintain records in accordance with clause 2.16C.3 in respect of any Non-Scheduled Facilities assigned to a Material Portfolio or Material Constrained Portfolio.

2.16C.4. The Economic Regulation Authority must monitor the following price offers for compliance with clause 2.16C.5:

(a) the prices offered by a Market Participant in its STEM Portfolio Supply Curve; and

(b) the prices offered by a Market Participant in its Real-Time Market Submissions for each of its Registered Facilities.

2.16C.5. A Market Participant must not make an Irregular Price Offer that results in an inefficient market outcome.

2.16C.6. The Economic Regulation Authority must investigate potential breaches of clause 2.16C.5:

(a) in accordance with clause 2.13.27 and the WEM Procedure referred to in clause 2.16D.15; and

(b) having regard to the Offer Construction Guideline,

and if it considers that:

(c) a price offered by a Market Participant in its Portfolio Supply Curve was inconsistent with an Economic Price Offer; or

(d) a price offered by a Market Participant in its Real-Time Market Submissions was inconsistent with an Economic Price Offer,

the Economic Regulation Authority must determine that the price was an Irregular Price Offer.

2.16C.6A. An Economic Price Offer is a price offered by a Market Participant, in its Portfolio Supply Curve or in a Real-Time Market Submission, which is not greater than the Market Participant's reasonable expectation (based on the information available at the time the offer was made) of the sum of all efficient variable costs for the provision of the relevant Market Service, including all costs incurred under long-term take-or-pay fuel contracts.

2.16C.7. The Economic Regulation Authority must investigate and determine, in accordance with clause 2.13.27 and the WEM Procedure referred to in clause 2.16D.15, whether an Irregular Price Offer determined under clause 2.16C.6 has resulted in an inefficient market outcome.

2.16C.8. Without limiting clauses 2.16C.6 and 2.16C.7, the Economic Regulation Authority must make a determination under clause 2.16C.6 and, if necessary, under clause 2.16C.7, no later than six months from the day the Economic Regulation Authority commenced its investigation under clause 2.16C.6.

2.16C.8A. If the Economic Regulation Authority requests that a Market Participant provides information under clause 2.13.28, or receives a submission from a Market Participant to explain an alleged breach in accordance with the WEM Procedure

specified in clause 2.15.1, the timeframe specified in clause 2.16C.8 for the Economic Regulation Authority to make a determination will be suspended:

(a) where the Economic Regulation Authority has requested information, from the date of the request and will recommence from the date the Market Participant provides the Economic Regulation Authority the information; or

(b) where the Market Participant makes a submission to the Economic Regulation Authority, from the date of receipt of the submission and will recommence two Business Days after that date unless the timeframe is already suspended pursuant to clause 2.16C.8A(a).

2.16C.9. In conducting an investigation under clause 2.16C.7, the Economic Regulation Authority:

(a) must consider any changes to:

i. a STEM Clearing Price or Reference Trading Price;

ii. Energy Uplift Payments; or

iii. the quantities of energy scheduled in respect of Market Participants in the STEM Auction, or the dispatch of Facilities in the Real-Time Market,

that are likely to have occurred as a result of the Irregular Price Offer; and

(b) may consider any other matters it considers relevant.

2.16C.10. If, following an investigation, the Economic Regulation Authority has determined pursuant to clause 2.16C.6 and clause 2.16C.7 that a Market Participant has breached the obligation specified in clause 2.16C.5, the Economic Regulation Authority must:

(a) at least two Business Days prior to publication of its determination under clause 2.16C.10(b), notify the relevant Market Participant of the determination; and

(b) publish on its website details of its determination, including the name of the relevant Market Participant and the Irregular Price Offer to which the determination relates.

2.16D. Guidance, WEM Procedures and Consultation Framework

2.16D.1. The Economic Regulation Authority must develop, maintain and publish on its website, the following guidelines:

(a) an Offer Construction Guideline that:

i. provides guidance to Market Participants in relation to the application of clause 2.16C.6A;

ii. details how the Economic Regulation Authority will assess prices offered under clause 2.16C.6;

iii. permits the recovery of all efficient variable costs of producing the relevant electricity, including all costs incurred under long-term take-or-pay fuel contracts;

iv. outlines how the Economic Regulation Authority will consider price offers for different Facility types, including Electric Storage Resources;

v. provides examples illustrating the types of conduct that the Economic Regulation Authority considers would be likely to contravene the clause 2.16C.5, including what offers would be considered inconsistent with an Economic Price Offer; and

vi. provides guidance to Market Participants on how the Economic Regulation Authority will assess inefficient market outcomes under clause 2.16C.7; and

(b) a Trading Conduct Guideline that must provide clarity and guidance to Market Participants regarding the prohibited conduct described in clause 2.16A.3. The Trading Conduct Guideline must provide examples illustrating the types of conduct that the Economic Regulation Authority considers would be likely to contravene clause 2.16A.3.

2.16D.2. Subject to the provisions of this section 2.16D, the Economic Regulation Authority may amend the guidelines to be developed and maintained under clause 2.16D.1 at any time.

2.16D.3. In developing and maintaining the guidelines under clause 2.16D.1, or any amendments to them under clause 2.16D.2, the Economic Regulation Authority must publish on its website:

(a) a draft report containing a copy of the proposed guidelines, or the proposed amendments to the guidelines, as applicable, and a request for submissions;

(b) the closing date for submissions, which must be no earlier than four weeks after the date of publication of the draft report; and

(c) a copy of all submissions received provided that if a submission contains information that the Economic Regulation Authority reasonably considers to be confidential, the Economic Regulation Authority may redact that information to the extent it considers appropriate.

2.16D.4. Following the closing date for submissions on the draft report published under clause 2.16D.3, the Economic Regulation Authority must publish a final report on its website containing:

(a) the final guidelines, or the amendments to the guidelines, as applicable;

(b) where applicable, the reasons for the amendment to the guidelines;

(c) a summary of any submissions received by the Economic Regulation Authority on the draft report published under clause 2.16D.3 that were received within the time specified, and any late submissions the Economic Regulation Authority has decided, in its discretion, to take into account;

(d) the Economic Regulation Authority's responses to the issues raised in those submissions;

(e) any other matters the Economic Regulation Authority considers relevant to the guidelines, or the amendment to the guidelines, as applicable; and

(f) the date that the final guidelines, or the amendment to the guidelines, will commence.

2.16D.5. A Market Participant that has received a notice from the Economic Regulation Authority under clauses 2.16C.1(c)(ii) or 2.16C.2(d) may, in accordance with clause 2.16D.6, request guidance from the Economic Regulation Authority in relation to the Offer Construction Guideline, including, for the purposes of the Economic Regulation Authority's assessment of prices offered under clause 2.16C.6, how the matters in the Offer Construction Guideline may apply to the Market Participant's Registered Facility.

2.16D.6. A request made by a Market Participant under clause 2.16D.5 must:

(a) be in writing;

(b) identify the matters in the Offer Construction Guideline on which the Market Participant is seeking guidance;

(c) specify the Market Participant's reasons for seeking guidance;

(d) where relevant, provide supporting materials that illustrate or evidence the matters raised in the request; and

(e) include any other information specified in the WEM Procedure referred to in clause 2.16D.15.

2.16D.7. Within 20 Business Days of receipt of a request under clause 2.16D.5, the Economic Regulation Authority must:

(a) consider the request; and

(b) subject to clause 2.16D.10, use reasonable endeavours to provide guidance on the matters specified in the request,

unless the Economic Regulation Authority is considering an earlier request received under clause 2.16D.5 at the time it receives the request, in which case the 20 Business Day timeframe will commence after the earlier request has been considered by the Economic Regulation Authority and resolved in accordance with this clause 2.16D.7.

2.16D.8. The Economic Regulation Authority may request further information from a Market Participant that has made a request under clause 2.16D.5. If, within 15 Business Days of the date of the Economic Regulation Authority's request for further information, the Market Participant does not provide the information requested, or the Economic Regulation Authority reasonably considers the information provided is not satisfactory, the Market Participant will be deemed to have withdrawn the relevant request.

2.16D.9. If the Economic Regulation Authority issues a request for further information under clause 2.16D.8, the timeframe specified in clause 2.16D.7 for the Economic Regulation Authority to provide the relevant guidance will recommence from the date the Market Participant has provided all of the further information requested by the Economic Regulation Authority.

2.16D.10. The Economic Regulation Authority is not required to provide guidance to a Market Participant in relation to a request under clause 2.16D.5 where it considers that:

(a) the Offer Construction Guideline already provides sufficient guidance on the matters raised in the request;

(b) the request does not meet the requirements in clause 2.16D.6;

(c) the cost the Economic Regulation Authority would incur to provide the guidance sought in the request is unreasonable or excessive; or

(d) the request is substantially similar to a previous request considered by the Economic Regulation Authority from the same Market Participant.

2.16D.11. Subject to clause 2.16D.12, any guidance provided by the Economic Regulation Authority pursuant to clause 2.16D.7 is not binding on the Economic Regulation Authority, the Market Participant who made the request, or any other person, and the Economic Regulation Authority may, at any time, reconsider, revise or withdraw any guidance provided to a Market Participant.

2.16D.12. In conducting an investigation under clauses 2.16C.6 or 2.16C.7, the Economic Regulation Authority must take into account any guidance it may have provided to the Market Participant under clause 2.16D.7 that is relevant to the matters being investigated.

2.16D.13. Where the Economic Regulation Authority provides guidance to a Market Participant under clause 2.16D.7, the Economic Regulation Authority must consider whether the Offer Construction Guideline should be amended to reflect that guidance. Where the Economic Regulation Authority considers the Offer Construction Guideline should be amended, the Economic Regulation Authority must initiate an amendment to the Offer Construction Guideline in accordance with clause 2.16D.3 as soon as practicable.

2.16D.14. The Economic Regulation Authority must publish on its website a copy of any guidance provided to a Market Participant under clause 2.16D.7 provided that the Economic Regulation Authority must first redact all information that is confidential or commercially sensitive in the guidance, including the name of the Market Participant to whom the guidance was provided. Where the Economic Regulation Authority considers the guidance cannot be redacted to ensure the identity of the Market Participant to whom the guidance was provided remains confidential, the Economic Regulation Authority is not required to publish the guidance.

2.16D.15. The Economic Regulation Authority must document in a WEM Procedure:

(a) the methodologies and processes to be followed by the Economic Regulation Authority in relation to:

i. identifying each Portfolio and Constrained Portfolio operating in the Wholesale Electricity Market pursuant to clauses 2.16B.1(a) and 2.16B.2, respectively;

ii. carrying out the calculations under clauses 2.16C.1(a) and 2.16C.2(a) in relation to identifying each Material Portfolio and Material Constrained Portfolio, respectively; and

iii. monitoring prices offered by a Market Participant under clause 2.16C.4, and making determinations under clauses 2.16C.6 and 2.16C.7 in relation to those price offers;

(b) the types and format of the information, and level of detail required to be maintained or recorded by a Market Participant to enable the Economic Regulation Authority to carry out its monitoring of price offers under clause 2.16C.4;

(c) details of the processes the Economic Regulation Authority and Market Participants must follow in respect to a request for guidance under clause 2.16D.5, which may include a template that a Market Participant must use for making a request; and

(d) the form and process for making a declaration under clause 2.16B.4.

2.16E. Irregular Price Offers – Limited Application of Section 2.13

2.16E.1. [Blank]

2.16E.2. If the Economic Regulation Authority has investigated a potential breach of clause 2.16C.5 and determined that a price offered by a Market Participant is not inconsistent with an Economic Price Offer, or that an Irregular Price Offer by a Market Participant has not resulted in an inefficient market outcome, the Economic Regulation Authority must notify the Market Participant of the results of the investigation and the reasons for its decision.

Reviewable Decisions and Disputes

2.17. Reviewable Decisions

2.17.1. A Rule Participant whose interests are adversely affected by a Reviewable Decision or a decision subject to Procedural Review, may apply to the Electricity Review Board for a review of that decision in accordance with the ESM Regulations.

2.17.2. Decisions by AEMO, the Economic Regulation Authority, the Coordinator or a Network Operator, as applicable, made under the following clauses may be subject to a Procedural Review:

(a) clauses 2.5.6(c), 2.5.9, 2.6.3A(a) and 2.7.7A(a); and

(b) clauses 2.10.2A(a) and 2.10.13.

2.17.3. In accordance with the ESM Regulations, a Rule Participant may apply to the Electricity Review Board for a review of Reviewable Decisions or a decision made under clauses subject to Procedural Review.

2.18. Disputes

2.18.1. The dispute process set out in sections 2.18, 2.19 and 2.20 applies to any dispute concerning:

(a) the application or interpretation of these ESM Rules;

(b) the failure of Rule Participants to reach agreement on a matter where these ESM Rules require agreement or require the Rule Participants to negotiate in good faith with a view to reaching agreement; or

(c) payment of moneys under, or the performance of any obligation under, these ESM Rules,

but does not apply to:

(d) any matter that is identified as a Reviewable Decision or is subject to Procedural Review;

(e) a matter that arises under a contract between Rule Participants, unless AEMO is a party to the contract and the contract provides that the dispute process applies;

(f) a dispute that arises in relation to:

i. a decision to exempt or not to exempt a Transmission Connected Generating System under section 3A.3;

ii. a decision by the Network Operator to refuse to renegotiate a Registered Generator Performance Standard under clause 3A.8.8;

iii. a decision in respect of a Rectification Plan under section 3A.11; or

iv. a decision to declare a Potential Relevant Generation Modification to be a Relevant Generation Modification under section 3A.13;

(g) a dispute in respect of a decision by a Network Operator to grant or refuse an extension of time for a Market Participant responsible for an Existing Transmission Connected Generating System to have a Registered Generator Performance Standard for each Technical Requirement for the Existing Transmission Connected Generating System;

(h) a dispute in respect of a decision by AEMO to grant or refuse an extension of time for a Market Participant responsible for an Existing Transmission Connected Generating System to:

i. submit a proposed Generator Monitoring Plan; or

ii. have a Generator Monitoring Plan approved by AEMO;

(i) a dispute which is being dealt with under the dispute resolution mechanism for Existing Transmission Connected Generating Systems contained in section 1.42; or

(j) disputes about the classification, release or disclosure of Market Information arising under Chapter 10.

2.18.2. For the purposes of these ESM Rules, the “Dispute Participants” are the Rule Participants raising the dispute, AEMO and all Rule Participants named in a Notice of Dispute or joined to the dispute in accordance with clause 2.19.5.

2.18.3. At any time during the course of resolving a dispute a Dispute Participant may refer a question of law to a court of competent jurisdiction.

2.18.4. Dispute Participants must not agree to actions to be taken in resolution of a dispute that are inconsistent with the ESM Rules.

2.19. First Stage Dispute Resolution

2.19.1. Where a Rule Participant wishes to raise a dispute with another Rule Participant concerning a matter to which this dispute process applies, it may issue a Notice of Dispute to each other Rule Participant that is a party to the dispute within 12 months of the matter giving rise to the dispute.

2.19.2. The Rule Participant raising the dispute may name any Rule Participant in a Notice of Dispute that the Rule Participant raising the dispute considers may be affected by the dispute or resolution of the dispute.

2.19.3. The Notice of Dispute must be in writing and must contain:

(a) the date on which the Notice of Dispute was issued;

(b) the identity of the Rule Participant issuing the Notice of Dispute;

(c) the identities of the other Rule Participants party to the dispute;

(d) the details of the dispute, including a description of the disputed actions, and the time and date when the disputed actions occurred; and

(e) the contact person for the Rule Participant issuing the dispute, and their mailing address.

2.19.4. A Rule Participant receiving a Notice of Dispute under clause 2.19.1 must supply a confirmation of the receipt of the Notice of Dispute within two Business Days of receipt of the Notice of Dispute, including details of a contact person and their mailing address.

2.19.5. Where AEMO receives a Notice of Dispute and it considers that a Rule Participant not named in the Notice of Dispute may be affected by the dispute or resolution of the dispute, it may, within 10 Business Days of receiving the Notice of Dispute, join the Rule Participant to the dispute by notifying the Rule Participant of the dispute and providing a copy of the Notice of Dispute.

2.19.6. The Chief Executive Officers, or their designated representatives with authority to resolve the dispute, from all Dispute Participants must make reasonable endeavours to meet on one or more occasions, and to attempt in good faith and using their best endeavours at all times to resolve the dispute.

2.19.7. A dispute must be escalated to the second stage dispute resolution process in section 2.20 if the Dispute Participants have not resolved the dispute (as evidenced by the terms of the settlement being reduced to writing and signed by each Chief Executive Officer) within:

(a) a time period agreed by all Dispute Participants; or

(b) if no time period is agreed by all Dispute Participants, within 60 days of the date on which the Notice of Dispute was issued.

2.20. Second Stage Dispute Resolution

2.20.1. Where any Dispute is not resolved as provided for in section 2.19 then the Dispute Participants must give consideration to resolving the dispute through mediation, conciliation, arbitration or alternative dispute resolution methods, using an independent body agreed between the Dispute Participants.

2.20.2. If any Dispute is not resolved as provided for in section 2.19 and a Dispute Participant has given consideration to resolving the dispute in accordance with clause 2.20.1, then that Dispute Participant may commence proceedings before a court of competent jurisdiction in relation to the dispute.

Market Consultation

2.21. Market Consultation

2.21.1. The Economic Regulation Authority must consult on such matters with such persons and over such timeframes as are specified in these ESM Rules.

2.21.2. The Economic Regulation Authority must:

(a) conduct its consultation processes in good faith; and

(b) ensure that these consultation processes allow a reasonable opportunity for relevant stakeholders to present their views.

2.21.3. [Blank]

2.21.4. [Blank]

2.21.5. AEMO must consult on such matters with such persons and over such timeframes as are specified in these ESM Rules.

2.21.6. AEMO must—

(a) conduct its consultation processes in good faith; and

(b) ensure that these consultation processes allow a reasonable opportunity for relevant stakeholders to present their views.

2.21.7. [Blank]

2.21.8. [Blank]

2.21.9. Each Network Operator must consult on such matters with such persons and over such timeframes as are specified in these ESM Rules.

2.21.10. Each Network Operator must:

(a) conduct its consultation processes in good faith; and

(b) ensure that these consultation processes allow a reasonable opportunity for relevant stakeholders to present their views.

2.21.11. The Coordinator must consult on such matters with such persons and over such timeframes as are specified in these ESM Rules.

2.21.12. The Coordinator must:

(a) conduct its consultation processes in good faith; and

(b) ensure that these consultation processes allow a reasonable opportunity for relevant stakeholders to present their views.

Budgets and Fees

2.22. [Blank]

2.22A. Determination of AEMO's budget

2.22A.1. Subject to the requirements of this section 2.22A, AEMO may recover its costs for performing its functions under the ESM Regulations and the ESM Rules.

2.22A.2. For the Review Period, AEMO must seek the determination of its Allowable Revenue and Forecast Capital Expenditure from the Economic Regulation Authority for its functions, in accordance with the proposal guideline referred to in clause 2.22A.9.

2.22A.2A. A submission by AEMO under clause 2.22A.2 must be made and processed in accordance with the following timelines:

(a) by 31 October of the year prior to the start of the Review Period, AEMO must submit a proposal for its Allowable Revenue and Forecast Capital Expenditure over the Review Period to the Economic Regulation Authority;

(b) by 31 March of the year in which the Review Period commences, the Economic Regulation Authority must publish on its website a draft determination of AEMO’s Allowable Revenue and Forecast Capital Expenditure for the Review Period for public consultation;

(c) by 30 April of the year in which the Review Period commences, the Economic Regulation Authority must prepare and publish on its website its final determination of AEMO’s Allowable Revenue and Forecast Capital Expenditure for the Review Period together with any submission received in response to the draft determination published in accordance with clause 2.22A.2A(b); and

(d) where the Economic Regulation Authority does not make a determination by the date in clause 2.22A.2A(c) or clause 2.22A.2B(c), the Market Participant Market Fee rate determined in accordance with section 2.24 for the current Financial Year will continue to apply until the Economic Regulation Authority makes a determination.

2.22A.2B. Notwithstanding clause 2.22A.2A, for the Review Period from 1 July 2022 to 1 July 2025 the following applies:

(a) the Economic Regulation Authority must publish a proposal guideline by 31 October 2021;

(b) AEMO must submit a proposal for its Allowable Revenue and Forecast Capital Expenditure to the Economic Regulation Authority for the Review Period by 31 December 2021;

(c) the Economic Regulation Authority must publish on its website a draft determination of AEMO's Allowable Revenue and Forecast Capital Expenditure for the Review Period for public consultation by 31 March 2022; and

(d) the Economic Regulation Authority must prepare and publish on its website its final determination of AEMO's Allowable Revenue and Forecast Capital Expenditure for the Review Period by 31 May 2022.

2.22A.3. AEMO's proposal under clauses 2.22A.2A(a) or 2.22A.2B(b) or AEMO's application for reassessment under clauses 2.22A.12 or 2.22A.13 must, to the extent practicable, identify proposed costs that are associated with a specific project or where that is not practicable, one or more specific functions.

2.22A.4. If AEMO appoints a Delegate, then its proposal for, or application for reassessment of, its Allowable Revenue and Forecast Capital Expenditure must separately itemise the amount payable to the Delegate.

2.22A.5. The Economic Regulation Authority must take the following into account when determining AEMO's Allowable Revenue and Forecast Capital Expenditure or an application for reassessment to the Allowable Revenue or Forecast Capital Expenditure:

(a) the Allowable Revenue must be sufficient to cover the forward looking costs of performing AEMO's functions in accordance with the following principles:

i. recurring expenditure requirements and payments are recovered in the year of the expenditure; and

ii. capital expenditure is to be recovered through the depreciation and amortisation of the assets acquired by the capital expenditures in a manner that is consistent with generally accepted accounting principles;

(b) the Allowable Revenue and Forecast Capital Expenditure must include only costs which would be incurred by a prudent provider of the services provided by AEMO in performing its functions, acting efficiently, to achieve the lowest practicably sustainable cost of performing AEMO's functions, while effectively promoting the State Electricity Objective;

(c) where possible, the Economic Regulation Authority should benchmark the Allowable Revenue and Forecast Capital Expenditure against the costs of providing similar functions and/or projects in other jurisdictions;

(d) where costs incurred by AEMO relate to both the performance of functions in connection with the ESM Rules, and the performance of AEMO's other functions, the costs must be allocated on a fair and reasonable basis between:

i. costs recoverable as part of AEMO's Allowable Revenue and Forecast Capital Expenditure; and

ii. other costs not to be recovered under the ESM Rules; and

(e) any other matters the Economic Regulation Authority considers relevant to its determination.

2.22A.6. The Economic Regulation Authority may do any or all of the following in respect to AEMO's proposal under clauses 2.22A.2A(a) or 2.22A.2B(b):

(a) approve the costs of any project;

(b) approve the costs of AEMO performing its functions;

(c) if the Economic Regulation Authority considers that some costs do not meet the requirements of clause 2.22A.5, reject the costs fully or partially, or substitute those costs with costs the Economic Regulation Authority considers meets the requirements of clause 2.22A.5; and

(d) recommend to AEMO that some of the costs be considered in a subsequent Review Period or in accordance with clause 2.22A.14.

2.22A.7. Subject to clause 2.22A.7A, by 30 June each year, AEMO must publish on the WEM Website a budget for the costs AEMO will incur in performing its functions for the coming Financial Year (including, without limitation, the amount to be paid to a Delegate). AEMO must ensure that its budget is:

(a) consistent with the Allowable Revenue and Forecast Capital Expenditure determined by the Economic Regulation Authority for the relevant Review Period and any reassessment; and

(b) reported in accordance with the Regulatory Reporting Guidelines issued by the Economic Regulation Authority from time to time in accordance with clause 2.22A.9.

2.22A.7A. If the Economic Regulation Authority publishes a final determination under clauses 2.22A.2A(c) or 1.65.1(c) at any time after the date that is five Business Days before 30 June, then AEMO must publish the budget specified in clause 2.22A.7 within 10 Business Days after the Economic Regulation Authority publishes a final determination.

2.22A.8. By 31 October each year, AEMO must publish on the WEM Website a financial report showing AEMO's actual financial performance against its budget for the previous Financial Year (including, without limitation, the actual amount paid to a Delegate compared to the budgeted amount). The report must be in accordance with the Regulatory Reporting Guidelines issued by the Economic Regulation Authority from time to time in accordance with clause 2.22A.9.

2.22A.9. The Economic Regulation Authority must issue guidelines, following public consultation, in relation to this section 2.22A, including:

(a) proposal guidelines, which must consider how future projects that carry a risk of not proceeding or for which the associated costs are not able to be quantified may be dealt with, and provide clarity and guidance to AEMO and Market Participants regarding the level of detail about projects, functions and costs expected in AEMO's proposal; and

(b) regulatory reporting guidelines, which:

i. must contain annual reporting obligations and provide clarity and guidance to AEMO and Market Participants about the scope of reporting and how AEMO should annually report to the Economic Regulation Authority and Market Participants; and

ii. are aimed at providing transparency and accountability in relation to AEMO's functions and Allowable Revenue and Forecast Capital Expenditure.

2.22A.10. The Economic Regulation Authority may amend guidelines issued under clause 2.22A.9 at any time, following public consultation which allows a reasonable opportunity for relevant stakeholders to present their views.

2.22A.11. Where the revenue earned for the functions performed by AEMO via Market Fees in the previous Financial Year, is greater than or less than AEMO's expenditure for that Financial Year, AEMO's current year's budget must take into account any difference between AEMO's Market Fees revenue and AEMO's expenditure in the previous Financial Year by:

(a) decreasing the budgeted revenue by the amount of any revenue surplus; or

(b) increasing the budgeted revenue by the amount of any revenue shortfall.

2.22A.12. Where, taking into account any adjustment under clause 2.22A.11, AEMO's budget is likely to result in revenue recovery, over the relevant Review Period, being at least the lower of 10% of the Allowable Revenue or $10 million, greater than the Allowable Revenue determined by the Economic Regulation Authority, AEMO must apply to the Economic Regulation Authority to reassess the Allowable Revenue.

2.22A.13. AEMO must apply to the Economic Regulation Authority to determine the adjusted Forecast Capital Expenditure for the current Review Period if the capital expenditure, over the relevant Review Period, is likely to be at least the lower of 10% of the Forecast Capital Expenditure or $10 million, greater than the Forecast Capital Expenditure determined by the Economic Regulation Authority.

2.22A.13A. If AEMO underspends on the Allowable Revenue and/or Forecast Capital Expenditure determined by the Economic Regulation Authority in a Review Period, then, for the next Review Period, the $10 million threshold in clause 2.22A.13 is to be increased to the amount equal to 30 percent of the underspend plus $10 million.

2.22A.14. AEMO may apply to the Economic Regulation Authority, at any time during a Review Period, for additional costs to be considered by the Economic Regulation Authority as part of the Allowable Revenue and Forecast Capital Expenditure for that Review Period:

(a) for the Allowable Revenue:

i. costs previously rejected by the Economic Regulation Authority pursuant to clause 2.22A.6;

ii. new costs for new projects or new functions conferred on AEMO since AEMO's proposal for its Allowable Revenue for the current Review Period was submitted; and

iii. costs which were not able to be estimated with reasonable confidence at the time the Allowable Revenue for the current Review Period was submitted; and

(b) for the Forecast Capital Expenditure:

i. costs previously rejected by the Economic Regulation Authority pursuant to clause 2.22A.5;

ii. new costs for new projects or new functions conferred on AEMO since AEMO's proposal for its Forecast Capital Expenditure for the current Review Period was submitted; and

iii. costs which were not able to be estimated with reasonable confidence at the time of the Forecast Capital Expenditure for the current Review Period was submitted.

2.22A.15. The Economic Regulation Authority may request information from AEMO in relation to the performance of its functions under this section 2.22A. AEMO must provide the information to the Economic Regulation Authority by the time specified in a request, which must be reasonable.

2.22A.16. AEMO must make an application under clauses 2.22A.12 or 2.22A.14(a) by 31 March for the Economic Regulation Authority to make a determination before the commencement of the Financial Year to which it relates.

2.22A.17. The Economic Regulation Authority may amend a determination under clauses 2.22A.2A(c) or 2.22A.2B(d) if AEMO makes a reassessment application under clauses 2.22A.12, 2.22A.13 or 2.22A.14 and the Economic Regulation Authority:

(a) must take the matters referred to in clause 2.22A.5 into account in determining any reassessment;

(b) may consider as part of its amended determination any earlier determined costs where the Economic Regulation Authority reasonably considers it necessary to review those earlier determined costs as part of the reassessment;

(c) is not required to reassess earlier determined costs in making its redetermination of the Allowable Revenue or Forecast Capital Expenditure; and

(d) must complete such public consultation as the Economic Regulation Authority considers appropriate in the circumstances.

2.23. [Blank]

2.24. Determination of Market Fees

2.24.1. The Market Fees charged by AEMO are:

(a) Market Participant Market Fees, Market Participant Coordinator Fees and Market Participant Regulator Fees the rates of which are determined in accordance with this section 2.24;

(b) Application Fees in accordance with section 2.33 and clauses 2.31.2, 4.9.3(c), 4.26.2CC and 4.28.9B; and

(c) a Reassessment Fee in accordance with clause 4.11.11.

2.24.2. Before 30 June each year, AEMO must determine and publish the level of:

(a) the Market Participant Market Fee rate (unless clause 2.24.2C applies);

(b) the Market Participant Coordinator Fee rate;

(c) the Market Participant Regulator Fee rate;

(d) each Application Fee; and

(e) the Reassessment Fee,

to apply over the year starting 1 July in accordance with:

(f) AEMO's budget published under clause 2.22A.7;

(g) information provided by the Economic Regulation Authority to AEMO under clause 2.24.6 (if any); and

(h) information provided by the Coordinator to AEMO under clause 2.24.6A (if any).

Where the Economic Regulation Authority has not provided AEMO with the information under, and by the time specified in clause 2.24.6, AEMO must determine and publish the expected level of Market Participant Regulator Fee rate

based on the most recent information provided to AEMO by the Economic Regulation Authority under clause 2.24.6. Where the Coordinator has not provided AEMO with the information under, and by the time specified in, clause 2.24.6A, AEMO must determine and publish the expected level of Market Participant Coordinator Fee rate based on the most recent information provided to AEMO by the Coordinator under clause 2.24.6A.

2.24.2A. AEMO must determine and publish a level of revised Market Participant Coordinator Fee rate or Market Participant Regulator Fee rate (as applicable), within five Business Days of:

(a) receiving the information under clause 2.24.6A from the Coordinator after the timeframe specified in that clause; or

(b) receiving the information under clause 2.24.6 from the Economic Regulation Authority after the timeframe specified in that clause.

2.24.2B. A revised Market Participant Coordinator Fee rate and Market Participant Regulator Fee rate will supersede any expected Market Participant Coordinator Fee rate and Market Participant Regulator Fee rate and are recoverable from Market Participants in arrears with effect from the start of the Financial Year to which they apply.

2.24.2C. If the Economic Regulation Authority publishes a final determination under clauses 2.22A.2A(c) or 1.65.1(c) at any time after the date that is five Business Days before 30 June, then AEMO must determine and publish the level of Market Participant Market Fee rate within 10 Business Days after the Economic Regulation Authority publishes its final determination.

2.24.3. At the same time as AEMO publishes a level of Market Participant Market Fee rate, Market Participant Coordinator Fee rate or Market Participant Regulator Fee rate (as applicable), AEMO must also publish an estimate of the total amount of revenue to be earned from:

(a) Market Participant Market Fees collected, where the amount is equal to the relevant costs in AEMO's budget published in accordance with clauses 2.22A.7 or 2.22A.7A;

(b) Market Participant Coordinator Fees collected for:

i. the Coordinator's functions under these ESM Rules;

ii. the costs associated with the remuneration and other expenses for the independent Chair of the Market Advisory Committee; and

iii. in the Coordinator’s discretion, costs associated with the remuneration and other expenses of the representatives of small-use consumers on the Market Advisory Committee,

where the amount to be earned for those services is equivalent to the costs identified by the Coordinator as costs incurred in the performance of the Coordinator's functions under these ESM Rules or the ESM Regulations, where the amount must be consistent with the relevant amount notified to AEMO in accordance with clause 2.24.6A; and

(c) Market Participant Regulator Fees collected for the Economic Regulation Authority's monitoring, compliance, enforcement and regulation services where the amount must be consistent with the relevant amount notified to AEMO in accordance with clause 2.24.6.

2.24.4. The Market Participant Market Fee rate, Market Participant Coordinator Fee rate and Market Participant Regulator Fee rate should be set at a level that AEMO estimates will earn revenue equal to the relevant estimate of revenue under clause 2.24.3.

2.24.5. The Economic Regulation Authority may recover a portion of its budget determined by the Minister responsible for the Economic Regulation Authority which corresponds to the costs of the Economic Regulation Authority in undertaking its Wholesale Electricity Market related functions and other functions under these ESM Rules and the ESM Regulations from the collection of Market Participant Regulator Fees under these ESM Rules. The Economic Regulation Authority must identify in its budget the proportion of its costs that relate to the performance of its Wholesale Electricity Market related functions and its other functions.

2.24.5A. Where the revenue earned via Market Participant Regulator Fees in the previous Financial Year is greater than or less than the Economic Regulation Authority expenditure related to the functions described in clause 2.24.5 for that Financial Year, the current year's budget must take this into account by decreasing the budgeted revenue by the amount of the surplus or adding to the budgeted revenue the amount of any shortfall, as the case may be.

2.24.5B. The Coordinator may recover a portion of her or his budget determined by the Minister responsible for the Coordinator which corresponds to the costs of the Coordinator in undertaking her or his functions under these ESM Rules (including costs referred to in clause 2.24.3(b)) from the collection of Market Participant Coordinator Fees under these ESM Rules.

2.24.5C. The Coordinator must:

(a) identify in her or his budget the proportion of her or his costs that relate to the performance of her or his functions under these ESM Rules; and

(b) subject to clause 2.24.5E, publish on the Coordinator's Website the proportion of costs corresponding to the functions described in clause 2.2D.1.

2.24.5D. Where the revenue earned via Market Participant Coordinator Fees in the previous Financial Year is greater than or less than the Coordinator expenditure related to the functions described in clause 2.24.5B for that Financial Year, the current year's budget must take this into account by decreasing the budgeted revenue by the amount of the surplus or adding to the budgeted revenue the amount of any shortfall, as the case may be.

2.24.5E For the purposes of clause 2.24.5C(b), the Coordinator need not separately publish the proportion of costs corresponding to the function described in clause 2.2D.1(d) and may consolidate the costs corresponding to the following groups of functions:

(a) the functions described clauses 2.2D.1(a) and 2.2D.1(b); and

(b) the functions described in clauses 2.2D.1(c), 2.2D.1(f) to 2.2D.1(i) inclusive, and 2.2D.1(j).

2.24.6. By the date which is five Business Days prior to 30 June each year, the Economic Regulation Authority must notify AEMO of the dollar amount that the Economic Regulation Authority may recover under clause 2.24.5.

2.24.6A. By the date which is five Business Days prior to 30 June each year, the Coordinator must notify AEMO of the dollar amount that the Coordinator may recover under clause 2.24.5B.

2.24.7. The level of each Application Fee:

(a) must reflect the estimated average costs to AEMO of processing that type of application;

(b) must be consistent with the Allowable Revenue approved by the Economic Regulation Authority; and

(c) may be different for different classes of Rule Participant and different classes of facility.

2.25. Payment of Market Fees

2.25.1. AEMO must charge a Market Participant the relevant payment amount for Market Participant Market Fees, Market Participant Coordinator Fees and Market Participant Regulator Fees for a Trading Week in accordance with section 9.12.

2.25.1A. AEMO is an agent for the collection of Market Participant Coordinator Fees and Market Participant Regulator Fees payable by Market Participants to AEMO.

2.25.1B. The Economic Regulation Authority must, if requested by AEMO, do all things reasonably necessary (including entering into any agreements) to enable AEMO to give effect to clause 2.25.1A.

2.25.1C. The Coordinator must, if requested by AEMO, use reasonable endeavours to cooperate with AEMO, as AEMO endeavours to give effect to clause 2.25.1A.

2.25.2. Each Market Participant must pay the relevant payment amount for Market Participant Market Fees, Market Participant Coordinator Fees and Market Participant Regulator Fees in accordance with Chapter 9.

2.25.3. Following receipt of a payment contemplated by clause 2.25.2, AEMO must:

(a) transfer to the fund established under clause 9.18.9 the payment received as calculated in clause 9.13.2;

(b) pay the Economic Regulation Authority the payment received as calculated in clause 9.13.3; and

(c) pay the Coordinator the payment received as calculated in clause 9.13.4.

2.25.4. [Blank]

2.25.5. Rule Participants must pay the relevant Application Fee upon submitting an application form in accordance with clause 2.31.2, or in accordance with clause 4.9.3, as applicable.

Market Price Limits, Reviews and Loss Factors

2.26. Economic Regulation Authority Reviews of Market Price Limits

2.26.1. The Economic Regulation Authority must, in accordance with this section 2.26, review the value of the Energy Offer Price Ceiling at least once every three years. For the avoidance of doubt, the Economic Regulation Authority must complete a subsequent review under this clause 2.26.1 and publish its final report no later than three years from the date of publication of the final report from the preceding review.

2.26.2. In conducting a review pursuant to clause 2.26.1, the Economic Regulation Authority must calculate the Energy Offer Price Ceiling by:

(a) applying the following formula:

(1 + Risk Margin) × (Variable O&M +(Heat Rate × Fuel Cost))/Loss Factor

where:

i. Risk Margin is a measure of uncertainty in the assessment of the mean short run average cost for the highest cost Facility in the SWIS, expressed as a fraction;

ii. Variable O&M is the mean variable operating and maintenance cost for the highest cost Facility in the SWIS, expressed in $/MWh, and includes, but is not limited to, start-up related costs;

iii. Heat Rate is the mean heat rate at the minimum stable loading level, based on the Economic Regulation Authority's assessment of available information, for the highest cost Facility in the SWIS, expressed in GJ/MWh;

iv. Fuel Cost is the mean unit fixed and variable fuel cost for the highest cost Facility in the SWIS, expressed in $/GJ; and

v. Loss Factor is the marginal loss factor for the highest cost Facility in the SWIS, relative to the Reference Node, determined in accordance with section 2.27,

where the Economic Regulation Authority must determine the values for each factor described in clauses 2.26.2(a)(i) to 2.26.2(a)(v) consistently with the Offer Construction Guideline as it applies to the highest cost generating Facility in the SWIS;

(b) rounding up the value in clause 2.26.2(a) to the nearest multiple of $100/MWh; and

(c) determining whether an indexation process should apply to the Energy Offer Price Ceiling to reflect movements in input costs and, if so, determining the formula for the indexation calculation and the frequency at which indexation will apply.

Review of FCESS Offer Price Ceilings

2.26.2A. The Economic Regulation Authority must, in accordance with this section 2.26, review the value of the Contingency Reserve Raise Offer Price Ceiling, Contingency Reserve Lower Offer Price Ceiling, RoCoF Control Service Offer Price Ceiling, Regulation Raise Offer Price Ceiling and Regulation Lower Offer Price Ceiling at least once every three years. For the avoidance of doubt, the Economic Regulation Authority must complete a subsequent review under this clause 2.26.2A of an FCESS Offer Price Ceiling and publish its final report no later than three years from the date of publication of the final report from the preceding review of that FCESS Offer Price Ceiling.

2.26.2B. In conducting a review pursuant to clause 2.26.2A, the Economic Regulation Authority must determine the value of each FCESS Offer Price Ceiling by:

(a) estimating, consistently with the Offer Construction Guideline as it applies to the highest cost Facility providing the relevant Frequency Co-optimised Essential System Service in the SWIS, the variable costs of providing the Frequency Co-optimised Essential System Service that are not compensated through other market mechanisms in the Wholesale Electricity Market;

(b) rounding up its determination of the value of the FCESS Offer Price Ceiling to the nearest multiple of $50 per MW per hour or $50 per MWs per hour, as applicable; and

(c) determining whether an indexation process should apply to the FCESS Offer Price Ceiling to reflect movements in input costs and, if so, determining the formula for the indexation calculation and the frequency at which indexation will apply.

Review of Energy Offer Price Floor

2.26.2C. The Economic Regulation Authority must, in accordance with this section 2.26, review the appropriateness of the value of the Energy Offer Price Floor at least once every three years. For the avoidance of doubt, the Economic Regulation Authority must complete a subsequent review under this clause 2.26.2C and publish its final report no later than three years from the date of publication of the final report from the preceding review.

2.26.2D. In conducting a review required by clause 2.26.2C, the Economic Regulation Authority must apply the following principles:

(a) the Economic Regulation Authority must only revise the value of the Energy Offer Price Floor if it determines that the current value of the Energy Offer Price Floor is not appropriate under clause 2.26.2E;

(b) if the Economic Regulation Authority determines that the current Energy Offer Price Floor is not appropriate under clause 2.26.2E, the revised value for the Energy Offer Price Floor must:

i. allow for the Real-Time Market for energy to clear without the Reference Trading Price being equal to the Energy Offer Price Floor in most circumstances; and

ii. subject to clause 2.26.2D(b)(i), limit the exposure of Market Participants to Reference Trading Prices that are reasonably likely to materially adversely affect the financial viability of a prudent Market Participant.

2.26.2E. In determining whether the current value of the Energy Offer Price Floor is not appropriate for the purposes of clause 2.26.2D(a), the Economic Regulation Authority must consider, without limitation, if, since the previous review of the value of the Energy Offer Price Floor under this section 2.26:

(a) the Real-Time Market for energy has cleared at the Energy Offer Price Floor in one or more Dispatch Intervals due to, in the Economic Regulation Authority's reasonable opinion, the Energy Offer Price Floor being too high; and

(b) there has been a change in the generation fleet in the SWIS that, in the Economic Regulation Authority's reasonable opinion, is likely to result in:

i. the current Energy Offer Price Floor being materially lower than necessary to achieve the criterion in clause 2.26.2D(b)(i), including, but not limited to, an upgrade or the retirement of a Facility with high cycling costs; or

ii. the current Energy Offer Price Floor being too high to achieve the criterion in clause 2.26.2D(b)(i), including, but not limited to, the increase of cycling costs due to deterioration or ageing of a Facility.

2.26.2F. When reviewing the Energy Offer Price Floor in accordance with this section 2.26, if the Economic Regulation Authority determines under clause 2.26.2E that the Energy Offer Price Floor is not appropriate, the Economic Regulation Authority must:

(a) determine for credible scenarios of low demand, the price at which the operator of the Facility with the highest cycling costs per MW in the SWIS in the scenario would, acting reasonably, decommit the Facility should the Reference Trading Price equal or fall below that price for a single Trading Interval;

(b) revise the Energy Offer Price Floor to be the highest price determined under the scenarios in clause 2.26.2F(a) that is lower than 95 percent of all of the prices determined under clause 2.26.2F(a); and

(c) determine whether an indexation process should apply to the Energy Offer Price Floor to reflect movements in input costs and, if so, determine the formula for the indexation calculation and the frequency at which indexation will apply.

2.26.2G. When determining the credible scenarios of low demand for the purpose of clause 2.26.2F(a), the Economic Regulation Authority may use historic scenarios but must also account for any changes expected in the SWIS that would take effect prior to the time that the Energy Offer Price Floor would apply and that are likely to have an effect on the Reference Trading Price. The changes include, but are not limited to:

(a) expected changes in system demand;

(b) any expected entrance of a new Facility that will participate in the Real-Time Market;

(c) expected changes to an existing Facility; and

(d) any expected permanent exit of a Facility from the Real-Time Market.

2.26.2H. When determining the cycling costs of a Facility under clause 2.26.2F(a), the Economic Regulation Authority must consider:

(a) the factors that a Market Participant acting reasonably would consider in making a decommitment decision for the Facility with the highest cycling

costs in the SWIS, assuming that all energy sent out by the Facility is settled at the Reference Trading Price, including:

i. the cost to decommit and recommit within the timeframe specified under clause 2.26.2H(a)(iii), including start-related fuel costs and variable operating and maintenance costs of the Facility;

ii. the minimum stable level of operation of the Facility;

iii. the minimum time the Facility must remain out of service once decommitted before recommitment is possible; and

iv. any expected losses or gains, opportunity costs and cost savings that the Market Participant would incur as a result of decommitment for the duration of the minimum time the Facility must remain out of service before recommitment is possible; and

(b) any other matters that the Economic Regulation Authority considers relevant.

2.26.2I. When determining the cycling costs of a Facility under clause 2.26.2F(a), the Economic Regulation Authority must have regard to the State Electricity Objective and must, as far as practicable, use information about the costs the relevant Facility would incur as provided by the relevant Market Participant but may use estimates where the Economic Regulation Authority considers it to be reasonable.

2.26.2J. A Market Participant may, by the time specified for the close of submissions under clause 2.26.2L(b), provide evidence to the Economic Regulation Authority of the costs that a Facility incurs when decommitting for the purpose of the ESM Rules and which the Economic Regulation Authority must consider in determining the appropriateness of the value of the Energy Offer Price Floor under clause 2.26.2C.

2.26.2K. Where a Market Participant provides the Economic Regulation Authority with satisfactory evidence under clause 2.26.2J, the Economic Regulation Authority must consider the information when determining the appropriateness of the Energy Offer Price Floor as far as the information affects the Economic Regulation Authority's reasonable estimate of any costs that a prudent Market Participant would incur when decommitting its Facility in the scenarios under clause 2.26.2F(a).

Conducting a Review of a Market Price Limit

2.26.2L. In conducting a review of a Market Price Limit under clauses 2.26.1, 2.26.2A or 2.26.2C, the Economic Regulation Authority must publish on its website:

(a) a draft report and a request for submissions;

(b) the closing date for submissions, which must be no earlier than four weeks after the date of publication of the draft report; and

(c) a copy of all submissions received provided that if a submission contains information that the Economic Regulation Authority reasonably considers to be confidential, the Economic Regulation Authority may redact that information to the extent it considers appropriate.

2.26.2M. Following the closing date for submissions on the draft report published under clause 2.26.2L, the Economic Regulation Authority must publish a final report on its website containing:

(a) the issues identified by the Economic Regulation Authority;

(b) the assumptions made by the Economic Regulation Authority in undertaking the review;

(c) the Economic Regulation Authority's determination of the relevant Market Price Limit, which is to include, where applicable:

i. the revised value of the relevant Market Price Limit;

ii. the Trading Day from which the revised value of the relevant Market Price Limit will take effect, which must be at least five Business Days after the date the final report is published; and

iii. any indexation process in the value of the relevant Market Price Limit and the associated times each indexed value will apply from;

(d) how the Economic Regulation Authority determined the revised value of the relevant Market Price Limit, including any analysis and calculation parameters used in its determination;

(e) a summary of any submissions received by the Economic Regulation Authority on the draft report published under clause 2.26.2L that were received within the time specified, and any late submissions the Economic Regulation Authority has decided, in its discretion, to take into account;

(f) the Economic Regulation Authority's responses to the issues raised in those submissions; and

(g) any other matters the Economic Regulation Authority considers relevant to the review.

2.26.2N. Where a Rule Participant considers there has been a material change in circumstances since the Economic Regulation Authority's most recent review of a Market Price Limit pursuant to clauses 2.26.1, 2.26.2A or 2.26.2C, as applicable, the Rule Participant may, subject to clause 2.26.2O(a), notify the Economic Regulation Authority that it considers the Market Price Limit is no longer appropriate in accordance with clause 2.26.2O.

2.26.2NA. If a Rule Participant considers there has been a material change in market circumstances since the Economic Regulation Authority's most recent review of a Market Price Limit pursuant to clauses 2.26.1, 2.26.2A or 2.26.2C, as applicable,

the Rule Participant may, subject to clause 2.26.2O(a), notify the Economic Regulation Authority that it considers that for the Market Price Limit, the determination to apply or not apply indexation to the Market Price Limit is no longer appropriate in accordance with clause 2.26.2O.

2.26.2O. A notice by a Rule Participant under clauses 2.26.2N or 2.26.2NA must:

(a) be given no earlier than six months after completion of the most recent review of the relevant Market Price Limit by the Economic Regulation Authority under clauses 2.26.1, 2.26.2A or 2.26.2C, as applicable; and

(b) set out the Rule Participant's reasoning, with any supporting analysis, as to why it considers there has been:

i. a material change in circumstances such that the relevant Market Price Limit is no longer appropriate, having regard to the relevant matters in this section 2.26; or

ii. a material change in market circumstances such that the determination to apply or not apply indexation to a Market Price Limit is no longer appropriate.

2.26.2P. Following receipt of a notice under clause 2.26.2N, the Economic Regulation Authority must, as soon as practicable:

(a) after considering the information in the notice, determine whether it considers it is appropriate to bring forward the next required review of the relevant Market Price Limit under clauses 2.26.1, 2.26.2A or 2.26.2C, as applicable;

(b) in making its determination under clause 2.26.2P(a), have regard to the State Electricity Objective and any benefits of undertaking an earlier review; and

(c) publish its response to the notice on its website, which is to include details of whether a review of the relevant Market Price Limit will be progressed, the proposed timing for the review, and the reasons for its decision.

2.26.2Q. If the Economic Regulation Authority decides to bring forward a review of a Market Price Limit pursuant to clause 2.26.2P(a), the Economic Regulation Authority must use its best endeavours to conduct the review in accordance with the proposed timing published in its response to the relevant notice in accordance with clause 2.26.2P(c).

2.26.2R. In conducting a review of a Market Price Limit under clauses 2.26.1, 2.26.2A or 2.26.2C, the Economic Regulation Authority may request information from a Market Participant.

2.26.2S. An information request by the Economic Regulation Authority under clause 2.26.2R must specify the time by which the information specified in the request

must be provided by the Market Participant, which must be at least 10 Business Days after the date of the request and be reasonable having regard to the nature of the information requested.

2.26.2T. Following receipt of a request under clause 2.26.2R, the Market Participant must provide the information specified in the request by the time specified in the request.

2.26.2U. Where the Economic Regulation Authority determines under clauses 2.26.2(c), 2.26.2B(c) or 2.26.2F(c) that indexation in the value of a Market Price Limit will apply, the Economic Regulation Authority must:

(a) calculate each indexed value for the Market Price Limit in accordance with the process and schedule determined under clause 2.26.2M(c)(iii); and

(b) for each indexed value calculated under clause 2.26.2U(a):

i. publish on its website the indexed value and the Trading Day from which the indexed value will take effect; and

ii. notify AEMO of the publication of the indexed value,

at least five Business Days before the Trading Day from which the indexed value will take effect.

2.26.2V. A revised value for a Market Price Limit replaces the previous value after the Economic Regulation Authority has published its final report in accordance with clause 2.26.2M, with effect from the Trading Day specified in the final report or, in the case of an indexed value, the Trading Day published by the Economic Regulation Authority on its website in accordance with clause 2.26.2U.

2.26.2W. AEMO must publish on the WEM Website each revised value of a Market Price Limit and the Trading Day from which the revised value will take effect within five Business Days after the Economic Regulation Authority publishes the relevant information under clauses 2.26.2M(c) or 2.26.2U(b).

2.27. Determination of Loss Factors

2.27.1. Network Operators must, in accordance with this section 2.27, calculate and provide to AEMO Loss Factors for:

(a) each Measurement Point in their Networks at which any of the following is connected:

i. a Scheduled Facility;

iA. a Semi-Scheduled Facility;

ii. a Non-Scheduled Facility; or

iii. [Blank]

iv. [Blank]

v. a Non-Dispatchable Load equipped with an interval meter; and

(b) in the case of Western Power, the Notional Wholesale Meter.

2.27.1A. If a Facility is electrically connected behind two or more Measurement Points, the Network Operator must determine a single Loss Factor applicable to the Facility under clause 2.27.1.

2.27.2. A Market Participant may request, during the process of obtaining a relevant Arrangement for Access, that the relevant Network Operator determine and provide to AEMO Loss Factors to apply to a Facility where there are no Loss Factors applying to the Measurement Point at which the Facility will be connected.

2.27.3. Loss Factors must reflect transmission and distribution losses and each Loss Factor must be expressed as the product of a Transmission Loss Factor and a Distribution Loss Factor.

2.27.4. Subject to clauses 2.27.1A and 2.27.5(d), for each Network Operator AEMO must, in consultation with that Network Operator, develop a classification system to assign each of the Measurement Points identified under clause 2.27.1(a) to a Transmission Loss Factor Class and a Distribution Loss Factor Class, where:

(a) the assignment of a Measurement Point to a Loss Factor Class is based on characteristics indicative of the expected transmission or distribution system losses (as applicable) for the Measurement Point;

(b) each Measurement Point in a Loss Factor Class is assigned the same Transmission Loss Factor or Distribution Loss Factor (as applicable); and

(c) Measurement Points on the transmission system are assigned to a Distribution Loss Factor Class with a Distribution Loss Factor equal to one.

2.27.5. In calculating Loss Factors, Network Operators must apply the following principles:

(a) Transmission Loss Factors must notionally represent the marginal transmission system losses for a Measurement Point relative to the Reference Node, averaged over all Trading Intervals in a year, weighted by the absolute value of the net demand at that Measurement Point during the Trading Interval;

(b) Distribution Loss Factors must notionally represent the average distribution system losses for a Measurement Point over a year;

(c) Loss Factors must be calculated using:

i. generation and load meter data from the preceding 12 months; or

ii. for a new Facility, any other relevant data provided to the Network Operator by the Market Participant and as agreed with the Network Operator and AEMO; and

iii. for Transmission Loss Factors, an appropriate network load flow software package;

(d) a specific Loss Factor must be calculated for each:

i. Scheduled Facility;

iA. Semi-Scheduled Facility;

ii. Non-Scheduled Facility; and

iii. [Blank]

iv. [Blank]

v. Non-Dispatchable Load above 7000 kVA peak consumption;

(e) Western Power must assign the Notional Wholesale Meter to:

i. a Transmission Loss Factor Class that represents system wide average marginal losses over Western Power's transmission system; and

ii. a Distribution Loss Factor Class that represents the average losses incurred over Western Power's distribution system by Non-Dispatchable Loads not equipped with an interval meter; and

(f) the Transmission Loss Factors calculated for each Transmission Loss Factor Class and the Distribution Loss Factors calculated for each Distribution Loss Factor Class are static, and apply to each Measurement Point in the relevant Loss Factor Class until the time published by AEMO under clause 2.27.8 for the application of an updated Transmission Loss Factor or Distribution Loss Factor to that Loss Factor Class.

2.27.5A. For each Interruptible Load, AEMO must use a Loss Factor of 1.

2.27.6. Each year by 1 June each Network Operator must, in accordance with the WEM Procedure specified in clause 2.27.17, recalculate the Loss Factors for its Measurement Points and provide AEMO with updated Transmission Loss Factors and Distribution Loss Factors (as applicable) for each Loss Factor Class in the Network Operator's classification system.

2.27.7. AEMO must publish the Transmission Loss Factors and Distribution Loss Factors provided by a Network Operator in accordance with clause 2.27.6 within two Business Days after receiving them.

2.27.8. When Transmission Loss Factors and Distribution Loss Factors are published in accordance with clause 2.27.7 or where one or more Transmission Loss Factors or Distribution Loss Factors are changed in accordance with clauses 2.27.15(e) or 2.27.16 AEMO must publish the time from which the new Transmission Loss Factors or Distribution Loss Factors will apply, where this must be from the commencement of a Trading Day.

2.27.9. In setting the time from which a Transmission Loss Factor or Distribution Loss Factor will apply in accordance with clause 2.27.8 AEMO must allow sufficient time for Rule Participants to identify and update any submission or forecast data that is dependent on Loss Factors.

2.27.10. A Network Operator must develop new Loss Factor Classes if required to implement the classification system prescribed by AEMO for that Network Operator. If a Network Operator develops a new Loss Factor Class then it must:

(a) calculate the initial Transmission Loss Factor or Distribution Loss Factor (as applicable) for the new Loss Factor Class in accordance with the WEM Procedure specified in clause 2.27.17; and

(b) provide to AEMO details of the new Loss Factor Class and its initial Transmission Loss Factor or Distribution Loss Factor as soon as practicable but before a Measurement Point is assigned to the new Loss Factor Class.

2.27.11. AEMO must publish a new Transmission Loss Factor or Distribution Loss Factor provided by a Network Operator in accordance with clause 2.27.10(b) within two Business Days after receiving it from the Network Operator.

2.27.12. A Network Operator must determine the Transmission Loss Factor Class and Distribution Loss Factor Class for each new Measurement Point in its Network identified under clause 2.27.1(a), in accordance with the classification system prescribed by AEMO for that Network Operator.

2.27.13. A Network Operator must re-determine the Loss Factor Classes for a Measurement Point in its Network identified under clause 2.27.1(a) if a change occurs to the Measurement Point that might alter its applicable Loss Factor Classes under the classification system prescribed by AEMO for that Network Operator.

2.27.14. When a Network Operator determines a Loss Factor Class for a Measurement Point under clause 2.27.12 or changes a Loss Factor Class for a Measurement Point under clause 2.27.13, the Network Operator must provide to both AEMO and the relevant Market Participant the new Loss Factor Class for the Measurement Point and the Trading Day from which it takes effect, as soon as practicable but before the information is required for use in calculations under the ESM Rules.

2.27.15. A Market Participant may apply to AEMO for a reassessment of any Transmission Loss Factor or Distribution Loss Factor applying to a Scheduled Facility, Semi-Scheduled Facility, Non-Scheduled Facility or Non-Dispatchable Load registered to that Market Participant. The following requirements apply to each application for reassessment:

(a) The Market Participant must apply for reassessment in accordance with the WEM Procedure specified in clause 2.27.17.

(b) AEMO must process an application for reassessment and where required conduct an audit of the relevant Loss Factor calculation in accordance with the WEM Procedure specified in clause 2.27.17.

(c) The relevant Network Operator must cooperate with an audit of the Loss Factor calculation conducted by AEMO under clause 2.27.15(b) by providing reasonable access to the data and calculations used in producing the Loss Factor.

(d) Where an audit reveals an error in the calculation of a Transmission Loss Factor or Distribution Loss Factor for a Loss Factor Class, AEMO must direct the Network Operator to recalculate the Transmission Loss Factor or Distribution Loss Factor, and may instruct the Network Operator to recalculate other Transmission Loss Factors or Distribution Loss Factors provided by that Network Operator.

(e) Where AEMO directs the Network Operator to recalculate a Transmission Loss Factor or Distribution Loss Factor for a Loss Factor Class, then the Network Operator must do so, and must provide the recalculated Transmission Loss Factor or Distribution Loss Factor to AEMO. The recalculated Transmission Loss Factor or Distribution Loss Factor is substituted for the value previously applied with effect from the time published by AEMO in accordance with clause 2.27.8.

(f) Where an audit reveals an error in the assignment of a Measurement Point to a Loss Factor Class, AEMO must direct the relevant Network Operator to correct the error and re-determine the Loss Factor Class for the Measurement Point in accordance with the classification system prescribed by AEMO for that Network Operator.

(g) Where AEMO directs a Network Operator to re-determine a Loss Factor Class for a Measurement Point, then the Network Operator must do so, and must as soon as reasonably practicable provide to AEMO and the relevant Market Participant the revised Loss Factor Class and the Trading Day from which it should apply.

(h) The costs of an audit conducted by AEMO in response to an application for reassessment, including any costs incurred by the Network Operator and any costs, not otherwise included in AEMO's budget, incurred by AEMO, are payable by the Market Participant who made the application for reassessment, unless the audit reveals:

i. an error of more than 0.0025 in the calculation of a Transmission Loss Factor or Distribution Loss Factor; or

ii. an incorrect assignment of a Measurement Point to a Loss Factor Class,

in which case all costs are payable by the relevant Network Operator.

2.27.16. Where a Network Operator fails to provide AEMO with a Transmission Loss Factor or Distribution Loss Factor in accordance with clause 2.27.6 or 2.27.15(d), AEMO must continue to use the equivalent Transmission Loss Factor or Distribution Loss Factor from the previous year until such time as the Network Operator has provided AEMO with the new Transmission Loss Factor or Distribution Loss Factor and that Transmission Loss Factor or Distribution Loss Factor has taken effect. The recalculated Transmission Loss Factor or Distribution Loss Factor is substituted for the value previously applied with effect from the time published by AEMO in accordance with clause 2.27.8.

2.27.17. Each Network Operator must document in a WEM Procedure the standards, methodologies, classification systems and procedures to be used in determining Loss Factors.

2.27.18. AEMO may at any time review the effectiveness of the processes used by a Network Operator for Loss Factor calculation in meeting the State Electricity Objective.

2.27.19. AEMO may request, and a Network Operator must provide, any information relating to the methodologies, models, software, data sources and internal procedures used by the Network Operator for Loss Factor calculation that AEMO considers relevant to a review conducted under clause 2.27.18.

Network Congestion and Constraint Equations

2.27A. Limit Advice and Constraint Equations

2.27A.1. A Network Operator must, in accordance with this section 2.27A, provide Limit Advice in respect to its Network to AEMO.

2.27A.2. Information to be provided to AEMO by a Network Operator in respect to limitations of, or relating to, its Network that gives rise to a Network Constraint ("**Limit Advice**") includes:

(a) Limit Equations in respect of Network Limits provided in accordance with this section 2.27A or section 4.4B, excluding Limit Equations for Frequency Co-optimised Essential System Services or, if, in respect of a particular Network element, a mathematical expression is not appropriate, the Network Limits for that particular Network element;

(b) Limit Advice Inputs; and

(c) supporting information and data specified in the WEM Procedure referred to in clause 2.27A.10(a).

2.27A.3. A Network Operator must provide Limit Advice to AEMO in the form and by the dates and times specified in:

(a) for RCM Limit Advice, section 4.4B and the WEM Procedure referred to in clause 2.27A.10(a); and

(b) for all other Limit Advice, the WEM Procedure referred to in clause 2.27A.10(a).

2.27A.4. AEMO may, if it reasonably considers it is required to enable it to carry out its obligations specified in clause 2.27A.7, request:

(a) clarification or further information regarding any aspect of information provided under clause 2.27A.2 from the Network Operator who provided it to AEMO; and

(b) additional Limit Advice from a Network Operator,

and each Network Operator must comply with any such request in accordance with WEM Procedures referred to in clauses 2.27A.10(a) and 2.27A.10(d).

2.27A.5. Any information provided by a Network Operator in response to a request by AEMO under clause 2.27A.4(a) is Limit Advice for the purpose of clause 2.27A.2.

2.27A.6. A Network Operator must, in respect of:

(a) RCM Limit Advice:

i. use its reasonable endeavours to ensure that all necessary RCM Limit Advice is complete, current and accurate at the time it is provided to AEMO;

ii. if it forms the view that any RCM Limit Advice is no longer complete, current or accurate prior to the latest date the RCM Limit Advice is required to be provided to AEMO under section 4.4B, promptly provide updated RCM Limit Advice to AEMO; and

iii. update Limit Advice required to be updated under clause 2.27A.6(a)(ii) in accordance with the WEM Procedure referred to in clause 2.27A.10(a).

(b) all other Limit Advice:

i. use its reasonable endeavours to ensure that all necessary Limit Advice is complete, current and accurate at the time it is provided to AEMO;

ii. promptly notify AEMO if it forms the view that any Limit Advice is no longer complete, current or accurate, including where Limit Advice is no longer required; and

iii. update Limit Advice in accordance with the WEM Procedure referred to in clause 2.27A.10(a).

2.27A.7. AEMO must:

(a) formulate Constraint Equations in accordance with the WEM Procedure referred to in clause 2.27A.10(b);

(aA) formulate RCM Constraint Equations in accordance with clause 4.4B.4;

(b) develop and maintain the Constraints Library in accordance with the WEM Procedure referred to in clause 2.27A.10(c);

(c) use its reasonable endeavours to ensure that:

i. RCM Constraint Equations are complete and accurate at the time the RCM Constraint Equation is formulated; and

ii. all necessary other Constraint Equations are complete, current and accurate; and

(d) update Constraint Equations, publish updates to the Constraints Library and notify Rule Participants of updates to the Constraints Library in accordance with the WEM Procedures referred to in clauses 2.27A.10(b) and 2.27A.10(c).

2.27A.8. A Constraint Equation that is updated by AEMO under clause 2.27A.7(d) is effective from the date and time determined by AEMO.

2.27A.9. The principles that must be taken into account by each Network Operator in developing Limit Advice, and by AEMO in formulating Constraint Equations, are:

(a) the State Electricity Objective; and

(b) good electricity industry practice.

2.27A.10. AEMO must document in a WEM Procedure:

(a) in respect of the information to be provided by a Network Operator to AEMO under clause 2.27A.2:

i. the information and data to be provided by each Network Operator to AEMO; and

ii. the processes to be followed for the provision of and, where applicable, updates to such information and any other information referred to in clause 2.27A.4, from each Network Operator to AEMO, including:

1. the format, form and manner in which such information must be provided; and

2. where these ESM Rules do not provide a timeframe for the provision of such information to AEMO, the reasonable times by which such information must be provided having regard to the scope and nature of the information to be provided;

(b) the processes to be followed by AEMO and the matters it must consider in formulating and, where applicable, updating Constraint Equations, (including RCM Constraint Equations), including:

i. the approach to be taken by AEMO in applying:

1. an Operating Margin; and

2. the principles described in clause 2.27A.9; and

ii. the conventions for assigning a unique identifier to Constraint Equations and Constraint Sets;

(bA) the processes it must follow in providing the information to Network Operators under clause 4.4B.2;

(c) the processes to be followed by AEMO in developing and updating the Constraints Library and notifying Market Participants of updates to the Constraints Library;

(cA) the processes to be followed and the methodology to be used by AEMO in determining Constraint Equation terms and coefficients for Network Constraints, including the methodology for determining whether the exclusion of a variable from a Fully Co-optimised Network Constraint Equation would have a material effect on Power System Security due to the size of its coefficient;

(cB) the processes to be followed and the methodology to be used by AEMO in selecting one or more Constraint Equations to represent a Network Constraint, including in respect of the location of terms on each side of the Constraint Equation;

(cC) the processes and timeframes to be followed by AEMO for creating new Constraint Equations and Constraint Sets in response to a Non-Credible Contingency Event;

(cD) wherever a Network Limit gives rise to a Network Constraint, the supporting information and data a Network Operator must provide AEMO; and

(d) any other processes or procedures relating to Constraints or Network congestion that AEMO considers are reasonably required to enable it to carry out its functions under the ESM Rules.

2.27A.11. Each Network Operator must document in a WEM Procedure:

(a) the processes to be followed by the Network Operator and the matters it must consider in developing and updating Limit Advice, including the approach to be taken by the Network Operator in applying:

i. a Limit Margin; and

ii. the principles described in clause 2.27A.9; and

(b) the processes to be followed by a Network Operator for:

i. estimating the configuration and Thermal Network Limits of its Network in accordance with clause 4.4B.3; and

ii. allocating the value referred to in clause 4.4B.5(a) for each Electrical Location in accordance with clause 4.4B.5(b).

2.27B. Congestion Information Resource

2.27B.1. The objective of the Congestion Information Resource is to provide information in a cost-effective and timely manner to Rule Participants and other interested stakeholders to enable them to understand patterns of Network congestion and the market impact of Network congestion ("**Congestion Information Resource Objective**").

2.27B.2. To implement the Congestion Information Resource Objective, AEMO must:

(a) develop and maintain a Congestion Information Resource in accordance with this section 2.27B; and

(b) publish the Congestion Information Resource on the WEM Website.

2.27B.3. The Congestion Information Resource must include:

(a) the Constraints Library;

(b) as soon as practicable after a Dispatch Interval, each Constraint Equation that bound during the Dispatch Interval;

(c) each report described in clauses 2.27B.6 and 7.2.7(b);

(d) any other information that AEMO, in its reasonable opinion, considers relevant to implement the Congestion Information Resource Objective; and

(e) any other information specified in the WEM Procedure referred to in clause 2.27B.8.

2.27B.4. AEMO must keep up to date the information in the Congestion Information Resource (excluding, for the avoidance of doubt, an annual congestion report described in clause 2.27B.6):

(a) consistently with the Congestion Information Resource Objective; and

(b) in accordance with the processes and by the dates and times specified in the WEM Procedure referred to in clause 2.27B.8.

2.27B.5. Each Network Operator must do all things reasonably necessary to support AEMO in carrying out its obligations under this section 2.27B, including providing AEMO with any information or data that AEMO reasonably requires.

2.27B.6. AEMO must prepare and publish an annual congestion report by 31 March each year. A report must contain:

(a) information on Network congestion for at least the period of 12 months commencing at the start of the Trading Day which commences on 1 October and ending at the end of the Trading Day ending on 1 October of the following calendar year immediately preceding the due date of the report specified in this clause 2.27B.6, including:

i. analysis of the Constraint Equations that bound during a Dispatch Interval, including the duration and frequency; and

ii. assessment of the market impact of Network congestion;

(b) information that is known to AEMO at the time of preparing the annual congestion report in accordance with this section 2.27B that is likely to affect, or could result in, Network congestion including:

i. new connections to the SWIS;

iA. new Constrained Access Loads;

ii. augmentations of the SWIS;

iii. decommissioning of a generating system, Load or any Network elements; and

iv. changes to Network elements;

(c) any other information that AEMO, in its reasonable opinion, considers relevant to implement the Congestion Information Resource Objective; and

(d) any other information or matters specified in the WEM Procedure referred to in clause 2.27B.8.

2.27B.7. In preparing a report described in clause 2.27B.6, AEMO must consult with each Network Operator.

2.27B.8. AEMO must document in a WEM Procedure:

(a) the information to be published in the Congestion Information Resource;

(b) the processes to be followed by AEMO in maintaining, publishing and updating the information in the Congestion Information Resource;

(c) the processes to be followed by AEMO in preparing a report described in clause 2.27B.6; and

(d) the information that AEMO may reasonably require a Network Operator or other Rule Participant to provide to AEMO to assist it with carrying out its obligations under this section 2.27B, and:

i. the format, form and manner in which any such information must be provided; and

ii. the date and time by which any such information must be provided.

2.27C. Economic Regulation Authority Review of Limit Advice and Constraint Equations

2.27C.1. The Economic Regulation Authority must review the effectiveness of:

(a) Limit Advice provided by each Network Operator to AEMO; and

(b) Constraint Equations formulated by AEMO,

in meeting the principles described in clause 2.27A.9.

2.27C.2. A review conducted under clause 2.27C.1 must examine:

(a) the appropriateness of any Limit Margin applied by each Network Operator;

(b) the appropriateness of any Operating Margin applied by AEMO;

(c) the appropriateness of the WEM Procedures described in clauses 2.27A.10(b)(i) and 2.27A.11; and

(d) any other matters which the Economic Regulation Authority considers relevant.

2.27C.3. Without limiting clause 2.27C.2, the Economic Regulation Authority may determine the scope of the Limit Advice and Constraint Equations to be reviewed in accordance with clause 2.27C.1.

2.27C.4. In conducting a review under clause 2.27C.1, the Economic Regulation Authority must publish a draft report and invite submissions, and publish all submissions received, from Rule Participants and any other interested stakeholders.

2.27C.5. In conducting a review under clause 2.27C.1, the Economic Regulation Authority must publish a final report containing:

(a) the scope of the review as determined by the Economic Regulation Authority in accordance with clause 2.27C.3;

(b) the issues identified by the Economic Regulation Authority;

(c) the assumptions made by the Economic Regulation Authority in undertaking the review;

(d) the results of any technical and cost-benefit studies;

(e) a summary of any submissions on the draft report received by the Economic Regulation Authority from Rule Participants and other interested stakeholders in accordance with clause 2.27C.4;

(f) the Economic Regulation Authority's responses to the issues raised in those submissions;

(g) any recommendations of the Economic Regulation Authority; and

(h) any other matters the Economic Regulation Authority considers relevant to the review.

2.27C.6. The Economic Regulation Authority must complete a review under clause 2.27C.1:

(a) for the first review, within two years of the New WEM Commencement Day; and

(b) for each subsequent review, at least once every three years from the completion of the preceding review under this section 2.27C.

2.27C.7. The Economic Regulation Authority may request, and AEMO and each Network Operator must provide, any information and documents, including methodologies, models, software, data sources and internal procedures, used by:

(a) the Network Operator, in respect to Limit Advice provided by the relevant Network Operator to AEMO; and

(b) AEMO, in respect to the Constraint Equations formulated by it,

that the Economic Regulation Authority considers relevant to a review conducted under clause 2.27C.1.

Participation and Registration

2.28. Rule Participants

2.28.1. The classes of Rule Participant are:

(a) Network Operator;

(b) Market Participant; and

(c) AEMO.

2.28.2. Subject to clauses 2.28.3 and 2.28.16, a person who owns, controls or operates a transmission system or distribution system which forms part of the South West Interconnected System, or is electrically connected to that system, must register as a Rule Participant in the Network Operator class.

2.28.3. A person that owns, controls or operates a transmission system or distribution system may, but is not required to, register as a Rule Participant in the Network Operator class where:

(a) Separate Facilities are connected to the relevant transmission system or distribution system; or

(b) both of the following are satisfied:

i. AEMO has determined that it does not require information about the relevant network to ensure Power System Security and Power System Reliability are maintained; and

ii. no Registered Facilities owned or operated by a Market Participant are directly connected to the transmission system or distribution system.

2.28.3A. A Network Operator must:

(a) promptly provide to AEMO all data available to it and reasonably required to model the static and dynamic performance of the SWIS, including (without limitation) computer models of the performance of the Network and Facilities connected, or which may be connected in the future, to the Network;

(b) promptly forward to AEMO subsequent updates of the data referred to in clause 2.28.3A(a);

(c) use its reasonable endeavours to ensure that all data referred to in this clause 2.28.3A is complete, current and accurate;

(d) promptly notify AEMO if there are any reasonable grounds for suspecting that the data provided under this clause 2.28.3A is no longer complete, current and accurate; and

(e) include as part of the data provided to AEMO under this clause 2.28.3A:

i. all data provided to the Network Operator that is used for the purpose of modelling in relation to the SWIS by Market Participants, other generators, customers and storage providers, other Network Operators and any other source;

ii. all data relating to actual, committed or proposed modifications to the SWIS that the Network Operator reasonably considers are relevant to modelling in relation to the SWIS;

iii. data relating to any Facility with a System Size which is less than 10 MW and is likely to be subject to constraints that may affect Power System Security and Power System Reliability; and

iv. data relating to Constrained Access Loads and the conditions in which the Withdrawal of each Constrained Access Load may be constrained.

2.28.3B. Where AEMO:

(a) is satisfied that the performance of a Facility (or equipment within the Facility) is not adequately represented by any applicable data either provided under clause 2.28.3A or as part of a Registered Generator Performance Standard; and

(b) holds the reasonable opinion that the inadequacy of the applicable data, is or will impede AEMO's ability to carry out its functions in relation to Power System Security and Power System Reliability,

AEMO may:

(c) where that Facility is not required to comply with the requirements under clause 3A.2.2, request that the Network Operator provide to AEMO, as soon as reasonably practicable, revised or additional data and an associated model validation report demonstrating to AEMO's reasonable satisfaction that the performance of the Facility (or equipment within the Facility) has been tested and is performing substantially in accordance with the revised modelling data; and

(d) direct the relevant Market Participant, or Network Operator where relevant, to operate the Facility (or equipment within the Facility) at a particular level of output or in a particular manner, until either the Market Participant is compliant with clause 3A.2.2 or until the Network Operator has submitted revised data and an associated model validation report under clause 2.28.3B(c), and AEMO is satisfied that the performance of the Facility (or equipment within the Facility) is performing substantially in accordance with that data.

2.28.4. A person who intends to own, control or operate a transmission system or distribution system which will form part of the South West Interconnected System, or will be electrically connected to that system, may register as a Rule Participant in the Network Operator class.

2.28.5. Subject to clause 2.28.16, a person registered as a Network Operator may be registered as a Rule Participant in another class or other classes.

2.28.6. Subject to clause 2.28.16, a person who owns, controls or operates a Facility containing an Energy Producing System with a System Size that equals or exceeds 10 MW and is electrically connected to a transmission system or distribution system which forms part of the South West Interconnected System, or is electrically connected to that system, must register as a Rule Participant in the Market Participant class.

2.28.7. A person that owns, controls or operates a Facility containing an Energy Producing System with a System Size of less than 10 MW, but which equals or exceeds 5 MW, and is electrically connected to a transmission system or distribution system which forms part of the South West Interconnected System, or is electrically connected to that system, must apply to AEMO:

(a) for registration as a Rule Participant in the Market Participant class; or

(b) for an exemption from the requirement to register as a Rule Participant in the Market Participant Class.

2.28.7A. AEMO must grant an exemption from the requirement to register as a Rule Participant in the Market Participant class for an application received under clause 2.28.7 unless AEMO determines, in accordance with the WEM Procedures

specified in clauses 2.28.21 and 2.29.4N, that the Facility must be registered for the purposes of Power System Security and Power System Reliability, in which case, the relevant applicant under clause 2.28.7 must register as a Rule Participant in the Market Participant class and register the Facility in accordance with section 2.29.

2.28.8. Subject to clauses 2.28.8A and 2.28.8B, a person who intends to own, control or operate a Facility with a System Size that is less than 5 MW and is or will be electrically connected to a transmission system or distribution system which forms part of the South West Interconnected System, or is electrically connected to that system is exempt from the requirement to register as a Rule Participant in the Market Participant class.

2.28.8A. A person who intends to own, control or operate a Facility with a System Size that is less than 5 MW and is or will be electrically connected to the South West Interconnected System may register as a Market Participant.

2.28.8B. Clause 2.28.8 does not apply where:

(a) the Facility is required to be registered in a Facility Class in accordance with section 2.29; or

(b) AEMO determines, in accordance with the WEM Procedure specified in clause 2.29.4N, that the Facility must be registered for the purposes of Power System Security and Power System Reliability.

2.28.9. Where AEMO:

(a) does not grant an exemption in respect of an application made under clause 2.28.7; or

(b) determines that a Facility must be registered in accordance with clause 2.28.8B,

the person who owns, controls or operates the Facility must register as a Rule Participant in the Market Participant class.

2.28.9A. Where a person who owns, controls or operates a Facility is exempt, under clause 2.29.4B or clause 2.29.4C, from the requirement to register the Facility and the person intends to make modifications to its Facility, which are likely to increase the System Size of the Facility or do not relate to routine maintenance or replacement of equipment, the person must notify AEMO as soon as practicable and provide details of the proposed modifications.

2.28.9B. Where AEMO receives a notification under clause 2.28.9A, AEMO must reassess the exemption in accordance with the exemption criteria and timeframes set out in the WEM Procedure referred to in clause 2.29.4N and AEMO must either:

(a) confirm the exemption remains valid; or

(b) revoke the exemption,

and notify the person who owns, controls or operates the Facility of the outcome.

2.28.9BA. Where AEMO revokes an exemption under clause 2.28.9B(b), the person who owns, controls or operates the relevant Facility must:

(a) register as a Rule Participant in the Market Participant class; and

(b) register its Facility in the relevant Facility Class in accordance with section 2.29.

2.28.9C. AEMO may, at any time, revoke an exemption granted pursuant to clause 2.28.7A or clause 2.29.4B, if AEMO considers that the relevant Facility no longer meets the exemption criteria for the relevant exemption set out in the WEM Procedures referred to in clauses 2.28.21 and 2.29.4N.

2.28.10. Subject to clause 2.28.16, a person who sells electricity to Contestable Customers in respect of Facilities electrically connected to a transmission system or distribution system which forms part of the South West Interconnected System, or is electrically connected to that system, must register as a Rule Participant in the Market Participant class.

2.28.11. A person who intends to sell electricity to Customers in respect of Facilities electrically connected to a transmission system or distribution system which forms part of the South West Interconnected System, or is electrically connected to that system, may register as a Rule Participant in the Market Participant class.

2.28.12. [Blank]

2.28.13. Subject to clauses 2.28.16 and 4.24.4, a person not covered by clauses 2.28.2 to 2.28.11 but who sells or purchases electricity or provides another electricity related service under these ESM Rules to or from AEMO, including, without limitation, a person who intends to provide or provides an Essential System Service, must register as a Rule Participant in the Market Participant class.

2.28.14. [Blank]

2.28.15. [Blank]

2.28.15A. AEMO is a Rule Participant, but is not required to register, and must not be registered in any other Rule Participant class.

2.28.16. AEMO may determine that a person is exempted from the requirement to register in accordance with clauses 2.28.2, 2.28.6, 2.28.7, 2.28.10 or 2.28.13. An exemption may be given subject to any conditions AEMO considers appropriate and may, upon prior reasonable notice, be revoked at any time.

2.28.16A. For the purposes of clause 2.28.16:

(a) a person (the "Applicant") who applies to AEMO for an exemption under clause 2.28.16 from the requirement to register may:

i. notify AEMO of the identity of a person (an "**Intermediary**") to be registered instead of the Applicant; and

ii. provide AEMO with the written consent of the Intermediary to act as Intermediary in a form reasonably acceptable to AEMO;

(b) if an application for exemption made in accordance with clause 2.28.16A(a) is granted by AEMO in accordance with clause 2.28.16 then:

i. provided the Intermediary satisfies all relevant registration requirements that the Applicant would have been required to satisfy, AEMO must register the Intermediary as a Rule Participant as if it were the Applicant;

ii. the Intermediary will be considered for the purposes of these ESM Rules to be the Applicant;

iii. all references in these ESM Rules to the Applicant will be deemed to be references to the Intermediary (unless the context requires otherwise);

iv. all acts, omissions, statements, representations and notices of the Intermediary in its capacity as the Rule Participant under these ESM Rules will be deemed to be the acts, omissions, statements, representations and notices of the Applicant;

v. the Intermediary and the Applicant will be jointly and severally liable for the acts, omissions, statements, representations and notices of the Intermediary in its capacity as the Rule Participant under these ESM Rules;

vi. AEMO or any other Rule Participant may fulfil any obligations to the Applicant under these ESM Rules by performing them in favour of the Intermediary;

vii. the Applicant must procure, and where necessary must facilitate, the Intermediary's compliance with its obligations under these ESM Rules, including any obligations that, but for the exemption, would be placed on the Applicant; and

viii. the Applicant must, where necessary, participate in and abide by the outcome of any dispute process under sections 2.18 to 2.20;

(c) for the purposes of enforcing clauses 2.28.16A(b)(vii) and (viii), a reference in these ESM Rules to "Rule Participant" includes the Applicant;

(d) the Applicant may revoke the appointment of the Intermediary by giving notice of the revocation to AEMO and, prior to giving such notice to AEMO:

i. where the Applicant wishes to appoint a replacement Intermediary:

1. providing the notices referred to in clauses 2.28.16A(a)(i) and 2.28.16A(a)(ii) to AEMO;
2. obtaining AEMO's consent to be exempted from registration in accordance with clause 2.28.16;
3. ensuring that all relevant Registered Facilities or Intermittent Loads that were registered to the current Intermediary have been transferred to the replacement Intermediary; and
4. ensuring that the replacement Intermediary has notified AEMO of the change of circumstances for Credit Limit determination purposes in accordance with clause 2.37.8; or

ii. where clause 2.28.16A(d)(i) does not apply:

1. registering as a Rule Participant in the Market Participant class;
2. ensuring that all relevant Registered Facilities or Intermittent Loads that were registered to the current Intermediary have been transferred to the Applicant; and
3. notifying AEMO of the change of circumstances for Credit Limit determination purposes in accordance with clause 2.37.8;

(e) at 8:00 AM, 2 Business Days after AEMO receives notice of the revocation of the appointment of an Intermediary in accordance with clauses 2.28.16A(d)(i) or 2.28.16A(d)(ii), the Intermediary will cease to be considered the Applicant's Intermediary for the purposes of these ESM Rules and the Applicant will not be liable under clause 2.28.16A(b)(v) for any acts, omissions, statements, representations or notices of the Intermediary occurring after that time;

(f) if the Applicant revokes the appointment of an Intermediary, the exemption granted by AEMO to the Applicant as contemplated by clause 2.28.16A(b) ceases at the time the Intermediary ceases to be the Applicant's Intermediary in accordance with clause 2.28.16A(e); and

(g) AEMO may permit the Applicant to designate the Intermediary as the Applicant's Intermediary with respect to one or more Facilities which the Applicant owns, operates or controls.

2.28.16B. Without limiting the generality and the operation of clause 2.28.16, AEMO may exempt under clause 2.18.16 a person who owns, controls or operates a generation system which has a rated capacity that equals or exceeds 10 MW and is electrically connected to a transmission system or distribution system which forms part of the South West Interconnected System, or is electrically connected to that system, from the requirement to register as a Rule Participant in the Market

Participant class, in respect of that generation system, where all of the following are satisfied:

(a) positive MWh quantities measured by the interval meter or meters associated with that generation system are not reasonably expected to exceed 5 MWh in any Trading Interval;

(b) negative MWh quantities measured by the interval meter or meters associated with that generation system are not reasonably expected to increase by more than 5 MWh in any Trading Interval in the event of an outage of that generating system;

(c) AEMO has determined that it does not require information about the relevant generation system to ensure Power System Security and Power System Reliability are maintained;

(d) the meter or meters measuring the generation system remains registered by an existing Market Participant; and

(e) AEMO determines that with the exemption the cumulative effect of all exemptions given under this clause 2.28.16B is consistent with the State Electricity Objective,

and AEMO may give the exemption subject to any conditions AEMO considers appropriate and may revoke the exemption if AEMO determines that any of these conditions, or any of the conditions in this clause 2.28.16B, ceases to be satisfied.

2.28.16C. Where AEMO is reasonably satisfied the requirements of clause 2.30B.8B have been met, AEMO must exempt a person who owns, controls or operates a Facility containing an Intermittent Load from the requirement to register as a Rule Participant.

2.28.17. A Rule Participant under these ESM Rules is a participant for the purposes of section 121(2) of the Electricity Industry Act.

2.28.18. [Blank]

2.28.19. Any person intending to register as a Rule Participant or who is registered as a Rule Participant must:

(a) be resident in, or have permanent establishment in, Australia;

(b) not be a Chapter 5 body corporate (as defined in the Corporations Act), or under a similar form of administration under any laws applicable to it in any jurisdiction;

(c) not have immunity from suit in respect of the obligations of a Rule Participant under these ESM Rules; and

(d) be capable of being sued in its own name in a court of Australia.

2.28.20. AEMO must document the following in a WEM Procedure:

(a) information that a Network Operator must provide to AEMO, for each of its Networks, including:

i. positive, negative and zero sequence network impedances for the network elements;

ii. information on the network topology;

iii. information on transmission circuit limits;

iv. information on security constraints;

v. overload ratings, including details of how long overload ratings can be maintained; and

vi. the short circuit capability of facility equipment;

(b) the processes to be followed by a Network Operator to enable AEMO to access the information specified in clause 2.28.20(a);

(c) technical and communication criteria that a Network Operator must meet with respect to AEMO's ability to access the information specified in clause 2.28.20(a); and

(d) the processes to be followed by AEMO when accessing the information specified in clause 2.28.20(a).

2.28.21. AEMO must document the following in a WEM Procedure:

(a) the criteria AEMO will use to determine whether or not to exempt persons from Rule Participant registration requirements in sections 2.28 and 2.30B, which must include assessment criteria for AEMO to ensure that granting an exemption from the requirement to register does not adversely affect Power System Security or Power System Reliability;

(b) the processes to be followed by a person in applying for an exemption in respect of Rule Participant registration under sections 2.28 and 2.30B; and

(c) the processes to be followed and criteria to be applied by AEMO in assessing, determining or revoking an exemption in respect of Rule Participant registration under sections 2.28 and 2.30B.

2.29. Facility Registration Classes

2.29.1. The Facility Technology Types are:

(a) a distribution system;

(b) a transmission system;

(c) an Intermittent Generating System;

(d) a Non-Intermittent Generating System;

(e) an Electric Storage Resource; and

(f) a Load.

2.29.1A. The Facility Classes are:

(a) a Network;

(b) a Scheduled Facility;

(c) a Semi-Scheduled Facility;

(d) a Non-Scheduled Facility;

(e) an Interruptible Load; and

(f) a Demand Side Programme.

2.29.1B. The following are Facilities for the purposes of these ESM Rules:

(a) a transmission system;

(b) a distribution system;

(c) all Facility Technology Types that are connected behind a single Measurement Point or electrically connected behind two or more Measurement Points;

(d) one or more Facilities described in clause 2.29.1B(c), aggregated under section 2.30 at an Electrical Location;

(e) a Small Aggregation;

(f) a Demand Side Programme; or

(g) an Interruptible Load.

2.29.1C. AEMO's determination of a Facility Class under this section 2.29 is final.

2.29.2. Subject to clause 2.29.2A, no Facilities registered in one Facility Class can simultaneously be registered in another Facility Class.

2.29.2A. Notwithstanding clause 2.29.2, AEMO may allow registration of a Demand Side Programme and Interruptible Load at a common set of network connection points provided that:

(a) the Demand Side Programme and the Interruptible Load are registered to the same Market Participant; or

(b) the Market Participant for the Demand Side Programme and the Interruptible Load each provide evidence that their Facility is capable of meeting the obligations under clause 7.4.10.

2.29.3. Subject to clause 2.29.4M, a Network Operator must register any transmission system or distribution system owned, operated or controlled by that Network Operator as a Network, where that transmission or distribution system forms part

of the South West Interconnected System, or is electrically connected to that system.

2.29.4. Subject to clauses 2.29.4M and 2.30B.8D, a person who owns, controls or operates a Facility containing an Energy Producing System with a System Size that equals or exceeds 10 MW and is electrically connected to a transmission system or distribution system which forms part of the South West Interconnected System, or is electrically connected to that system, must register the Facility as a Semi-Scheduled Facility or a Scheduled Facility.

2.29.4A. A person that owns, controls or operates a Facility containing an Energy Producing System with a System Size of less than 10 MW, but which equals or exceeds 5 MW, and is electrically connected to a transmission system or distribution system which forms part of the South West Interconnected System, or is electrically connected to that system, must apply to AEMO for an exemption from the requirement to register the Facility in a Facility Class where the person is not intending to register the Facility in a Facility Class.

2.29.4B. Where AEMO receives an application under clause 2.29.4A, AEMO must grant an exemption from the requirement to register the Facility in a Facility Class unless AEMO determines, in accordance with the WEM Procedure specified in clause 2.29.4N, that the Facility must be registered in a Facility Class for the purposes of Power System Security and Power System Reliability.

2.29.4C. Subject to clause 2.29.4E, a person who intends to own, control or operate a Facility with a System Size that is less than 5 MW and is or will be electrically connected to a transmission system or distribution system which forms part of the South West Interconnected System, or is electrically connected to that system, is exempted from the requirement to register the Facility in a Facility Class.

2.29.4D. Clause 2.29.4C does not apply where AEMO determines, in accordance with the WEM Procedure specified in clause 2.29.4N, that a Facility, containing an Energy Producing System, must be registered in a Facility Class for the purposes of Power System Security and Power System Reliability.

2.29.4E. A person who intends to own, control or operate a Facility with a System Size that is less than 5 MW, and is or will be electrically connected to the South West Interconnected System may apply to AEMO to register the Facility in a Facility Class.

2.29.4F. Where AEMO:

(a) does not grant an exemption in respect to an application made under clause 2.29.4A; or

(b) determines that the Facility must be registered in accordance with clause 2.29.4D,

the person who owns, controls or operates the Facility must register the Facility in a Facility Class.

2.29.4G. A person that owns, operates or controls a Facility with a System Size that is less than 10 MW may request the Facility to be registered as a Non-Scheduled Facility, a Scheduled Facility or a Semi-Scheduled Facility.

2.29.4H. AEMO must grant a request by a person that owns, operates or controls a Facility containing an Energy Producing System with a System Size less than 10 MW to register the Facility as a Non-Scheduled Facility, unless AEMO determines the Facility must be controllable for the purposes of Power System Security and Power System Reliability in accordance with the WEM Procedure referred to in clause 2.29.4N.

2.29.4I. If AEMO determines that a Facility containing an Energy Producing System must be controllable for the purposes of Power System Security and Power System Reliability, in accordance with the WEM Procedure pursuant to 2.29.4N or if a person requests to register their Facility as a Scheduled Facility or a Semi-Scheduled Facility under clause 2.29.4G, then AEMO must register the relevant Facility as either a Scheduled Facility or a Semi-Scheduled Facility in accordance with clause 2.29.4K and the WEM Procedure referred to in clause 2.29.4N.

2.29.4J. AEMO must not register a Facility with a System Size greater than or equal to 10 MW as a Non-Scheduled Facility.

2.29.4K. In determining whether a Facility should be registered as a Scheduled Facility or a Semi-Scheduled Facility, AEMO must take into account the extent to which the relevant Facility is controllable as follows:

(a) a Scheduled Facility must be able to respond to a Dispatch Target from AEMO such that it can maintain its Injection or Withdrawal within its Tolerance Range for a specified period; and

(b) a Semi-Scheduled Facility must be able to reduce the value of its Injection or increase the value of its Withdrawal to comply with a Dispatch Cap issued by AEMO.

2.29.4L. Where AEMO reasonably considers that further information is required to enable it to make a determination under clause 2.29.4K, AEMO may request the information from the relevant Market Participant and the Market Participant must provide the information to AEMO by the time specified in the request, which must not be less than 15 Business Days of receipt of AEMO's request. AEMO may extend the time specified in a request if it considers it is reasonably necessary to do so.

2.29.4M. AEMO may determine that a person is exempted from the requirement to register a Facility in accordance with this section 2.29. An exemption may be given subject to any conditions that AEMO considers appropriate.

2.29.4N. AEMO must document in a WEM Procedure:

(a) the process AEMO will follow to assess a Facility's controllability where that assessment must take into account:

i. the controllability requirements specified for a Scheduled Facility and a Semi-Scheduled Facility in clause 2.29.4K;

ii. how reliably a Facility can follow Dispatch Instructions within its Tolerance Range; and

iii. any other information provided by a Market Participant, in response to a request by AEMO or otherwise, that supports the assessment of the Facility's controllability;

(b) the criteria AEMO will use to determine whether or not to exempt a Facility from Facility registration requirements in this section 2.29, which must include:

i. assessment criteria for AEMO to ensure that granting an exemption from the requirement to register does not adversely affect Power System Security or Power System Reliability; and

ii. the criteria AEMO will use to determine whether a Facility comprising a Load and another Facility Technology Type with a System Size greater than or equal to 10 MW would be required to be registered as a Semi-Scheduled Facility or Scheduled Facility or be allowed to be a Non-Dispatchable Load associated with a Demand Side Programme;

(c) the processes to be followed by a Market Participant in applying for an exemption from the requirement to register a Facility under this section 2.29;

(d) the processes to be followed and criteria to be applied by AEMO in assessing, determining or revoking an exemption in respect of Facility registration under this section 2.29 and section 2.30B; and

(e) the processes to be followed in relation to applications for Intermittent Loads and the provision of data to AEMO under section 2.30B.

Non-Dispatchable Loads and the association and disassociation with Demand Side Programmes and Interruptible Loads

2.29.5. A Market Participant that owns, operates or controls a Non-dispatchable Load or:

(a) has entered into; or

(b) intends to enter into,

a contract with a person who owns, controls or operates a Non-Dispatchable Load, for the Load to be interrupted in response to under frequency situations may register an Interruptible Load.

2.29.5A. A Market Participant that owns, operates or controls a Non-Dispatchable Load or:

(a) has entered into; or

(b) intends to enter into,

a contract with a person who owns, controls or operates a Non-Dispatchable Load, for the Load to provide curtailment (on request if relevant) by the Market Participant, may register a Demand Side Programme.

2.29.5AA. A Market Participant that owns, controls or operates a Facility containing a Load may register the Facility as a Scheduled Facility if AEMO determines that the Facility meets the controllability requirements outlined in the WEM Procedure specified in clause 2.29.4N.

2.29.5AB. A Market Participant who was assigned Peak Capacity Credits or Flexible Capacity Credits for a certified Demand Side Programme must no later than three months before the start of the Capacity Year:

(a) if the Demand Side Programme was subject to clause 4.10.1B in Year 1 of the Reserve Capacity Cycle:

i. notify AEMO of the number of Capacity Credits that are to be allocated to one or more Demand Side Programmes that are registered; and

ii. in accordance with clause 2.29.5B, apply to associate Non-Dispatchable Loads with each registered Demand Side Programme that is to be allocated Capacity Credits under clause 2.29.5AB(a)(i) such that:

1. the date of association for the Associated Loads of the Demand Side Programme is no later than 1 December of the relevant Capacity Year; and

2. the sum of the MW quantities by which each Associated Load is expected to reduce its Withdrawal or increase its Injection, provided under clause 2.29.5B for the Associated Loads, equals at least the Capacity Credits allocated to the Demand Side Programme that was subject to clause 4.10.1B; or

(b) if the Demand Side Programme was not subject to clause 4.10.1B in Year 1 of the Reserve Capacity Cycle, associate Non-Dispatchable Loads to the Demand Side Programme such that:

i. the date of association for the Associated Loads of the Demand Side Programme is no later than 1 December of the relevant Capacity Year; and

ii. the sum of the MW quantities by which each Associated Load is expected to reduce its Withdrawal or increase its Injection, provided under clause 2.29.5B for the Associated Loads, equals at least the Capacity Credits assigned to the Demand Side Programme.

For the avoidance of doubt, the requirement to associate Non-Dispatchable Loads to Demand Side Programmes under this clause does not preclude a Market Participant from associating additional Non-Dispatchable Loads to their Demand Side Programmes during the Capacity Year.

2.29.5AC. Subject to clause 2.29.5AD, a Market Participant associating Non-Dispatchable Loads to its Demand Side Programmes under clause 2.29.5AB(a) for a Capacity Year, must not associate a Non-Dispatchable Load to a Demand Side Programme at a Transmission Node that is included in the list of Transmission Nodes published by AEMO under clause 4.3.1(n) in Year 1 of the Reserve Capacity Cycle.

2.29.5AD. If a Network Operator changes the Transmission Node for a Non-Dispatchable Load associated to a Demand Side Programme, then the relevant Market Participant may continue to associate that Non-Dispatchable Load with the Demand Side Programme for any Capacity Year for which the Demand Side Programme has Capacity Credits assigned for the original Transmission Node.

2.29.5AE. If a Market Participant fails to allocate all Peak Capacity Credits assigned to a single certified Demand Side Programme, which was subject to clause 4.10.1B in Year 1 of a Reserve Capacity Cycle, in accordance with clause 2.29.5AB, AEMO must reduce the level of Peak Capacity Credits assigned to the single certified Demand Side Programme by the difference between the number of Peak Capacity Credits assigned and the number of Peak Capacity Credits allocated under clause 2.29.5AB.

2.29.5AF. If a Market Participant fails to allocate all Flexible Capacity Credits assigned to a single certified Demand Side Programme, which was subject to clause 4.10.1B in Year 1 of a Reserve Capacity Cycle, in accordance with clause 2.29.5AB, AEMO must reduce the level of Flexible Capacity Credits assigned to the single certified Demand Side Programme by the difference between the number of Flexible Capacity Credits assigned and the number of Flexible Capacity Credits allocated under clause 2.29.5AB.

2.29.5AG. A Market Participant responsible for a Demand Side Programme may nominate either the Adjusted Baseline Method or Unadjusted Baseline Method for the determination of the Relevant Demand of the Demand Side Programme.

2.29.5AH. AEMO must:

(a) use the Unadjusted Baseline Method if a Market Participant has not nominated a method for the determination of the Relevant Demand of the Demand Side Programme in accordance with clause 2.29.5AG; or

(b) subject to clause 2.29.5AI, if a Market Participant nominates a method for the determination of the Relevant Demand of the Demand Side Programme in accordance with clause 2.29.5AG:

i. effect the nomination from the later of:

1. the Trading Day specified by the Market Participant in the nomination; or

2. the start of the second Trading Day following the date of receipt of the nomination; and

ii. within one Business Day of receipt of the nomination, inform the Market Participant about the date the nomination will be effective.

2.29.5AI. A Market Participant responsible for a Demand Side Programme may apply to AEMO to change the method for the determination of the Relevant Demand of the Demand Side Programme twice for each Capacity Year.

2.29.5AJ. [Blank]

2.29.5AK. Synergy is the only Market Participant that may apply to AEMO to associate a Non-Dispatchable Load with a Demand Side Programme or an Interruptible Load under clause 2.29.5B, if that Non-Dispatchable Load is associated with a Non-Contestable Customer.

2.29.5AL. A Market Participant intending to apply under clause 2.29.5B to associate a Non-Dispatchable Load with a Demand Side Programme or Interruptible Load must ensure that the meter installed at the applicable Measurement Point complies with the requirements of an Interval Meter under clause 3.16 of the Metering Code.

2.29.5AM. If a Market Participant fails to associate enough Non-Dispatchable Loads to a Demand Side Programme to satisfy the criteria under clauses 2.29.5AB(a)(ii) or 2.29.5AB(b), as applicable, AEMO must reduce the level of Peak Capacity Credits assigned to the Demand Side Programme by the association shortfall calculated as:

$$max\big(0, PCC(f) - AssocLoadCapacity(f)\big)$$

where:

(a) PCC(f) is the total of Peak Capacity Credits assigned to the Facility; and

(b) AssocLoadCapacity(f) is the sum of the MW quantities by which each Associated Load is expected to reduce its Withdrawal or increase its

Injection, provided under clause 2.29.5B for the Associated Loads of the Demand Side Programme.

2.29.5AN. If a Market Participant fails to associate enough Non-Dispatchable Loads to a Demand Side Programme to satisfy the requirements under clause 2.29.5AB(a)(ii) or 2.29.5AB(b), as applicable, AEMO must reduce the level of Flexible Capacity Credits assigned to the Demand Side Programme by the association shortfall calculated as:

$$max\left(0, FCC(f) - AssocLoadCapacity(f)\right)$$

where:

(a) FCC(f) is the total of Flexible Capacity Credits assigned to the Facility; and

(b) AssocLoadCapacity(f) is the sum of the MW quantities by which each Associated Load is expected to reduce its Withdrawal or increase its Injection, provided under clause 2.29.5B for the Associated Loads of the Demand Side Programme.

2.29.5AO. A Market Participant may not change the Transmission Node Identifier for a Demand Side Programme to a Transmission Node published by AEMO under clause 4.3.1(n) in Year 1 of the Reserve Capacity Cycle for the relevant Capacity Year.

2.29.5B. A Market Participant may apply to AEMO to associate a Non-Dispatchable Load with a Demand Side Programme or an Interruptible Load. The Market Participant must provide the following information to AEMO in support of the application:

(a) if applicable, details acceptable to AEMO together with supporting evidence that the Market Participant owns the Non-Dispatchable Load or has entered into a contract with the person who owns, operates or controls the Non-Dispatchable Load to reduce its Withdrawal or increase its Injection on request by the Market Participant, and that the Non-Dispatchable Load will not be subject to a contract or arrangement to reduce Withdrawal or increase Injection during one or more Trading Intervals in Year 3 of the relevant Reserve Capacity Cycle for the purpose of reducing Peak Capacity Purchaser Payments and Flexible Capacity Purchaser Payments determined under clause 9.8.2;

(b) the network Measurement Point of the Non-Dispatchable Load;

(bA) the Transmission Node Identifier for the Non-Dispatchable Load;

(c) if the Demand Side Programme contains a Single Associated Load, the expected Minimum Consumption of the Non-Dispatchable Load in units of MW;

(d) if the Market Participant requesting the association owns, controls or operates the relevant Non-Dispatchable Load, then:

i. the start date of the Non-Dispatchable Load association;

ii. the end date of the Non-Dispatchable Load association; and

iii. the intended reduction of Withdrawal or increase in Injection, in MW, of the Non-Dispatchable Load;

(e) if the Market Participant requesting the association has entered into a contract with a person who owns, controls or operates the relevant Non-Dispatchable Load, then:

i. the contract start date of the Non-Dispatchable Load association;

ii. the contract end date of the Non-Dispatchable Load association; and

iii. the contracted reduction of Withdrawal or increase in Injection, in MW, of the Non-Dispatchable Load; and

(f) if the Non-Dispatchable Load is associated with a Non-Contestable Customer, details acceptable to AEMO together with supporting evidence that the Network Operator has installed an Interval Meter at the Measurement Point of the relevant Non-Dispatchable Load.

2.29.5C. AEMO must within one Business Day notify an applicant of the receipt of the application submitted under clause 2.29.5B. AEMO may, at its discretion, require that an applicant provide information that is missing from the application or is inadequately specified. The date the requested information is submitted to AEMO will become the date of receipt of the application.

2.29.5CA. Where an applicant receives a request for information from AEMO under clause 2.29.5C and does not provide the information to AEMO within 20 Business Days from the date of AEMO's request, the applicant will be deemed to have withdrawn the application.

2.29.5D. AEMO must determine, in accordance with clause 2.29.5E, whether to accept or reject an application submitted under clause 2.29.5B, and must notify the applicant of its decision within 10 Business Days of receipt of the application.

2.29.5E. AEMO must accept an application submitted under clause 2.29.5B unless:

(a) AEMO considers that the information provided by the Market Participant under clauses 2.29.5B and 2.29.5C is not satisfactory;

(b) [Blank]

(c) AEMO considers that the application does not comply with clauses 2.29.5AC or 2.29.5AK;

(d) for an application relating to a Demand Side Programme, the relevant Non-Dispatchable Load is registered as an Intermittent Load for any part of the proposed Association Period;

(e) subject to clause 2.29.2A, the relevant Non-Dispatchable Load is already associated with a Demand Side Programme or an Interruptible Load registered to a different Market Participant for any part of the proposed Association Period;

(f) during the same Capacity Year, the relevant Non-Dispatchable Load was an Associated Load of another Demand Side Programme and, while it was so associated:

i. the other Demand Side Programme passed a Reserve Capacity Test; or

ii. any part of DSP Reserve Capacity Security associated with the other Demand Side Programme was returned or relinquished under:

1. clause 4.13A.19 by operation of clause 4.13A.18; or

2. clause 4.13A.24;

(g) the Transmission Node Identifier for the relevant Non-Dispatchable Load does not match the single Transmission Node Identifier for the Demand Side Programme; or

(h) the application relates to a Non-Dispatchable Load behind a Connection Point, and:

i. there are Separate Facilities behind the Connection Point; and

ii. the registered Market Participant for the Separate Facilities differs from the Market Participant submitting the application.

2.29.5EA. In considering whether to accept an application in accordance with clause 2.29.5E, AEMO must, with the assistance of the Network Operator, confirm that the Transmission Node Identifier for the relevant Non-Dispatchable Load matches the single Transmission Node Identifier for the Demand Side Programme.

2.29.5F. If AEMO accepts an application in accordance with clause 2.29.5D then AEMO must include in its notification to the applicant:

(a) the date and time from which the relevant Non-Dispatchable Load will be associated with the Demand Side Programme or Interruptible Load, as applicable, as defined under clause 2.29.5G(a); and

(b) the date and time from which the relevant Non-Dispatchable Load will cease to be associated with the Demand Side Programme or Interruptible Load, as applicable, as defined under clause 2.29.5G(b).

2.29.5G If AEMO accepts an application submitted under clause 2.29.5B then AEMO must associate the relevant Non-Dispatchable Load ("**Associated Load**") with the Demand Side Programme or Interruptible Load, as applicable, for the period ("**Association Period**") between:

(a) the start date, which is the latest of:

i. if the Market Participant making the application owns, controls or operates the relevant Non-Dispatchable Load, the start of the Trading Day commencing on the start date provided under clause 2.29.5B(d); or

ii. if the Market Participant making the application has entered into contract with the person who owns, controls or operates the relevant Non-Dispatchable Load, the contract start date provided under clause 2.29.5B(e); or

iii. the start of the Trading Day following the day that AEMO notifies the applicant of its decision under clause 2.29.5D to accept the application submitted under clause 2.29.5B; and

(b) the end date is:

i. if the Market Participant making the application owns, controls or operates the relevant Non-Dispatchable Load, the end of the Trading Day for the end date provided under clause 2.29.5B(d); or

ii. if the Market Participant making the application has entered into a contract with the person who owns, controls or operates the relevant Non-Dispatchable Load, the end of the Trading Day for the contract end date provided under clause 2.29.5B(e).

2.29.5H. If AEMO rejects an application submitted under clause 2.29.5B, then AEMO must include in its notification to the applicant under clause 2.29.5D the reasons for the rejection of the application. A Market Participant whose application is rejected may reapply to associate a Non-Dispatchable Load with a Demand Side Programme or Interruptible Load, as applicable, under clause 2.29.5B.

2.29.5HA. If Synergy is notified under clause 2.29.5D that AEMO has accepted its application submitted under clause 2.29.5B in respect of a Non-Dispatchable Load associated with a Non-Contestable Customer, Synergy must notify the relevant Network Operator and provide the Network Operator with the NMI of the relevant Measurement Point described in clause 2.29.5B(b).

2.29.5I. A Market Participant with an Associated Load may apply to AEMO to:

(a) cancel the association of the relevant Non-Dispatchable Load with the Demand Side Programme or Interruptible Load, as applicable; or

(b) reduce the Association Period of the Associated Load.

2.29.5J. AEMO must within one Business Day notify an applicant of the receipt of an application submitted under clause 2.29.5I.

2.29.5K. AEMO must determine whether to accept or reject an application submitted under clause 2.29.5I and notify the applicant of its decision within two Business Days of the receipt of the application. AEMO must accept the application unless the proposed change would affect the association of the relevant Non-Dispatchable Load with the Demand Side Programme or Interruptible Load, as applicable, during any period before the Trading Day commencing on the third Business Day after the receipt of the application.

2.29.5L. If AEMO accepts an application submitted under clause 2.29.5I then it must either:

(a) cancel the association of the relevant Non-Dispatchable Load with the Demand Side Programme or Interruptible Load, as applicable; or

(b) reduce the Association Period of the Associated Load,

as requested in the application.

2.29.5LA. Subject to clause 2.29.5AD, if AEMO becomes aware that information of the type listed in clause 2.29.5B regarding an Associated Load differs from that provided under clause 2.29.5B or previously the subject of a redetermination under this clause 2.29.5LA ("**New Information**"), then AEMO must make a fresh determination under clause 2.29.5D taking into account the New Information, as a result of which AEMO must, as appropriate:

(a) reduce the Associated Load's Association Period; or

(b) take other measures in respect of the Associated Load including cancelling its association; or

(c) make no change to its previous determination or redetermination.

2.29.5LB. AEMO may from time to time request a Market Participant with a Demand Side Programme or Interruptible Load to provide evidence to AEMO's reasonable satisfaction that information provided under clause 2.29.5B or previously the subject of an adjustment under clause 2.29.5LA, remains accurate, and the Market Participant must comply as soon as reasonably practicable and in any event within 10 Business Days of the request.

2.29.5LC. If AEMO takes action under clause 2.29.5LA(a) or clause 2.29.5LA(b), it must notify the Market Participant of the action and its reasons within five Business Days after the action.

2.29.5M. If AEMO rejects an application submitted under clause 2.29.5I, then AEMO must include in its notification to the applicant under clause 2.29.5K the reasons for the rejection of the application.

2.29.5N. AEMO must document in a WEM Procedure:

(a) the process to be followed by a Market Participant and the information to be provided to AEMO for an application to associate, disassociate or

reduce the Association Period of a Non-Dispatchable Load with a Demand Side Programme or an Interruptible Load under clauses 2.29.5AB, 2.29.5B and 2.29.5I; and

(b) the process to be followed by AEMO in respect to accepting or rejecting an application to associate, disassociate or reduce the Association Period of a Non-Dispatchable Load with a Demand Side Programme or an Interruptible Load under clauses 2.29.5B and 2.29.5I.

2.29.6. A Market Participant must submit an application in accordance with clause 2.33.8 for a Facility Class reassessment on becoming aware that:

(a) the System Size of its Non-Scheduled Facility is or will be greater than 10 MW; or

(b) the Facility Class that the Facility is registered in does not reflect the Facility's controllability.

2.29.7. AEMO must process a Facility Class reassessment application it receives in accordance with section 2.31.

2.29.7A. AEMO may from time to time conduct a review to assess whether a Registered Facility continues to meet the obligations under these ESM Rules and WEM Procedures for the Facility Class in which it is registered.

2.29.8. Where AEMO considers that a Facility no longer meets the requirements of the Facility Class it is registered in, AEMO may register the Facility in a different Facility Class.

2.29.9. AEMO must document in a WEM Procedure:

(a) the processes AEMO will use to:

i. determine whether a Facility should be assigned to a different Facility Class; and

ii. assign a Facility to a different Facility Class; and

(b) the processes a Market Participant must follow where:

i. the Market Participant provides information to AEMO under clause 2.29.6; or

ii. AEMO notifies the Market Participant of its intention to assess whether the Facility continues to meet the requirements of the Facility Class in which it is registered.

2.29.10 [Blank]

2.29.11 [Blank]

2.29.12. A Market Participant must install Facility Sub-Metering for a Scheduled Facility or Semi-Scheduled Facility containing:

(a) multiple Separately Certified Components; or

(b) a single Separately Certified Component and any Energy Producing Systems that are not Separately Certified Components.

2.29.13. Facility Sub-Metering is to be used solely for the purpose of:

(a) certification of Reserve Capacity under section 4.9;

(b) a Reserve Capacity Test under section 4.25;

(c) in accordance with clause 4.13.10B, the determination of whether a Facility is in Commercial Operation;

(d) reviewing expert reports under clause 4.11.7; and

(e) monitoring compliance with clause 7.10.6B in accordance with the WEM Procedure referred to in clause 2.15.4.

To avoid doubt, Facility Sub-Metering must not be used for the purposes of settlement under Chapter 9.

2.29.14. Facility Sub-Metering must comply with the requirements specified in the WEM Procedure referred to in clause 2.29.15.

2.29.15. AEMO must document the following matters in respect of Facility Sub-Metering in a WEM Procedure:

(a) the characteristics and requirements of Facility Sub-Metering, including accuracy requirements;

(b) the procedures to be followed by Market Participants for auditing of Facility Sub-Metering;

(c) the communication requirements and protocols between a relevant Market Participant and AEMO;

(d) the processes to be followed by a Market Participant for providing Facility Sub-Metering information to AEMO; and

(e) any other matters which AEMO considers relevant.

2.29.16. A Market Participant that is required to install Facility Sub-Metering for a Facility in accordance with clause 2.29.12 must provide AEMO with meter data, recorded by the Facility Sub-Metering, by 5 February each year, for the 5 year period ending on 1 October of the previous year, excluding any part of the period for which:

(a) Facility Sub-Metering was not yet installed for that Facility; or

(b) the relevant meter data has already been provided to AEMO.

2.30. Facility Aggregation

2.30.1. A Rule Participant, or an applicant for rule participation, may apply to AEMO to allow the registration of an Aggregated Facility.

2.30.1A. For each Capacity Year AEMO may only accept an application under clause 2.30.1 once with respect to each Facility.

2.30.2. [Blank]

2.30.3. [Blank]

2.30.4. AEMO must consult with the relevant Network Operator when assessing an application for Facility aggregation and inform the relevant Rule Participant whether the aggregation of the facilities is allowed.

2.30.5. AEMO must only allow the aggregation of Facilities pursuant to an application under clause 2.30.1 if, in its opinion, the proposed Aggregated Facility meets the following criteria:

(a) the proposed Aggregated Facility will not adversely impact on AEMO's ability to ensure Power System Security and Power System Reliability are maintained;

(b) the Market Participant for the proposed Aggregated Facility provides Standing Data for:

i. each individual Facility that would be required to be provided if each Facility was registered separately; and

ii. the Aggregated Facility as a whole;

(c) adequate control and monitoring equipment exists for the proposed Aggregated Facility;

(d) the Facilities within the proposed Aggregated Facility are at the same Electrical Location;

(e) [Blank]

(f) the Entity Daily Peak Reserve Capacity Price applicable to each of the Facilities or Separately Certified Components within the proposed Aggregated Facility is the same, and is expected to remain the same, from and including the current Reserve Capacity Cycle;

(g) either:

i. the System Size of the proposed Aggregated Facility as determined by AEMO will not affect the quantity of Frequency Co-optimised Essential Services required to be dispatched; or

ii. the Facility Contingency associated with the proposed Aggregated Facility affects each individual Facility in the proposed aggregation simultaneously;

(h) if the proposed Aggregated Facility intends to provide Frequency Co-optimised Essential System Services, the capability to simultaneously provide energy and Frequency Co-optimised Essential Services from the individual Facilities in the proposed aggregation can be adequately derived for the proposed Aggregated Facility;

(i) the Aggregated Facility will be registered as a Scheduled Facility, Semi-Scheduled Facility or a Non-Scheduled Facility; and

(j) all the Separately Certified Components that are Electric Storage Resources within the proposed Aggregated Facility are expected to have the same Peak Electric Storage Resource Obligation Duration in any future Trading Day.

2.30.5A. Unless the Facilities are Separate Facilities, if a single Credible Contingency Event other than a Network Contingency would result in the disconnection of two or more Facilities, then the Market Participant responsible for each of the Facilities must apply to AEMO to aggregate the relevant Facilities into an Aggregated Facility.

2.30.5B. If two or more Facilities are electrically connected behind multiple Measurement Points, and one or more of the Facilities is registered or AEMO has received an application to register one or more of the Facilities, then AEMO must aggregate the relevant Facilities into an Aggregated Facility.

2.30.5C. Unless the Facilities are Separate Facilities, if a Facility containing an Energy Producing System with a System Size that equals or exceeds 10 MW has a Parasitic Load which is located at a Connection Point other than the Connection Point at which the Energy Producing System is located, then AEMO may require the Market Participant for the relevant Facilities to apply to aggregate the Facilities into an Aggregated Facility under clause 2.30.1.

2.30.5D. Where AEMO considers that clauses 2.30.5A, 2.30.5B or 2.30.5C apply to an application for registration of a Facility under section 2.29, AEMO must notify the relevant Market Participant of the requirement to register the Facilities as an Aggregated Facility.

2.30.6. If the individual Facilities forming part of an Aggregated Facility have their own meters, and there is no single meter for the entire Aggregated Facility, then the settlement meter data for the Aggregated Facility must be the sum of the meter readings for its component Facilities for the purposes of clause 9.5.1. An Aggregated Facility which has been registered is taken to be treated as a single Facility for the purpose of these ESM Rules.

2.30.7. If AEMO approves the aggregation of Facilities then, that Aggregated Facility must be registered as a single Facility for the purpose of these ESM Rules, and the aggregation will take effect from the date of that registration.

2.30.8. Where AEMO considers that a change in one or more of the criteria in clause 2.30.5 means that an Aggregated Facility should no longer be aggregated, AEMO must notify the relevant Rule Participant of:

(a) its decision and the reasons for its decision; and

(b) the date on which the Aggregated Facility will be considered to have been disaggregated.

2.30.8A. Where AEMO has notified a Market Participant under clause 2.30.8 that an Aggregated Facility should no longer be aggregated, AEMO may reassess the Facility Class in which each individual Facility is registered in accordance with clause 2.29.9.

2.30.9. Where a Rule Participant no longer wishes to operate a Facility as an Aggregated Facility from a specified date, the Rule Participant may apply to AEMO to disaggregate the Facilities from that specified date in accordance with the WEM Procedure referred to in clause 2.31.25 and section 2.33.

2.30.10. Where an Aggregated Facility is disaggregated in accordance with clauses 2.30.8 or 2.30.9:

(a) the relevant Rule Participant must ensure each disaggregated Facility is registered in accordance with the process outlined in section 2.31, as a separate Facility for the purpose of these ESM Rules from the date specified by AEMO or the Rule Participant, as applicable; and

(b) AEMO may require the Rule Participant to provide Standing Data relevant to each disaggregated Facility.

2.30A. [Blank]

2.30B. Intermittent Load

2.30B.1. An Intermittent Load is a Load, or a part of a Load associated with consumption in excess of a level specified by the Market Participant, that satisfies the requirements of clause 2.30B.2 and is recorded in Standing Data as being an Intermittent Load.

2.30B.2. For a Load or part of a Load to be eligible to be an Intermittent Load AEMO must be satisfied that the following conditions are met:

(a) an Energy Producing System must have the following characteristics:

i. it can typically supply the maximum quantity of energy consumed by that Load to be treated as Intermittent Load without requiring energy to be withdrawn from a Network; and

ii. the output of which is netted off consumption of the Load by the meter measuring consumption of the Load, or which is always or at times electrically connected to the Load behind two or more Measurement Points;

(b) the Intermittent Load shall reasonably be expected to have net consumption of energy (based on Metered Schedules calculated in accordance with the methodology prescribed in clauses 2.30B.10 or 2.30B.11) for not more than 4320 Trading Intervals in any Capacity Year, excluding Trading Intervals in which the Facility containing the Load is delivering a service under an NCESS Contract;

(c) the Market Participant for the Facility containing the Load must have an agreement in place with a Network Operator to allow energy to be supplied to the Load from a Network;

(d) [Blank]

(e) the Facility containing the Load is not expected (based on applications accepted by AEMO under clause 2.29.5D and any amendments accepted by AEMO under clause 2.29.5K) to be associated with any Demand Side Programme for any period following the registration of the Load or part of the Load as an Intermittent Load; and

(f) the Facility containing the Load is connected to the transmission network registered by the Network Operator referred to in clause 2.30B.2(c).

2.30B.3. The Market Participant for a Load or part of a Load to be treated as an Intermittent Load must, in addition to any Standing Data for the Facility containing the Load, provide, and ensure remains accurate, the following data in regard to the Facility:

(a) the maximum capacity in MW, excluding capacity for which Capacity Credits are held, that the Energy Producing System referred to in clause 2.30B.2(a) can be guaranteed to have available to supply Intermittent Load, when it is operated normally at an ambient temperature of 41 degrees Celsius;

(b) where the Load is and continues to be deemed to be an Intermittent Load under clause 1.48.2:

i. the anticipated reduction, measured in MW, in the maximum capacity described in clause 2.30B.3(a) when the ambient temperature is 45 degrees Celsius;

ii. at the option of the Market Participant, the method to be used to measure the ambient temperature at the site of the Energy Producing System referred to in clause 2.30B.2(a) for the purpose

of determining Intermittent Load Refunds, where the method specified may be either:

1. a publicly available daily maximum temperature at a location representative of the conditions at the site of the Energy Producing System as reported daily by a meteorological service; or
2. a daily maximum temperature measured at the site of the Energy Producing System by the SCADA system operated by AEMO or the relevant Network Operator (as applicable),

where no method is specified, a temperature of 41 degrees Celsius will be assumed; and

(c) details of primary and any alternative fuels, including details and evidence of both firm and non-firm fuel supplies and the factors that determine restrictions on fuel availability that could prevent the Energy Producing System referred to in clause 2.30B.2(a) from operating at its full capacity;

(d) a single line diagram which includes details of the Loads and Energy Producing Systems contained within the Facility and any other information AEMO requires to determine whether the Load meets the conditions specified in clause 2.30B.2;

(e) the Nominated Excess Capacity;

(f) the Declared Sent Out Capacity and any other information AEMO requires to determine the System Size of the Facility;

(g) at the option of the Market Participant, information regarding protection schemes at the Facility, including whether the Facility is configured to automatically adjust load or generation where a Contingency Event, or an event behind the relevant connection point, affects the Energy Producing System, and evidence to support that configuration as required in the WEM Procedure referred to in clause 2.29.4N;

(h) the instantaneous output or consumption of the Energy Producing System referred to in clause 2.30B.2(a) measured in accordance with the WEM Procedure referred to in clause 2.36A.5, with separate measurements for each separate electricity producing unit in the Energy Producing System;

(i) the maximum level of Intermittent Load for the Facility referred to in Appendix 1(g)(ii); and

(j) the Contract Maximum Demand associated with the Facility.

2.30B.4. [Blank]

2.30B.5. A Market Participant may apply for a Load or part of a Load to be treated as an Intermittent Load where the Market Participant has submitted or changed Standing Data for the Facility in accordance with clause 2.34.2B(b) and:

(a) the Load is part of a Non-Dispatchable Load; or

(b) the Load is part of a Registered Facility.

The application must include the information in clause 2.30B.3, except for clause 2.30B.3(h).

2.30B.6. AEMO must accept an application for a Load or part of a Load to be treated as an Intermittent Load if the requirements of clause 2.30B.2 are satisfied.

2.30B.7. AEMO may cease to treat a Load or part of a Load as an Intermittent Load and require a Market Participant to modify its Standing Data in accordance with clause 2.34.11 from the commencement of a Trading Month if AEMO considers that the requirements of clause 2.30B.2 are no longer satisfied.

2.30B.8. Subject to clause 2.30B.8A, where a Market Participant seeks to increase the absolute value of the quantities provided under clauses 2.30B.3(i) or 2.30B.3(j) by more than 10 MW from the quantities in effect for that Intermittent Load on the New WEM Commencement Day, the Market Participant must make a new application under clause 2.30B.5 for the Load to be treated as an Intermittent Load, and clause 1.48.2 will no longer apply to the Load.

2.30B.8A. Where AEMO determines that an increase in the absolute value of the quantities provided under clauses 2.30B.3(i) or 2.30B.3(j) is necessary to implement the terms of a NCESS Contract, clause 2.30B.8 does not apply to the Intermittent Load.

2.30B.8B. A person who owns, controls or operates a Facility containing an Intermittent Load may apply to AEMO to be exempted from the requirement to register as a Rule Participant in the Market Participant class in accordance with clause 2.28.16C, where:

(a) the person has submitted an application for another Market Participant to act as their Intermediary in accordance with clause 2.28.16A(a); and

(b) where the consumption or generation from the metered meter or meters measuring the relevant Facility containing the Intermittent Load is registered to the Intermediary for the purposes of clause 8.3.1.

2.30B.8C. Without limiting AEMO's rights to revoke an exemption under clause 2.28.16, AEMO may revoke an exemption to register that was based on the conditions specified in clause 2.28.16C where AEMO considers that any of the conditions specified in clause 2.30B.8B are no longer satisfied.

2.30B.8D. Notwithstanding clause 2.29.4, where AEMO has accepted an application under clause 2.30B.6 for a Facility with a Nominated Excess Capacity of less than 10 MW, AEMO must determine (under clause 2.29.4M) that the person who owns,

controls or operates the Facility is exempted from the requirement to register the Facility.

2.30B.8E. Where a Facility containing an Intermittent Load has a Nominated Excess Capacity greater than or equal to 10 MW, the relevant Market Participant must register the Facility in accordance with section 2.29, or apply to be exempted from the requirement to register.

2.30B.8EA. Where a Market Participant registers a Facility in accordance with clause 2.30B.8E, AEMO must assess the application in respect of the export capability of the Facility only, regardless of the System Size of the Energy Producing System referred to in clause 2.30B.2(a).

2.30B.8F. Where the Injection of a Facility containing an Intermittent Load exceeds the Nominated Excess Capacity in more than 120 Dispatch Intervals in any continuous 12-month period, the Market Participant must update the Nominated Excess Capacity provided under clause 2.30B.3(e).

2.30B.9. For the purpose of defining Metered Schedules, each Facility containing an Intermittent Load is represented by the following components:

(a) if~~where~~ the Intermittent Load is part of a Registered Facility, a Registered Facility component;

(b) if~~where~~ the Load was deemed to be an Intermittent Load under clause 1.48.2, an Intermittent Load component; and

(c) a remaining Load component~~, which may be Temperature Dependent or Non-Temperature Dependent~~.

2.30B.10. Where the Load was deemed to be an Intermittent Load under clause 1.48.2, for the purpose of defining Metered Schedules associated with the interval meter measuring the Facility containing the Intermittent Load, the following methodology is to apply:

(a) define for each Trading Interval:

i. NMQ to be the net metered energy measured by the meter where a positive amount indicates supply and a negative amount indicates consumption;

ii. NS to be the net supply (supply as a positive value plus consumption as a negative value) measured by the Intermittent Load meter which corresponds to supply and consumption, excluding consumption by Intermittent Loads, by Market Participants, and by Market Participant Facilities which are separately metered for the purpose of settlement under these ESM Rules. This may have a positive or negative value;

iii. NL to be the maximum possible consumption behind that meter due to consumption which is not Intermittent Load but which is measured only by the meter which also measures the Intermittent Load. This has a negative value;

iv. [Blank]

v. if the Load is part of a Registered Facility, MSG to be the greater of zero and the maximum energy output from the Registered Facility in excess of that required to supply the Intermittent Load based on Standing Data and measured only by the Intermittent Load meter. This has a positive value; and

vi. AMQ to be the adjusted meter quantity which equals NMQ less NS;

(b) if the Load is not part of a Registered Facility then:

i. if AMQ is less than or equal to NL then:

1. for the purpose of defining its Metered Schedule the metered quantity associated with the Intermittent Load is AMQ minus NL; and

2. for the purpose of defining its Metered Schedule the metered quantity associated with non-Intermittent Loads only measured by the Intermittent Load meter is NL;

ii. if AMQ is greater than NL but less than zero then:

1. for the purpose of defining its Metered Schedule the metered quantity associated with the Intermittent Load is zero; and

2. for the purpose of defining its Metered Schedule the metered quantity associated with non-Intermittent Loads only measured by the Intermittent Load meter is AMQ; and

iii. if AMQ is greater than or equal to zero then:

1. for the purpose of defining its Metered Schedule the metered quantity associated with the Intermittent Load is AMQ; and

2. for the purpose of defining its Metered Schedule the metered quantity associated with non-Intermittent Loads only measured by the Intermittent Load meter is zero; and

(c) if the Load is part of a Registered Facility then:

i. if AMQ is less than or equal to NL then:

1. for the purpose of defining its Metered Schedule the metered quantity associated with the Intermittent Load is AMQ minus NL;

2. for the purpose of defining its Metered Schedule the metered quantity associated with non-Intermittent Loads measured only by the meter that also measures the Intermittent Load is NL; and

3. for the purpose of defining its Metered Schedule the metered quantity associated with the Registered Facility measured only by the meter that also measures the Intermittent Load is zero;

ii. if AMQ is greater than NL but less than or equal to zero then:

1. for the purpose of defining its Metered Schedule the metered quantity associated with the Intermittent Load is zero;

2. for the purpose of defining its Metered Schedule the metered quantity associated with non-Intermittent Loads measured only by the meter that also measures the Intermittent Load is AMQ; and

3. for the purpose of defining its Metered Schedule the metered quantity associated with the Registered Facility measured only by the meter that also measures the Intermittent Load is zero;

iii. if AMQ is greater than zero but less than or equal to MSG then:

1. for the purpose of defining its Metered Schedule the metered quantity associated with the Intermittent Load is zero;

2. for the purpose of defining its Metered Schedule the metered quantity associated with non-Intermittent Loads measured only by the meter that also measures the Intermittent Load is zero; and

3. for the purpose of defining its Metered Schedule the metered quantity associated with the Registered Facility measured only by the meter that also measures the Intermittent Load is AMQ; and

iv. if AMQ is greater than MSG then:

1. for the purpose of defining its Metered Schedule the metered quantity associated with the Intermittent Load is AMQ minus MSG;

2. for the purpose of defining its Metered Schedule the metered quantity associated with non-Intermittent Loads measured only by the meter that also measures the Intermittent Load is zero; and

3. for the purpose of defining its Metered Schedule the metered quantity associated with the Registered Facility measured only by the meter that also measures the Intermittent Load is MSG.

2.30B.11. Where an application for a Load or part of a Load to be treated as an Intermittent Load was accepted by AEMO under clause 2.30B.6 on or after the New WEM Commencement Day, for the purpose of defining Metered Schedules associated with the interval meter measuring the Facility containing the Intermittent Load, the following methodology is to apply:

(a) define for each Trading Interval:

i. NMQ to be the net metered energy measured by the meter in Meter Data Submissions where a positive amount indicates supply and a negative amount indicates consumption;

ii. NS to be the net supply (supply as a positive value plus consumption as a negative value) measured by the Intermittent Load meter which corresponds to supply and consumption, excluding consumption by Intermittent Loads, by Market Participants, and by Market Participant Facilities which are separately metered in Meter Data Submissions for the purpose of settlement under these ESM Rules. This may have a positive or negative value; and

iii. AMQ to be the adjusted meter quantity which equals NMQ less NS;

(b) where the Intermittent Load is part of a Registered Facility:

i. where AMQ is positive, indicating supply:

1. the Metered Schedule for the Registered Facility is AMQ; and

2. the Metered Schedule for the Non-Dispatchable Load is zero; or

ii. where AMQ is negative, indicating consumption:

1. the Metered Schedule for the Registered Facility is zero; and

2. the Metered Schedule for the Non-Dispatchable Load is AMQ; or

(c) where the Intermittent Load is not part of a Registered Facility, the Metered Schedule for the Non-Dispatchable Load is AMQ.

2.30C. Rule Commencement and Registration Data

2.30C.1. Subject to sections 1.47, 1.48, 1.49 and 1.54A, AEMO must not require that an applicant for Rule Participant registration or Facility registration provide

information on any application form, or evidence to support that application form, pertaining to registration if the applicable ESM Rules requiring that information to be provided have not commenced.

2.31. Registration Process

2.31.1. AEMO must maintain the following forms on the WEM Website:

(a) Rule Participant registration form;

(b) Rule Participant de-registration form;

(c) Facility registration form;

(d) Facility de-registration form;

(e) Facility transfer form;

(f) Facility aggregation form;

(g) Facility disaggregation form; and

(h) Facility Class reassessment form.

2.31.1A. AEMO must not approve a Facility transfer application if approval of the application would result in Separate Facilities behind the same Connection Point being registered to more than one Market Participant.

2.31.2. A person intending to submit an application described in clause 2.31.1 must provide the information specified in section 2.33, as applicable, and any applicable Application Fees to AEMO.

2.31.2A. AEMO must maintain a form on the WEM Website for applications under clause 2.31.2C.

2.31.2B. Subject to clause 2.31.2D, a person may submit an application for Separate Facilities and the application must be submitted prior to submitting a Facility registration form referred to in clause 2.31.1(c).

2.31.2C. An application under clause 2.31.2B must be made for each proposed Separate Facility behind a Connection Point.

2.31.2D. A Market Participant may only submit an application under clause 2.31.2B, and such an application will only be valid, if the Market Participant does not submit an application for changes to the System Size or Facility Technology Type of any existing Registered Facility, located behind the same Connection Point, before the registration application for Separate Facilities is determined by AEMO.

2.31.2E. AEMO must notify an applicant of the receipt of an application under clause 2.31.2B within one Business Day of receiving the application.

2.31.2F. AEMO must determine whether to approve or reject an application submitted under clause 2.31.2B, and notify the applicant of its decision:

(a) within 20 Business Days of receiving the application under clause 2.31.2B; or

(b) if further information is requested under clause 2.31.2G, within 20 Business Days of receiving the further information in full.

2.31.2G. AEMO may, at its discretion, request further information from the applicant in respect of the application.

2.31.2H. If AEMO requests information from an applicant under clause 2.31.2G and the applicant does not provide the information to AEMO within 20 Business Days of the date of AEMO's request, AEMO must deem the application to have been withdrawn.

2.31.2I. As part of determining an application made under clause 2.31.2B, AEMO must confirm the location of the intended Measurement Point and Connection Point with the Network Operator, and may, at its discretion, request further information from a Network Operator in respect of the location of the intended Measurement Point and Connection Point, and the time by which the information must be provided, which must be reasonable.

2.31.2J. The Network Operator must comply with a request made under clause 2.31.2I by the time specified by AEMO.

2.31.2K. AEMO must not approve an application made under clause 2.31.2B unless it is satisfied that:

(a) the Connection Point and the Measurement Point for the Facility will not be at the same location;

(b) there is, or will be, more than one Facility behind the Connection Point;

(c) all Registered Facilities behind the Connection Point will be registered to the same Market Participant;

(d) each Facility behind the Connection Point has, or will have, a separate Measurement Point;

(e) the relevant Network Operator has confirmed the location of the Connection Point and Measurement Point for the Facility;

(f) approving the application would not adversely impact AEMO's ability to maintain Power System Security and Power System Reliability;

(g) the Facility will not be electrically connected to any other Facility behind the Measurement Point; and

(h) the Facility will not be capable of Injection or Withdrawal at more than one of the Measurement Points behind the Connection Point.

2.31.2L. If AEMO approves an application made under clause 2.31.2B, the Network Operator must install a revenue quality interval meter that complies with the Metering Code at the Measurement Point confirmed under clause 2.31.2I.

2.31.2M. A Market Participant responsible for a Separate Facility is responsible for all network equipment behind the Connection Point.

2.31.2N. A Market Participant responsible for a Separate Facility must, at all times:

(a) respect the thermal limits of network equipment behind the Connection Point;

(b) ensure accurate SCADA system data is made available and provided to AEMO via the Network Operator;

(c) meet all relevant SCADA system data requirements; and

(d) ensure Outages related to the Separate Facilities include Outages of the network equipment located behind the Connection Point.

2.31.2O. For the purpose of these ESM Rules, for a Separate Facility:

(a) the Connection Point is not a Measurement Point for the purposes of Chapter 8 and Chapter 9 of the ESM Rules; and

(b) the approval of the application made under clause 2.31.2B does not substitute the Measurement Point for the connection point or otherwise redefine references to the connection point in the ESM Rules, including Chapter 3A and Appendix 12 of these ESM Rules unless otherwise specifically stated.

2.31.2P. For the avoidance of doubt:

(a) subject to the requirements of clause 2.31.2K, there is no limit to the number of Separate Facilities that may exist behind a Connection Point;

(b) the Separate Facilities can be located behind more than one shared Connection Points;

(c) a Registered Facility that intends to become a Separate Facility may retain its existing registration and is not required to de-register the Facility, but is required to submit registration applications in relation to any new Facilities behind the Connection Point; and

(d) Separate Facilities behind a Connection Point may be of the same or different Facility Technology Types.

2.31.3. AEMO must notify an applicant of the receipt of the application within one Business Day of receipt of an application form described in clause 2.31.1.

2.31.4. Subject to clause 2.30C.1, AEMO may, at its discretion, require that an applicant provide information that is missing from the relevant application form, or is

inadequately specified. The date at which the requested information is submitted to AEMO in full is to become the date of receipt of the application for the purpose of clause 2.31.3.

2.31.4A. If AEMO requests information from an applicant under clause 2.31.4 and the applicant does not provide the information to AEMO within 20 Business Days of the date of AEMO's request, the applicant will be deemed to have withdrawn the application.

2.31.5. AEMO may consult with the relevant Network Operators with respect to applications for registration, de-registration, transfer or Facility Class reassessment of Facilities containing Energy Producing Systems or Loads.

2.31.6. If AEMO determines that a test required by these ESM Rules or a WEM Procedure must be conducted in order for AEMO to accept or reject an application for Facility registration, AEMO must notify the applicant within 15 Business Days from the date of notification of receipt of the application of:

(a) the dates on which any required tests may be held;

(b) the date by when results of any required tests must be made available to AEMO; and

(c) the date by when AEMO expects to accept or reject the application, being no later than 10 Business Days after the date in clause 2.31.6(b).

2.31.7. When a test is required under the ESM Rules or a WEM Procedure, prior to the registration of a Facility, AEMO may determine that the test is not necessary and in doing so must take into consideration any previous tests performed in connection with an Arrangement for Access.

2.31.8. AEMO must allow a Facility holding an Arrangement for Access to operate for the purpose of tests required under the Arrangement for Access, provided that the carrying out of these tests has received approval from AEMO.

2.31.9. The relevant Network Operator must cooperate with any tests required by these ESM Rules or a WEM Procedure that must be conducted prior to the registration of a Facility.

2.31.10. AEMO must determine whether to accept or reject the application and notify an applicant accordingly:

(a) by the date specified in accordance with clause 2.31.6(c) in the case of an application for Facility registration where AEMO has determined that a test must be conducted in order for AEMO to accept or reject the application; and

(b) within 20 Business Days after the date of notification of receipt for all other applications.

2.31.11. Where AEMO has accepted the application the notification under clause 2.31.10 must include:

(a) in the case of an application to register as a Rule Participant the date and time that registration is to take effect where the date is to be the later of the earliest date by which AEMO can facilitate the registration and the date specified in accordance with clause 2.33.1(k);

(b) in the case of an application to de-register as a Rule Participant:

i. where the Rule Participant is a Market Participant, the date and time on which the Rule Participant must cease trading as a Market Participant, being the start of the Trading Day beginning on the date specified in accordance with clause 2.33.2(d); and

ii. a statement that de-registration as a Rule Participant will not take effect until the requirements of clause 2.31.16 are satisfied;

(c) in the case of an application to register a Facility, the date and time that registration is to take effect where the date is to be the later of the earliest date by which AEMO can facilitate the registration and the date specified in accordance with clause 2.33.3(c)(xviii);

(d) in the case of an application to de-register a Facility, the date and time that de-registration is to take effect where the date is to be the later of the earliest date by which AEMO can facilitate the de-registration and the date specified in accordance with clause 2.33.4(d);

(e) in the case of an application to transfer a Facility, the date and time that transfer is to take effect where the date is to be the later of the earliest date by which AEMO can facilitate the transfer and the date specified in accordance with clause 2.33.5(e)(iii);

(f) in the case of an application to aggregate two or more Facilities, the date and time the aggregation is to take effect, where the date is to be the later of the earliest date by which AEMO can facilitate the aggregation and the date specified in accordance with clause 2.33.6(d);

(g) in the case of an application to disaggregate two or more Facilities, the date and time that is to take effect, where the date is to be the later of the earliest date by which AEMO can facilitate the disaggregation and the date specified in accordance with clause 2.33.7(d); and

(h) in the case of an application for Facility Class reassessment, the date and time that the Facility Class change is to take effect, where the date is to be the later of the earliest day by which AEMO can facilitate the Facility Class change and the date specified in accordance with clause 2.33.8(c).

2.31.12. Where AEMO has rejected the application the notification must include the reason for its rejection of the application.

2.31.13. AEMO may only reject an application described in clause 2.31.1 if:

(a) subject to clause 2.30C.1, the application form, when read together with any information received after a request under clause 2.31.4 is incomplete or provides insufficient detail;

(b) subject to clause 2.30C.1, the required supporting evidence is insufficient or not provided;

(c) the required Application Fee is not paid;

(d) AEMO is not satisfied that the applicant can comply with the requirements for participation in the Wholesale Electricity Market or registration;

(e) in the case of an application to register as a Rule Participant where the person has previously been de-registered as a Rule Participant following an order from the Electricity Review Board or de-registered by AEMO under clause 2.32.7E(b), AEMO is not satisfied that person has remedied the reason for or underlying cause of the prior de-registration;

(f) in the case of an application to de-register as a Market Participant, the applicant has not arranged to de-register its Registered Facilities or transfer those Registered Facilities to another Rule Participant prior to the proposed date of de-registration as a Market Participant;

(g) [Blank]

(h) in the case of an application to de-register as a Network Operator, the applicant has not arranged to de-register its Registered Facilities that are Networks or transfer those Registered Facilities to another Rule Participant prior to the proposed date of de-registration as a Network Operator;

(i) the applicant fails to conduct tests in accordance with clause 2.31.6, fails the tests, or fails to provide adequate information about the tests;

(j) in the case of an application to register a Facility:

i. the relevant Metering Data Agent informs AEMO that the Facility or the interval meter for the Facility is not registered in its Meter Registry or that the Meter Registry information is not consistent with the information in the application to register the Facility;

ii. the controllability assessment undertaken by AEMO in accordance with the WEM Procedure referred to in clause 2.29.4N determines that the Facility is not able to meet the controllability requirements for the requested Facility Class;

iii. the Facility is not able to meet the requirements for the requested Facility Class; or

iv. AEMO considers that the Connection Point and the Measurement Point of the Facility are not intended to be at the same location, and

the applicant has not made an application under clause 2.31.2B, or an application made under clause 2.31.2B was rejected by AEMO;

(k) in the case of an application to transfer a Facility:

i. the transfer of the Facility would result in the number of Capacity Credits allocated for a Trading Day by the Market Participant transferring the Facility exceeding the number of Capacity Credits held for that Trading Day for the Facility by the Market Participant that are able to be traded bilaterally under the ESM Rules; or

ii. clause 2.31.1A applies;

(l) in the case of an application to transfer a Facility, the transfer of the Facility would result in the number of Capacity Credits allocated for a Trading Day by the Market Participant transferring the Facility exceeding the number of Capacity Credits held for that Trading Day for the Facility by the Market Participant that are able to be traded bilaterally under the ESM Rules;

(m) in the case of an application for a Facility aggregation, AEMO considers the aggregation will not meet the criteria in clause 2.30.5;

(n) in the case of an application for a Facility disaggregation, the Facility meets the criteria in clause 2.30.5(g)(ii); or

(o) in the case of an application for a Facility Class reassessment:

i. if the controllability assessment undertaken by AEMO in accordance with clause 2.29.4N determines that the Facility is not able to meet the controllability requirements for the requested Facility Class; and

ii. if the Facility is not able to meet the requirements applicable for the requested Facility Class.

2.31.14. A person who has an application to become a Rule Participant approved, is to become a Rule Participant in the approved class from the date and time specified in accordance with clause 2.31.11(a).

2.31.15. A person who has an application to deregister as a Rule Participant accepted by AEMO must cease trading as a Market Participant by the date and time specified in clause 2.31.11(b)(i).

2.31.16. Where an application for de-registration as a Rule Participant has been accepted by AEMO, participation in the relevant Rule Participant class ceases from the end of the first Business Day in which the Rule Participant:

(a) has de-registered all of its Facilities applicable to the class;

(b) has resolved and settled all outstanding disputes, investigations and enforcement actions;

(c) has paid all outstanding debts to AEMO; and

(d) has received final payment of all amounts owed to it by AEMO.

2.31.17. The fact that a person has ceased to be registered as a Rule Participant does not affect any right, obligation or liability of that person under these ESM Rules which arose prior to the cessation of its registration.

2.31.18. If AEMO accepts a Facility registration then that Facility becomes a Registered Facility of the applicant from the date and time specified in accordance with clause 2.31.11(c).

2.31.19. If AEMO accepts a Facility deregistration then that Facility ceases being a Registered Facility of the applicant from the date and time specified in accordance with clause 2.31.11(d).

2.31.20. If AEMO accepts a Facility transfer then from the date and time specified in accordance with clause 2.31.11(e):

(a) each Facility covered by the transfer will cease to be a Registered Facility of the Rule Participant to whom it was registered prior to the transfer; and

(b) each Facility covered by the transfer will become a Registered Facility of the Rule Participant who submitted the application.

2.31.21. If AEMO approves a Facility aggregation application then the Facility will be aggregated and registered as a single Facility from the date and time specified and in accordance with clause 2.31.11(f).

2.31.22. If AEMO approves a Facility disaggregation application then the Facility will be disaggregated and registered as the constituent Facilities from the date and time specified in accordance with clause 2.31.11(g).

2.31.23. If AEMO determines that a Facility should be registered in a different Facility Class, then the Facility Class change will be effective from the date determined by AEMO and notified to the Market Participant in accordance with the WEM Procedure referred to in clause 2.31.25.

2.31.24. AEMO must maintain a register of:

(a) Rule Participants; and

(b) Registered Facilities.

2.31.25. AEMO must document the following processes that AEMO and other Rule Participants, as applicable, must follow in a WEM Procedure:

(a) Rule Participant registration;

(b) Facility registration, de-registration, aggregation and disaggregation;

(c) Facility Class reassessment; and

(d) Facility transfers.

2.31.26. Applicants must follow the processes in the WEM Procedure referred to in clause 2.31.25 applicable to the Rule Participant class, Facility Class and type of application.

2.31.27. AEMO must facilitate participation in a Rule Participant class or Facility Class by an approved applicant as soon as practicable.

2.32. Rule Participant Suspension and Deregistration

2.32.1. Where the Economic Regulation Authority receives notice that the Electricity Review Board has made a decision in accordance with the Regulations that a Rule Participant be suspended, the Economic Regulation Authority must notify AEMO and AEMO must issue a Suspension Notice to the Rule Participant.

2.32.2. Where AEMO has issued a Suspension Notice under section 9.19 or pursuant to a notification by the Economic Regulation Authority in accordance with clause 2.32.1, AEMO must issue a Market Advisory specifying that the Rule Participant has been suspended from the Wholesale Electricity Market and provide details of the suspension, including the reason for the suspension and the date the suspension took effect.

2.32.2A. If a Suspension Notice is withdrawn, AEMO must promptly publish a notice on the WEM Website and issue a Market Advisory specifying that the Suspension Notice has been withdrawn.

2.32.3 AEMO may specify in a Suspension Notice directions that the relevant Rule Participant must comply with to give effect to the suspension.

2.32.4. From the time AEMO issues a Suspension Notice to a Rule Participant:

(a) the Rule Participant must comply with the Suspension Notice, including:

i. trading or ceasing trading in the Wholesale Electricity Market to the extent specified in the notice; and

ii. continuing to meet any existing Reserve Capacity Obligations specified in the notice.

(b) AEMO may do all or any of the following to give effect to the notice:

i. reject any submissions from, or on behalf of, the Market Participant, and cancel any existing submissions; and

ii. withhold payments owed to a defaulting Rule Participant.

2.32.5. AEMO must withdraw a Suspension Notice where:

(a) if the notice was issued under section 9.19, the defaulting Rule Participant has remedied the relevant Suspension Event and is complying with its Prudential Obligations; and

(b) if the notice was issued under clause 2.32.1, it receives a further notice that the Electricity Review Board has withdrawn the suspension,

and no other circumstances exist that would entitle AEMO to issue a Suspension Notice.

2.32.6. Where a Rule Participant has been suspended for 90 days AEMO must notify the Economic Regulation Authority and, the Economic Regulation Authority may apply to the Electricity Review Board for a de-registration order in accordance with the Regulations.

2.32.7. Where the Economic Regulation Authority receives notice that the Electricity Review Board has made a decision in accordance with the Regulations that a Rule Participant be de-registered, the relevant Rule Participant ceases to be a Rule Participant from the time specified in the notice, and the Economic Regulation Authority must notify AEMO. AEMO must de-register all of the Facilities registered by or to the Rule Participant by the time specified in the notice.

2.32.7A. AEMO may at any time review whether a Rule Participant registered in the classes outlined in clauses 2.28.1(a) or 2.28.1(b) continues to meet all of the criteria specified in clause 2.28.19.

2.32.7AA. A Rule Participant that is registered in a class outlined in clauses 2.28.1(a) or 2.28.1(b) must notify AEMO as soon as it becomes aware that it no longer meets all of the criteria specified in clause 2.28.19.

2.32.7B. If:

(a) the Economic Regulation Authority becomes aware that a Rule Participant registered in the classes outlined in clauses 2.28.1(a) or 2.28.1(b) no longer meets all of the criteria specified in clause 2.28.19, it must notify AEMO; or

(b) AEMO becomes aware that a Rule Participant registered in the classes outlined in clauses 2.28.1(a) or 2.28.1(b) no longer meets all of the criteria specified in clause 2.28.19 (whether as a result of being informed by the Economic Regulation Authority pursuant to clause 2.32.7B(a) or otherwise),

then, subject to clause 2.32.7BB(b), AEMO must issue a Registration Correction Notice to that Rule Participant.

2.32.7BA. If AEMO becomes aware that a Rule Participant has become a Chapter 5 body corporate (as defined in the Corporations Act), or is under a similar form of

administration under any laws applicable to it in any jurisdiction, then AEMO must, as applicable:

(a) if AEMO intends to issue a Suspension Notice, issue the Suspension Notice to the Chapter 5 body corporate and the External Administrator, which may include directions that would have been given in a notice to the relevant Rule Participant pursuant to clause 2.32.3; or

(b) if AEMO is required to issue a Registration Correction Notice, issue the Registration Correction Notice to the Chapter 5 body corporate and the External Administrator, specifying details that it would have specified in a notice to the relevant Rule Participant pursuant to clause 2.32.7C; or

(c) notify the Economic Regulation Authority that the Rule Participant is a Chapter 5 body corporate or has had an External Administrator appointed, and that AEMO is not required to, as applicable:

i. issue a Suspension Notice to the Rule Participant pursuant to clause 2.32.1; or

ii. issue a Registration Correction Notice to the Rule Participant pursuant to clause 2.32.7B(b).

2.32.7BB. If AEMO becomes aware that a Rule Participant has been deregistered (as defined in the Corporations Act), AEMO:

(a) is not required to issue a Suspension Notice to the Rule Participant pursuant to clause 2.32.1;

(b) is not required to issue a Registration Correction Notice to the Rule Participant pursuant to clause 2.32.7B(b);

(c) must de-register the Rule Participant and all of the Facilities registered by or to the Rule Participant on a date and time nominated by AEMO;

(d) must, as soon as practicable, notify the Economic Regulation Authority that the Rule Participant has been wound up or dissolved; and

(e) must, as soon as practicable, issue a Market Advisory specifying that the Rule Participant will cease, or has ceased, to be registered from the date and time nominated by AEMO.

2.32.7C. Each Registration Correction Notice must:

(a) specify which of the criteria specified in clause 2.28.19 AEMO considers the Rule Participant no longer meets;

(b) require that the Rule Participant:

i. correct the circumstances that have led to it no longer meeting all of the criteria specified in clause 2.28.19 and provide evidence to AEMO that it has done so; or

ii. provide evidence to AEMO that it continues to meet all of the criteria specified in clause 2.28.19;

(c) specify a date and time for the Rule Participant to respond to the Registration Correction Notice, which must be at least 90 days from the date of the Registration Correction Notice; and

(d) specify a date and time from which the de-registration of the Rule Participant will become effective, should that Rule Participant not provide evidence in response to the Registration Correction Notice that is satisfactory to AEMO.

2.32.7D. Where AEMO has issued a Registration Correction Notice it may extend the deadline for:

(a) correcting the circumstances that are the subject of the notice; or

(b) responding to the notice

for any period that it considers is appropriate in the circumstances.

2.32.7E. AEMO must consider any evidence or submissions provided by a Rule Participant in response to a Registration Correction Notice and determine whether:

(a) it is satisfied that the Rule Participant meets all of the criteria specified in clause 2.28.19. If so, AEMO will notify the Rule Participant that no further action will be taken; or

(b) it is not satisfied that the Rule Participant meets all of the criteria specified in clause 2.28.19. If so, AEMO will issue a De-registration Notice notifying the Rule Participant that it will cease to be registered from the date and time specified in the De-registration Notice and the Rule Participant will cease to be registered with effect from that date and time.

2.32.7F. Where AEMO de-registers a Rule Participant it must also de-register all of the Facilities registered by the Rule Participant by the time specified in the De-registration Notice. For the avoidance of doubt, AEMO must not de-register a Rule Participant, if that Rule Participant holds Capacity Credits for any of its Facilities.

2.32.8. The de-registration of a Rule Participant does not affect any rights, obligations or liabilities arising under or in connection with these ESM Rules prior to the time the Rule Participant ceases to be a Rule Participant.

2.32.9. AEMO may require a Network Operator to disconnect one or more of the Facilities registered by a suspended or deregistered Rule Participant in order to give effect to a Suspension Notice or deregistration. If AEMO gives a notice under this clause to a Network Operator, then the Network Operator must comply with the notice as soon as practicable. If the disconnection arises because of the suspension of a Market Participant and the Suspension Notice is subsequently withdrawn by AEMO under clause 2.32.5, then AEMO must request the relevant

Network Operator to reconnect the Facilities registered by the relevant Rule Participant.

2.33. The Registration Application Forms

2.33.1. AEMO must prescribe a Rule Participant registration application form that requires an applicant to provide the following:

(a) the relevant non-refundable Application Fee;

(b) whether the applicant is already a Rule Participant;

(c) contact details for the applicant;

(d) invoicing details for the applicant;

(e) tax information from the applicant required by law;

(f) the class of Rule Participant to which the application relates;

(g) if the applicant is seeking an exemption from the requirement to register as a Rule Participant;

(h) if the application relates to the sale of electricity to Contestable Customers by an applicant for the Market Participant class, evidence that the applicant holds an Arrangement for Access for the purpose of taking power from the electricity grid;

(i) confirmation of the implementation of any processes or systems required by these ESM Rules for the Rule Participant class to which the application relates;

(j) information on any Facility registration applications that will follow successful Rule Participant registration or are required as a condition of Rule Participant registration;

(k) a proposed date for becoming a Rule Participant;

(l) information required for AEMO to determine the applicant's required Credit Limit;

(m) such other information AEMO requires to process the application;

(n) an acknowledgement from the Rule Participant that it is aware of its obligations under these ESM Rules; and

(o) a statement that the information provided is accurate.

2.33.2. AEMO must prescribe a Rule Participant de-registration application form that requires an applicant to provide the following:

(a) the relevant non-refundable Application Fee;

(b) the identity of the Rule Participant;

(c) the class of Rule Participant to which the application relates;

(d) a proposed date for ceasing operation in the Rule Participant class covered by the application, where that date must be not earlier than 10 Business Days after the date of application;

(e) such other information AEMO requires to process the application; and

(f) a statement that the information provided is accurate.

2.33.3. AEMO must prescribe a Facility registration application form that requires an applicant to provide the following:

(a) the relevant non-refundable Application Fee where this Application Fee:

i. may differ for different Facility Classes;

ii. must be a single Application Fee for multiple registered Demand Side Programmes being allocated Capacity Credits under clause 2.29.5AB(a); and

iii. must be a single Application Fee for multiple Small Aggregations being registered by the same Market Participant;

(b) the identity of the person making the application, where that person must be a Rule Participant or be in the process of applying to be registered as a Rule Participant;

(c) for each Facility to be registered:

i. the name of the Facility;

ii. the owner of the Facility;

iii. if the applicant is seeking an exemption from the requirement to register a Facility;

iv. the proposed Facility Class and each Facility Technology Type for the Facility;

v. the location of the Facility;

vi. if the Facility is to be aggregated with one or more other Facilities in accordance with section 2.30 and details of any proposed aggregation;

vii. if the Facility is a Small Aggregation;

viii. the type of Facility as defined under clause 2.29.1B;

ix. a single line diagram for the Facility, including the location of transformers, switches, operation and interval meters (which are to be maintained in the Meter Registry);

x. the point on the network at which the Facility can connect;

xi. the network nodes at which the Facility can connect;

xii. contact details for the Facility;

xiii. if the Facility is yet to commence operation:

1. a proposed date for commencing commissioning the Facility; and

2. a commissioning plan for the Facility.

xiv. evidence that an Arrangement for Access is in place, if necessary;

xv. details of operational control over that the Facility;

xvi. applicable Standing Data as required by Appendix 1;

xvii. information on the communication systems that exist for operational control of the Facility; and

xviii. a date for commencement of operation; and

(d) such other information AEMO requires to process the application; and

(e) a statement that the information provided is accurate.

2.33.4. AEMO must prescribe a Facility de-registration application form that requires an applicant to provide the following:

(a) the relevant non-refundable Application Fee;

(b) the name of the Registered Facility to which the application relates;

(c) information as to whether the Registered Facility is being:

i. decommissioned; or

ii. moth-balled or placed in reserve shut-down, in which case information on the time required to return the Registered Facility to service is to be provided;

(d) a proposed date on which the Registered Facility is to cease to be registered in the name of that Rule Participant where that date must be:

i. not earlier than six months after the date of application if the Facility will cease operation; or

ii. the date the application is accepted in the event that the Facility has been rendered permanently inoperable; or

iii. not earlier than one month after the date of application if the Facility is a Demand Side Programme; and

(e) such other information AEMO requires to process the application; and

(f) a statement that the information provided is accurate.

2.33.5. AEMO must prescribe a Facility transfer application form that requires an applicant to provide the following:

(a) the relevant non-refundable Application Fee;

(b) the identity of the person making the application, where that person must be a Rule Participant or be in the process of applying to be registered as a Rule Participant;

(c) the name of the Rule Participant in respect of which the Facility is currently registered;

(d) evidence that the Rule Participant identified in clause 2.33.5(c) consents to the transfer;

(e) for each Facility to be transferred:

i. the name of the Facility;

ii. the owner of the Facility;

iii. a proposed date for the transfer to take effect;

iv. evidence that any required Arrangement for Access is in place; and

v. details of operational control over the Facility; and

(f) evidence to AEMO's satisfaction that the person making the application has assumed the Reserve Capacity Obligations associated with the Facility;

(g) such other information AEMO requires to process the application; and

(h) a statement that the information provided is accurate.

2.33.6. AEMO must prescribe a Facility aggregation application form that requires an applicant to provide the following:

(a) the relevant non-refundable Application Fee;

(b) the names of the Facilities to which the application relates;

(c) evidence to AEMO's satisfaction that the conditions of clause 2.31.10(a) can be met;

(d) a proposed date on which the aggregation is to take effect;

(e) such other information AEMO requires to process the application; and

(f) a statement that the information provided is accurate.

2.33.7. AEMO must prescribe a Facility disaggregation application form that requires an applicant to provide the following:

(a) the relevant non-refundable Application Fee;

(b) the names of the Registered Facilities to which the application relates;

(c) evidence satisfactory to AEMO that the requirement in clause 2.30.10(a) that each disaggregated Facility is to be registered as a separate facility can be met;

(d) a proposed date on which the disaggregation is to take effect;

(e) such other information AEMO requires to process the application; and

(f) a statement that the information provided is accurate.

2.33.8. AEMO must prescribe a Facility Class reassessment application form that requires an applicant to provide the following:

(a) the relevant non-refundable Application Fee;

(b) the name of the Registered Facility to which the application relates;

(c) the proposed Facility Class, which must be either Scheduled Facility, Semi-Scheduled Facility or Non-Scheduled Facility, and a proposed date on which the reassessment is to take effect;

(d) evidence to AEMO's satisfaction that the Registered Facility meets the conditions specified in clause 2.29.6;

(e) information required by AEMO to reassess the Facility Class;

(f) such other information AEMO requires to process the application; and

(g) a statement that the information provided is accurate.

2.34. Standing Data and Rule Participant Details

Standing Data

2.34.1. AEMO must maintain a record of the Standing Data described in Appendix 1, including the date from which the data applies.

2.34.2. Each Rule Participant must ensure that Standing Data required by the ESM Rules to be provided to AEMO for that Rule Participant is and remains accurate.

2.34.2A. A Rule Participant must, as soon as practicable, seek to have its Standing Data revised, other than Standing Data described in clause 2.34.2B, if it becomes aware that its Standing Data is currently inaccurate or not in compliance with the requirements of these ESM Rules, or will become inaccurate or will cease to be in compliance with the requirements of these ESM Rules within the next five Business Days.

2.34.2B. A Rule Participant may submit a proposed change to the following Standing Data at any time:

(a) [Blank]

(b) whether a Load not currently treated as an Intermittent Load is to be treated as an Intermittent Load, provided that the Rule Participant is confident that the Load satisfies the requirements of clause 2.30B.2; and

(c) whether a Load currently treated as an Intermittent Load is to cease to be treated as an Intermittent Load.

2.34.3. A Rule Participant that seeks to change its Standing Data must notify AEMO of:

(a) the revisions it proposes be made to its Standing Data;

(b) the reason for the change; and

(c) the date from which the revision will take effect.

2.34.4. Notwithstanding clauses 2.34.2 and 2.34.3, a Rule Participant is not required to notify AEMO of changes to Standing Data where the changes reflect a temporary change in the capacity or capability of a Registered Facility resulting from an Outage.

2.34.5. AEMO must confirm receipt of the notification described in clause 2.34.3 within one Business Day of receipt of notification.

2.34.6. AEMO may, at its discretion, request further information from a Rule Participant, including requiring that tests be conducted and evidence provided, concerning a notification of a change in Standing Data described in clause 2.34.3. A Rule Participant must comply with a request under this clause.

2.34.7. AEMO:

(a) may reject a change in any Standing Data if it considers that an inadequate explanation, including test results, was provided to justify the change in Standing Data; and

(b) must reject a change where the Standing Data, including Standing Data relating to the accreditation of a Facility to provide a Frequency Co-optimised Essential System Service in accordance with section 2.34A, is required to:

i. be modified in accordance with processes in these ESM Rules other than the processes in this section 2.34; or

ii. firstly be approved by AEMO through processes in these ESM Rules other than the processes set out in this section 2.34, and AEMO has not given its approval to the change in Standing Data in accordance with those other processes.

2.34.8. AEMO must notify the Rule Participant of its acceptance or rejection of the change in Standing Data as soon as practicable, and no later than three Business Days after the later of:

(a) the date of notification described in clause 2.34.3; and

(b) if AEMO makes a request under clause 2.34.6, the date on which the information requested is received by AEMO.

2.34.9. If AEMO rejects a change in Standing Data it must provide the Rule Participant that requested the change with its reasons for rejecting the change.

2.34.10. [Blank]

2.34.11. AEMO must:

(a) use reasonable endeavours to verify that the Standing Data required by the ESM Rules to be provided by a Rule Participant to AEMO is accurate and remains accurate; and

(b) require that a Rule Participant provide updated Standing Data for a Facility, if AEMO considers the information provided by the Rule Participant to be inaccurate or no longer accurate.

2.34.12. AEMO may use Standing Data to assess whether a Market Participant continues to meet its obligations under these ESM Rules and the WEM Procedures.

2.34.12A. AEMO may use Standing Data to assess whether a Registered Facility continues to meet its obligations under these ESM Rules, including the requirements of the Facility Class it is registered in.

2.34.12B. Where a person is exempted from the requirement to register a Facility AEMO may request information regarding the Facility from that person to assess whether the exemption should be revoked and the information must be provided to AEMO by the time specified in the request.

2.34.13. If AEMO requires a Rule Participant to provide updated Standing Data under clause 2.34.11, then:

(a) The Rule Participant must provide AEMO with updated Standing Data for the specified Registered Facility as soon as practicable; and

(b) where the Rule Participant fails to provide updated Standing Data in a timely manner, AEMO may temporarily substitute data restricting the capability of the Facility until such time as the Rule Participant updates the Standing Data. AEMO must notify the Rule Participant when it is using such substitute data.

2.34.14. Revised Standing Data that is accepted by AEMO takes effect from 8:00 AM on the later of:

(a) the date proposed by the Rule Participant; or

(b) the second day after the day on which AEMO accepts the revised Standing Data.

Rule Participant Details

2.34.15. A Rule Participant must provide the information specified in clauses 2.33.1(c), 2.33.1(d) and 2.33.1(e) to AEMO:

(a) when first registering as a Rule Participant using the registration application outlined in clause 2.33.1; and

(b) as soon as practicable, following any changes to the information.

2.34A. Essential System Service Accreditation

Accreditation for Frequency Co-optimised Essential System Services

2.34A.1. AEMO may accredit a Facility to provide one or more of the following Frequency Co-optimised Essential System Services:

(a) Regulation Raise;

(b) Regulation Lower;

(c) Contingency Reserve Raise;

(d) Contingency Reserve Lower; and

(e) RoCoF Control Service.

2.34A.2. A Market Participant may apply to AEMO for accreditation of a Facility to provide one or more Frequency Co-optimised Essential System Services referred to in clause 2.34A.1 in accordance with the WEM Procedure referred to in clause 2.34A.13.

2.34A.3. Unless the relevant information is included as part of Standing Data, an application for accreditation of a Facility made pursuant to clause 2.34A.2 to provide one or more Frequency Co-optimised Essential System Services referred to in clause 2.34A.1 must include:

(a) the identity of the Facility;

(b) the maximum quantity of each applicable Frequency Co-optimised Essential System Service that the Facility intends to provide and where that value would differ under different Facility operating configurations;

(c) the Standing Enablement Minimum and Standing Enablement Maximum for the Facility for each applicable Frequency Co-optimised Essential System Service and where those values would differ under different Facility operating configurations;

(d) the Standing Low Breakpoint and Standing High Breakpoint for the Facility for each applicable Frequency Co-optimised Essential System Service and where those values would differ under different Facility operating configurations;

(e) for a Facility that is an Interruptible Load, the Restoration Profile of the Interruptible Load if applicable;

(f) for an application to provide Contingency Reserve Raise, whether the Facility will provide a Contingency Reserve Raise response in a block or continuous manner if applicable; and

(g) any other information that may be specified in the WEM Procedure referred to in clause 2.34A.13.

2.34A.4. AEMO must approve or reject an application for accreditation of a Facility made pursuant to clause 2.34A.2, including any subsequent amendments required by AEMO following consultation with the relevant Market Participant, in accordance with the WEM Procedure referred to in clause 2.34A.13, within 20 Business Days of the later of:

(a) receipt of the application under clause 2.34A.2; and

(b) receipt of all information required to be provided under clauses 2.34A.3 and as may be specified in the WEM Procedure referred to in clause 2.34A.13, including the results of any required Facility tests and re-tests.

2.34A.4A. Where AEMO requires tests or re-tests for a Facility, a Market Participant must conduct the test or re-test and will be responsible for the cost of that test or re-test.

2.34A.4B. AEMO may only require a test or re-test where AEMO considers it reasonably necessary for AEMO to consider the accreditation of the Facility to provide one or more Frequency Co-optimised Essential System Services referred to in clause 2.34A.1.

2.34A.4C. A Market Participant may withdraw an application for accreditation of a Facility made pursuant to clause 2.34A.2 at any time prior to the application being approved or rejected by AEMO under clause 2.34A.4.

2.34A.5. If AEMO rejects an application for accreditation of a Facility made pursuant to clause 2.34A.2, AEMO must provide reasons for the rejection to the Market Participant.

2.34A.6. If AEMO approves an application for accreditation of a Facility made pursuant to clause 2.34A.2, it must, as soon as possible, inform the Market Participant, together with notification of any required amendments, including revised or additional parameters or settings, and the Market Participant must include the following information in its Standing Data for the Facility, or in such other place as specified in the WEM Procedure referred to in clause 2.34A.13, in respect of each Frequency Co-optimised Essential System Service referred to in clause 2.34A.1 that the Facility is accredited to provide:

(a) the maximum quantity of each applicable Frequency Co-optimised Essential System Service for each relevant Facility operating configuration;

(b) the Standing Enablement Minimum and Standing Enablement Maximum for each relevant Facility operating configuration;

(c) the Standing Low Breakpoint and Standing High Breakpoint for each relevant Facility operating configuration;

(d) where the Facility is accredited to provide Contingency Reserve:

i. the Facility Speed Factor (which must be based on the Facility's actual or modelled response to a local frequency excursion determined in accordance with the WEM Procedure referred to in clause 2.34A.13);

ii. whether the Facility is subject to the Maximum Contingency Reserve Block Size; and

iii. where the Facility is an Interruptible Load, the Restoration Profile of the Interruptible Load if applicable;

(e) where the Facility is accredited to provide Regulation or RoCoF Control Service, a Facility Performance Factor of one for each of these Essential System Services; and

(f) any other performance parameters that may be specified in the WEM Procedure referred to in clause 2.34A.13.

2.34A.7. If requested by AEMO, a Market Participant must promptly provide AEMO with any information to clarify or support the information referred to in clause 2.34A.6.

2.34A.8. Where, in the Market Participant's reasonable opinion, the performance of the Facility is varying significantly, or is likely to vary significantly, from Frequency Co-optimised Essential System Service Accreditation Parameters for the Facility, or any performance requirements specified in the WEM Procedure referred to in clause 2.34A.13, the Market Participant must provide the information in respect of those matters to AEMO as soon as possible and request AEMO to amend the Frequency Co-optimised Essential System Service Accreditation Parameters for the Facility to reflect the actual or likely varied performance.

2.34A.9. Clause 2.34A.8 does not apply to the extent that the performance of the Facility is or is likely to be impacted by an Outage.

2.34A.10. Where a request to amend the Frequency Co-optimised Essential System Service Accreditation Parameters for a Facility pursuant to clause 2.34A.8:

(a) is made at least 12 months after AEMO's most recent assessment of the Frequency Co-optimised Essential System Service Accreditation Parameters for the Facility, AEMO must consider the information and assess whether the Frequency Co-optimised Essential System Service Accreditation Parameters should be amended; or

(b) is made less than 12 months after AEMO's most recent assessment of the Frequency Co-optimised Essential System Service Accreditation Parameters for the Facility, AEMO may decline the request or may

consider the information and assess whether the Frequency Co-optimised Essential System Service Accreditation Parameters should be amended.

2.34A.11. If AEMO becomes aware, either pursuant to clause 2.34A.10 or through its own monitoring activities, that the performance of a Facility has varied, is varying, or is likely to vary, significantly from the Frequency Co-optimised Essential System Service Accreditation Parameters for the Facility, or any performance requirements specified in the WEM Procedure referred to in clause 2.34A.13, AEMO must reassess the Frequency Co-optimised Essential System Service Accreditation Parameters, and notify the Market Participant of its decision to either:

(a) amend the Frequency Co-optimised Essential System Service Accreditation Parameters, the amendments it will make and the date that the amendments will take effect from; or

(b) not amend the Frequency Co-optimised Essential System Service Accreditation Parameters,

and the reasons for its decision.

2.34A.12. Where AEMO amends the Frequency Co-optimised Essential System Service Accreditation Parameters pursuant to clause 2.34A.11, the Market Participant must, within 5 Business Days of receiving notification from AEMO in accordance with clause 2.34A.11, update its Standing Data for the Facility or information in such other place as specified in the WEM Procedure referred to in clause 2.34A.13, to reflect the amended Frequency Co-optimised Essential System Service Accreditation Parameters.

Determining RoCoF Ride-Through Capability

2.34A.12A. A Market Participant may apply to AEMO for accreditation of the RoCoF Ride-Through Capability of each of its Facilities in accordance with the WEM Procedure specified in clause 2.34A.13.

2.34A.12B. A Network Operator must apply to AEMO for accreditation of the RoCoF Ride-Through Capability of each of its transmission systems or distribution systems in accordance with the WEM Procedure specified in clause 2.34A.13.

2.34A.12C. AEMO must determine, or re-determine, as applicable, in accordance with the WEM Procedure specified in clause 2.34A.13, the RoCoF Ride-Through Capability for a Facility pursuant to an application made under clauses 2.34A.12A, 2.34A.12B, 2.34A.12E or in accordance with clause 2.34A.12F.

2.34A.12D. As part of determining, or re-determining, as applicable, the RoCoF Ride-Through Capability for a Facility, transmission system or distribution system pursuant to an application made under clauses 2.34A.12A, 2.34A.12B or 2.34A.12E or in accordance with clause 2.34A.12F, AEMO may request the

relevant Market Participant or Network Operator to provide further information that may be reasonably required, including engineering studies or reports, to demonstrate the RoCoF Ride-Through Capability of the Facility, and the relevant Market Participant or Network Operator must comply with the request within a reasonable timeframe as agreed with AEMO.

2.34A.12E. Where, in the Market Participant's or Network Operator's reasonable opinion, the RoCoF Ride-Through Capability of its Facility has varied, is varying, or is likely to vary, significantly from the value the Facility was accredited for under clause 2.34A.12C, the Market Participant or Network Operator must apply to AEMO to re-determine the RoCoF Ride-Through Capability accredited to the Facility, transmission system or distribution system, as applicable.

2.34A.12F. Where AEMO becomes aware that the RoCoF Ride-Through Capability of a Facility has varied, is varying, or is likely to vary, significantly from the value the Facility was accredited for under clause 2.34A.12C, AEMO must:

(a) notify the relevant Market Participant or Network Operator; and

(b) re-determine the RoCoF Ride-Through Capability accredited to the relevant Facility in accordance with clause 2.34A.12C.

2.34A.12G. Where AEMO determines the RoCoF Ride-Through Capability accredited to a Facility pursuant to clause 2.34A.12C, or as a result of a re-determination pursuant to clauses 2.34A.12E or 2.34A.12F, the relevant Market Participant or Network Operator must, within five Business Days of receiving notification of the re-accreditation from AEMO, update its Standing Data for its Facility or information in such other place as specified in the WEM Procedure referred to in clause 2.34A.13, to reflect the amended RoCoF Ride-Through Capability for the Facility.

2.34A.12H. Notwithstanding clauses 2.34A.12A, 2.34A.12B, 2.34A.12E or 2.34A.12F, AEMO may, in its sole discretion, deem the RoCoF Ride-Through Capability of any Facility to be equal to the RoCoF Safe Limit.

Cost-recovery for RoCoF Control Service based on a Facility's RoCoF Ride-Through Capability

2.34A.12I. AEMO must determine a RoCoF Ride-Through Cost Recovery Limit in accordance with the WEM Procedure specified in clause 2.34A.13. In determining the RoCoF Ride-Through Cost Recovery Limit, AEMO must:

(a) not set the value higher than the RoCoF Upper Limit;

(b) set the limit to a minimum precision of 0.1 Hz/s over 500 milliseconds; and

(c) subject to clause 2.34A.12I(a), set the limit above the RoCoF Safe Limit by at least 0.25 Hz/s over 500 milliseconds.

2.34A.12J. Where the RoCoF Ride-Through Capability accredited to a Facility under clause 2.34A.12C, or deemed to be accredited to a Facility under clause 2.34A.12H, is equal to or lower than the RoCoF Ride-Through Cost Recovery Limit, the Facility is deemed to be a RoCoF Causer for the purposes of Appendix 2B.

WEM Procedure

2.34A.13. AEMO must document in a WEM Procedure the processes to be followed by AEMO, Market Participants and Network Operators in respect of the accreditation of a Facility under this section 2.34A or section 1.49. The WEM Procedure must include:

(a) in respect to the provision of a Frequency Co-Optimised Essential System Service:

i. the format of information which Market Participants must submit;

ii. the performance parameters and requirements which must be satisfied in order for a Facility to be accredited to provide a particular Frequency Co-optimised Essential System Service (for example, minimum quantity, maximum response time, control facilities, measurement facilities);

iii. the manner and form of control system or communication arrangements required for the provision, and monitoring, of each Frequency Co-optimised Essential System Service;

iv. the Maximum Contingency Reserve Block Size and the method used to determine the Maximum Contingency Reserve Block Size;

v. the format and nature of data to be provided as evidence of performance after each Contingency Event;

vi. how AEMO will monitor and verify Facility performance against the Frequency Co-optimised Essential System Service Accreditation Parameters for the Facility including modelling and testing requirements;

vii. how AEMO will determine a Facility Speed Factor for the Facility (so that it is possible for a Market Participant to estimate the Facility Speed Factor likely to be applied to its Facility);

viii. the process for a Market Participant to seek to amend the Frequency Co-optimised Essential System Service Accreditation Parameters for a Facility;

ix. the process AEMO will follow in considering whether to amend the Frequency Co-optimised Essential System Service Accreditation Parameters for a Facility, including examples of changes to Facility performance that would lead to an adjustment of the Frequency Co-optimised Essential System Service Accreditation Parameters;

x. the processes to be followed by AEMO and Market Participants for any tests and re-tests of a Facility for the accreditation of a Facility to provide a Frequency Co-optimised Essential System Service;

xi. timeframes for notification requirements and provision of information including updating any Standing Data or information in such other place as determined by AEMO and specified in the WEM Procedure; and

xii. any other processes or requirements relating to the accreditation of a Facility to provide a Frequency Co-optimised Essential System Service that AEMO considers are reasonably required to enable it to perform its functions under this section 2.34A;

(b) in respect to RoCoF Ride-Through Capability:

i. the type and form of supporting information which AEMO may request from Market Participants and Network Operators;

ii. the processes AEMO must follow and the matters AEMO must take into account in determining whether to deem a Facility's RoCoF Ride-Through Capability as being equal to the RoCoF Safe Limit under clause 2.34A.12H;

iii. the processes to be followed by Market Participants and Network Operators that wish to apply for the accreditation of RoCoF Ride-Through Capability for its Facility to be determined or re-determined by AEMO;

iv. the processes to be followed by AEMO to determine or re-determine the accredited RoCoF Ride-Through Capability for a Facility;

v. the processes to be followed by AEMO in considering whether to re-determine the RoCoF Ride-Through Capability accredited to a Facility, which may include examples of changes to a Facility's performance that would lead to an adjustment of the RoCoF Ride-Through Capability accredited to the Facility;

vi. the processes to be followed by AEMO, Market Participants and Network Operators for any tests and re-tests of a Facility for the accreditation, or re-accreditation, of RoCoF Ride-Through Capability for a Facility; and

vii. the timeframes, which must be reasonable, for notification requirements and provision of information, including updating any Standing Data or information in such other place as determined by AEMO and specified in the WEM Procedure; and

(c) the processes to be followed by AEMO, including a consultation process with Market Participants and Network Operators, in determining or re-determining the RoCoF Ride-Through Cost Recovery Limit.

Publication

2.34A.14. AEMO must publish, and keep up to date, the following information on the WEM Website:

(a) for each Facility accredited to provide a Frequency Co-optimised Essential System Service:

i. the identity of the Facility;

ii. the maximum quantity of each Frequency Co-optimised Essential System Service intended to be provided by the Facility and how that value would vary under different Facility operating configurations;

iii. where applicable, the Facility Speed Factor for the Facility; and

(b) for each Facility, including a transmission system or distribution system, for which AEMO has determined a RoCoF Ride-Through Capability value:

i. the identity of the Facility; and

ii. the RoCoF Ride-Through Capability for the Facility.

2.34B. Rule Participant Data

2.34B.1. AEMO must publish details of all Rule Participants, including:

(a) name;

(b) contact details;

(c) the name and title of a contact person;

(d) applicable Rule Participant classes;

(e) names and System Sizes of Registered Facilities; and

(f) names of Intermittent Loads and the associated maximum capacity from the Energy Producing Systems which supply them, as described in clause 2.30B.3(a).

2.34C. Third Party Aggregator Framework

2.34C.1. By 1 April 2026, following at least 20 Business Days of public consultation which allows adequate opportunity for relevant stakeholders to present their views, Synergy must publish on its website a document ("**Third Party Aggregator Framework**") which sets out how Synergy will engage with Third Party Aggregators that seek to provide services to Synergy involving a Non-Contestable Customer.

2.34C.2. Synergy may amend the Third Party Aggregator Framework from time to time, following at least 20 Business Days of public consultation which allows adequate opportunity for relevant stakeholders to present their views on the amendments.

2.34C.3. At the time Synergy publishes the initial Third Party Aggregator Framework under clause 2.34C.1 or an amended Third Party Aggregator Framework under clause 2.34C.2, Synergy must also publish:

(a) the submissions received in the consultation process;

(b) a summary of those submissions;

(c) Synergy's responses to issues raised in those submissions; and

(d) the date and time from which the Third Party Aggregator Framework will take effect, which must be:

i. for the initial Third Party Aggregator Framework, 8:00 AM on 1 July 2026; and

ii. for an amended Third Party Aggregator Framework, a date and time which, in Synergy's opinion, allows sufficient time after the date of publication for Third Party Aggregators to implement any changes required by it.

2.34C.4. Synergy must consult with the Coordinator before commencing public consultation on a proposed initial or amended Third Party Aggregator Framework.

2.34C.5. The Third Party Aggregator Framework must specify:

(a) the types of services that Synergy intends to procure from Third Party Aggregators;

(b) minimum technical requirements that a Third Party Aggregator must meet as a condition of providing services to Synergy;

(c) an overview of the processes for engaging and contracting with Synergy, including:

i. how and when Synergy will notify Third Party Aggregators of opportunities to provide services to Synergy;

ii. how Third Party Aggregators must submit proposals to provide services to Synergy;

iii. how proposals to provide services will be assessed by Synergy;

iv. how Synergy will communicate its decision on a proposal to the Third Party Aggregator;

v. how Synergy will manage any disputes that arise; and

vi. all applicable timeframes;

(d) the criteria Synergy will use to assess:

i. proposals to provide services that it receives from a Third Party Aggregator; and

ii. options for Synergy to provide services using its own internal resources; and

(e) the process by which a Third Party Aggregator can propose to provide services to Synergy other than those specified under clause 2.34C.5(a).

2.34C.6. Synergy must act consistently with the Third Party Aggregator Framework when:

(a) engaging and contracting with Third Party Aggregators; and

(b) providing services to AEMO or a Network Operator involving a Non-Contestable Customer.

2.34C.7. Amendments to the Third Party Aggregator Framework do not affect the terms and conditions of any existing contract between Synergy and a Third Party Aggregator, except where explicitly provided for in the contract.

2.34C.8. By 1 July 2026, following at least 20 Business Days of public consultation which allows adequate opportunity for relevant stakeholders to present their views, Synergy must publish on its website a model contract ("**Third Party Aggregator Model Contract**") which sets out:

(a) all standard terms and conditions with which a Third Party Aggregator must comply to provide services to Synergy; and

(b) the mechanisms for sharing risks and benefits between the counterparties.

2.34C.9. Synergy may amend the Third Party Aggregator Model Contract from time to time, following at least 20 Business Days of public consultation which allows adequate opportunity for relevant stakeholders to present their views on the amendments.

2.34C.10. At the time Synergy publishes the initial Third Party Aggregator Model Contract under clause 2.34C.8 or an amended Third Party Aggregator Model Contract under clause 2.34C.9, Synergy must also publish:

(a) the submissions received in the consultation process;

(b) a summary of those submissions; and

(c) Synergy's responses to issues raised in those submissions.

2.34C.11. Synergy must consult with the Coordinator before commencing public consultation on an initial or amended Third Party Aggregator Model Contract.

Communications and Systems Requirements

2.35. Dispatch Systems Requirements

2.35.1. Market Participants with Scheduled Facilities, Semi-Scheduled Facilities and Non-Scheduled Facilities that are not under the direct control of AEMO must maintain communication systems that enable communication with AEMO for dispatch of those Registered Facilities.

2.35.2. Market Participants with Registered Facilities to which clause 7.6.28 relates must provide the necessary communication systems for AEMO to activate and control the level of output of the Registered Facility as required for it to comply with Dispatch Instructions.

2.35.3. The Rule Participant in respect of an Interruptible Load must maintain systems to reduce the energy consumption of the Interruptible Load in response to system frequency changes.

2.35.4. AEMO must document the communications and control system requirements, including backup communication and control requirements where the primary methods are unavailable, necessary to support the dispatch process described in these ESM Rules in a WEM Procedure, including for issuing Dispatch Instructions.

2.36. AEMO Systems Requirements

2.36.1. Where AEMO uses software systems to perform calculations of quantities, prices or amounts defined under these ESM Rules, AEMO must:

(a) maintain a record of which version of software was used in producing each set of results, and maintain records of the details of the differences between each version and the reasons for the changes between versions;

(b) maintain each version of the software in a state where results produced with that version can be reproduced for a period of at least one year from the release date of the last results produced with that version;

(c) ensure that appropriate testing of new software versions is conducted;

(d) ensure that any versions of the software used by AEMO have been certified as being in compliance with the ESM Rules by an independent auditor; and

(e) require vendors of software audited in accordance with clause 2.36.1(d) to make available to Rule Participants explicit documentation of the functionality of the software adequate for the purpose of audit.

2.36.2. A “version” of the software referred to in clause 2.36.1 means any initial software used and any changes to the software that could have a material effect on the prices or quantities resulting from the use of the software.

2.36.3. A Rule Participant must ensure that any of its systems which are linked to AEMO's systems conform to AEMO's data and IT security standards at the point of interface.

2.36.4. A Rule Participant must not deliberately use systems in a manner that will undermine the operability of those or connected software systems.

2.36.5. AEMO must document the data and IT interface requirements, including security standards in respect of systems required for Market Participants to operate in the Wholesale Electricity Market in a WEM Procedure.

2.36.5A. AEMO must publish documentation of the functionality of:

(a) the STEM Auction software; and

(b) the settlement system software.

2.36.6. AEMO may require Rule Participants to submit information to AEMO using software systems that AEMO specifies, and may reject information submitted by another method.

2.36.7. AEMO must document in a WEM Procedure:

(a) arrangements by which Network Operators and AEMO must provide each other information produced under these ESM Rules;

(b) the format, form and manner in which that information must be provided; and

(c) a timeframe for the provision of the information as agreed between Network Operators and AEMO.

2.36A. SCADA, Communication and Monitoring Equipment

2.36A.1. AEMO may direct a Rule Participant, in accordance with the WEM Procedure referred to in clause 2.36A.5, to:

(a) install communications or control systems, including interfaces to communications or control systems, that AEMO considers are adequate to enable AEMO to remotely monitor the performance of the SWIS (including its dynamic performance); and

(b) upgrade, modify, repair or replace any communications or control systems already installed in a Facility providing the existing communications or control systems are, in the reasonable opinion of AEMO, no longer fit for the intended purpose.

2.36A.2 Where a Facility:

(a) is seeking Essential System Service accreditation; or

(b) is connected at a location within the Network Operator's Network that has demonstrated historical or potential instability or high fault activity,

and the Facility does not have measurement equipment installed, AEMO may, acting reasonably, direct a Network Operator to, in accordance with the WEM Procedure referred to in clause 2.36A.5, install or upgrade measurement equipment or systems to enable high resolution time-synchronised measurement data to be recorded and provided to AEMO.

2.36A.3. If AEMO issues a direction under clause 2.36A.1 or clause 2.36A.2, the Rule Participant must comply with the direction within the timeframe agreed between the relevant Rule Participant and AEMO or, if no time is agreed, then within a reasonable time.

2.36A.4. A Rule Participant must operate and maintain equipment in order to meet and comply with the requirements specified in the WEM Procedure referred to in clause 2.36A.5.

2.36A.4A. Rule Participants must provide the data or information specified by AEMO from the equipment in clause 2.36A.1 to AEMO in the manner and form specified in the WEM Procedure referred to in clause 2.36A.5.

2.36A.5. AEMO must develop a WEM Procedure specifying:

(a) the communications and control system requirements, including backup communication and control requirements where the primary methods are unavailable, necessary to enable AEMO to remotely monitor the performance of the SWIS; and;

(b) the high-resolution time synchronised data requirements necessary to enable AEMO to:

i. accredit a Facility's Frequency Co-optimised Essential System Services capability;

ii. monitor a Facility's Frequency Co-optimised Essential System Services response;

iii. monitor a Facility's compliance with its Registered Generator Performance Standards;

iv. investigate incidents on the SWIS that impact Power System Security or Power System Reliability or market operation; and

v. any other matter for which high-resolution time stamped data, where available, may assist with monitoring the performance of the SWIS;

(c) the minimum standards and specifications that the communication and measuring information must adhere to;

(d) the manner in which communications data and measuring information is to be provided to AEMO; and

(e) any other relevant matters required for AEMO to perform its obligations in respect of this section 2.36A.

2.36A.6. In developing the WEM Procedure referred to in clause 2.36A.5, AEMO must:

(a) consult in good faith with Network Operators; and

(b) give reasonable consideration to the cost-effectiveness of equipment which the WEM Procedure may require to be installed or upgraded.

Prudential Requirements

2.37. Credit Limit

2.37.A1. In this section 2.37, a reference to "Rule Participant" is a reference to the relevant Market Participant or the relevant Network Operator as the case may be (and is not a reference to any other Rule Participant).

2.37.1. AEMO must determine a Credit Limit for each Rule Participant in accordance with clause 2.37.4.

2.37.2. Subject to clauses 2.37.3 and 2.42.7, AEMO may review and revise a Rule Participant's Credit Limit at any time.

2.37.3. AEMO must review each Rule Participant's Credit Limit at least once each year.

2.37.4. Subject to clauses 2.37.5 and 2.37.6, the Credit Limit for a Rule Participant is the dollar amount determined by AEMO as being equal to the amount that AEMO reasonably expects will not be exceeded over any 35 day period, where this amount is:

(a) the maximum net amount owed by the Rule Participant to AEMO over the 35 day period;

(b) determined by applying the factors set out in clause 2.37.5; and

(c) calculated in accordance with the WEM Procedure referred to in clause 2.43.1.

2.37.5. When determining a Rule Participant's Credit Limit AEMO must take into account:

(a) in relation to a Market Participant:

i. the Market Participant's historical level of payments based on metered quantity data for the Market Participant, or an estimate of the Market Participant's future level of payments based on its expected generation and consumption quantities where no metered quantity data is available;

ii. the Market Participant's historical level of Bilateral Contract sale and purchase quantities as reflected in historical Bilateral Contract submissions, or an estimate of the Market Participant's expected level of Bilateral Contract sale and purchase quantities where no historical Bilateral Contract submission data is available;

iii. the Market Participant's historical level of STEM settlement payments under clause 9.7.2, or an estimate of the Market Participant's future level of STEM settlement payments based on its expected STEM sales and purchases where no historical STEM settlement payment data is available;

iv. the Market Participant's historical level of Reserve Capacity settlement payments under section 9.8 or an estimate of the Market Participant's future level of Reserve Capacity settlement payments based on its number of Capacity Credits where no historical Reserve Capacity settlement payment data is available;

v. the Market Participant's historical level of Real-Time Energy settlement payments under clause 9.9.2, or an estimate of the Market Participant's future level of Real-Time Energy settlement payments based on its expected transactions in the Real-Time Market where no historical Real-Time Energy settlement payment data is available;

vi. the Market Participant's historical level of Outage Compensation settlement payments under clause 9.11.2, or an estimate of the Market Participant's future level of Outage Compensation settlement payments based on its expected level of Outages where no historical Outage Compensation settlement payment data is available;

vii. the Market Participant's historical level of Market Participant Fee settlement payments under clause 9.12.2, or an estimate of the Market Participant's future level of Market Participant Fee settlement payments based on its expected generation or consumption quantities where no historical Market Participant Fee settlement payment data is available;

(b) the Rule Participant's historical level of Essential System Service settlement payments under clause 9.10.1, or an estimate of the Rule Participant's future level of Essential System Service settlement payments based on its expected Essential System Service provision where no historical Essential System Service settlement payment data is available;

(c) the length of the settlement cycle; and

(d) any other factor that AEMO considers relevant.

2.37.6. In determining a Market Participant's Credit Limit under clause 2.37.4, AEMO may, to the extent it considers relevant, take into account a minimum amount that AEMO considers would adequately protect the Wholesale Electricity Market if a Suspension Event were to occur in relation to that Market Participant.

2.37.7. AEMO must notify each Rule Participant of its Credit Limit, including any revised Credit Limit under clause 2.37.2. AEMO must provide details of the basis for the determination of the Credit Limit (with references to the factors specified in clause 2.37.5 and the WEM Procedure referred to in clause 2.43.1).

2.37.8. Where any of the circumstances specified in the WEM Procedure specified in clause 2.43.1 for the purposes of this clause (which are circumstances that may result in an increase or decrease in a Rule Participant's Credit Limit) have occurred or may occur:

(a) the Rule Participant must notify AEMO as soon as practicable if the circumstance may result in an increase in the Rule Participant's Credit Limit; and

(b) the Rule Participant may notify AEMO if the circumstance may result in a decrease in the Rule Participant's Credit Limit.

2.38. Credit Support

2.38.A1. In this section 2.38, a reference to "Rule Participant" is a reference to the relevant Market Participant or the relevant Network Operator as the case may be (and is not a reference to any other Rule Participant).

2.38.1. A Rule Participant must ensure that, at all times, AEMO holds the benefit of Credit Support that is:

(a) in the form specified in clause 2.38.4; and

(b) an amount not less than the most recently determined Credit Limit for that Rule Participant.

2.38.2. Where a Rule Participant's existing Credit Support is due to expire or cease to have effect for any other reason, then that Rule Participant must ensure that AEMO holds the benefit of replacement Credit Support that is:

(a) in the form specified in clause 2.38.4;

(b) an amount not less than the level required under clause 2.38.1(b); and

(c) effective when the existing Credit Support expires or otherwise ceases to have effect.

2.38.3 Where a Rule Participant's Credit Support is affected by any of the circumstances specified in the WEM Procedure referred to in clause 2.43.1 that may require

replacement Credit Support, then the Rule Participant must ensure that AEMO holds the benefit of replacement Credit Support that is:

(a) in the form specified in clause 2.38.4;

(b) an amount not less than the level required under clause 2.38.1(b); and

(c) effective before the end of the next Business Day or within any longer period approved in writing by AEMO, after the Rule Participant first becomes aware of the relevant change in circumstance (whether by reason of the Rule Participant's own knowledge or a notification by AEMO).

2.38.4. The Credit Support for a Rule Participant must be:

(a) an obligation in writing that:

i. is from a Credit Support provider, who must be an entity which meets the Acceptable Credit Criteria and which itself is not a Rule Participant;

ii. is a guarantee or bank undertaking in a form prescribed by AEMO;

iii. is duly executed by the Credit Support provider and delivered unconditionally to AEMO;

iv. constitutes valid and binding unsubordinated obligations of the Credit Support provider to pay to AEMO amounts in accordance with its terms which relate to the relevant Rule Participant's obligations under the ESM Rules; and

v. permits drawings or claims by AEMO up to a stated amount; or

(b) a Security Deposit.

2.38.5. Where Credit Support is provided as a Security Deposit in accordance with clause 2.38.4(b), it will accrue interest daily at the Bank Bill Rate, and AEMO must pay the Rule Participant the interest accumulated at the end of each calendar month less any liabilities and expenses incurred by AEMO, including bank fees and charges.

2.38.6. An entity meets the Acceptable Credit Criteria if it is:

(a) either:

i. under the prudential supervision of the Australian Prudential Regulation Authority; or

ii. a central borrowing authority of an Australian State or Territory which has been established by an Act of Parliament of that State or Territory;

(b) resident in, or has a permanent establishment in, Australia;

(c) not a Chapter 5 body corporate (within the meaning of the Corporations Act), or under a similar form of administration under any laws applicable to it in any jurisdiction;

(d) not immune from suit;

(e) capable of being sued in its own name in a court of Australia; and

(f) has an acceptable credit rating, being either:

i. a rating of A-1 or higher for short term unsecured counterparty obligations of the entity, as rated by Standard and Poor's (Australia) Pty. Limited; or

ii. a rating of P-1 or higher for short term unsecured counterparty obligations of the entity, as rated by Moodys Investor Services Pty. Limited.

2.38.7. AEMO must maintain on the WEM Website a list of entities which:

(a) AEMO is satisfied, based on evidence provided by Rule Participants in the previous 12 months, meet the Acceptable Credit Criteria outlined in clause 2.38.6; or

(b) AEMO has determined in its absolute discretion meet the Acceptable Credit Criteria outlined in clause 2.38.6.

2.38.8 AEMO must monitor the entities included on the list described in clause 2.38.7 against the requirements in clause 2.38.6 (f).

2.38.9 AEMO may remove the name of an entity from the list described in clause 2.38.7 at any time if AEMO considers that the entity no longer meets the Acceptable Credit Criteria defined in clause 2.38.6.

2.39. Trading Limit

2.39.A1. In this section 2.39, a reference to "Rule Participant" is a reference to the relevant Market Participant or the relevant Network Operator as the case may be (and is not a reference to any other Rule Participant).

2.39.1. The Trading Limit for a Rule Participant is to equal the prudential factor specified in clause 2.39.2 multiplied by the total amount which can be drawn or claimed under, or applied from, its Credit Support.

2.39.2. The prudential factor is 0.87.

2.40. Outstanding Amount

2.40.A1. In this section 2.40, a reference to "Rule Participant" is a reference to the relevant Market Participant or the relevant Network Operator as the case may be (and is not a reference to any other Rule Participant).

2.40.1. The Outstanding Amount for a Rule Participant at any time equals the total amount calculated as follows:

(a) the aggregate of the amounts payable by the Rule Participant to AEMO under these ESM Rules, including amounts for all past periods for which no Settlement Statement has yet been issued, and whether or not the payment date has yet been reached; less

(b) the aggregate of the amounts payable by AEMO to the Rule Participant under these ESM Rules, including amounts for all past periods for which no Settlement Statement has yet been issued, and whether or not the payment date has yet been reached; less

(c) the aggregate of any amounts paid by the Rule Participant to AEMO for the purpose (to be specified by the Rule Participant in accordance with the WEM Procedure referred to in clause 2.43.1) of reducing the Outstanding Amount and increasing the Trading Margin on each day during the period from the Trading Day on which the Outstanding Amount is calculated up to and including the next Settlement Date.

2.40.2. The amounts to be used for the purposes of making the calculation under clauses 2.40.1(a) and 2.40.1(b) will be the actual amounts for which Settlement Statements have been issued by AEMO and AEMO's reasonable estimate of other amounts.

2.41. Trading Margin

2.41.A1. In this section 2.41, a reference to "Rule Participant" is a reference to the relevant Market Participant or the relevant Network Operator as the case may be (and is not a reference to any other Rule Participant).

2.41.1. The Trading Margin for a Rule Participant at any time equals the amount by which its Trading Limit exceeds its Outstanding Amount at that time.

2.41.2. A Market Participant must not make any submission to AEMO where the transaction contemplated by the submission, if valued according to the list of factors referred to in clause 2.41.5, could result in the Market Participant's Trading Margin being exceeded.

2.41.3. AEMO may reject any submission from a Market Participant where in AEMO's opinion the transaction contemplated by the submission, if valued according to the list of factors referred to in clause 2.41.5, could result in the Market Participant's Trading Margin being exceeded.

2.41.4. AEMO may notify a Rule Participant at any time of the level of their Trading Margin.

2.41.5. AEMO must publish in the WEM Procedure referred to in clause 2.43.1, a list of factors to be taken into account for determining the expected value of a transaction. The factors must be consistent with the methodology that AEMO uses to determine Credit Limits for Rule Participants.

2.42. Margin Call

2.42.A1. In this section 2.42, a reference to "Rule Participant" is a reference to the relevant Market Participant or the relevant Network Operator as the case may be (and is not a reference to any other Rule Participant).

2.42.1. If, at any time, a Rule Participant's Trading Margin is less than zero, then AEMO may issue a Margin Call Notice to the Rule Participant, specifying the amount of the Margin Call.

2.42.2. [Blank]

2.42.3. The amount of the Margin Call must be the amount that will increase the Rule Participant's Trading Margin to zero.

2.42.4. A Rule Participant must respond to a Margin Call Notice within the time specified in the WEM Procedure referred to in clause 2.43.1 for the purposes of this clause, by:

(a) paying to AEMO in cleared funds a Security Deposit as contemplated under clause 2.38.4(b); or

(b) ensuring AEMO has the benefit of additional Credit Support of the kind contemplated by clause 2.38.4(a),

in the amount of the Margin Call.

2.42.5. AEMO may cancel a Margin Call Notice at any time. The cancellation of a Margin Call Notice does not affect AEMO's rights to issue a further Margin Call Notice on the same grounds that gave rise to the original Margin Call Notice.

2.42.6. Where a Market Participant fails to comply with clause 2.42.4 the provisions of section 9.19 apply.

2.42.7. AEMO must review a Rule Participant's Credit Limit within 30 Business Days after issuing a Margin Call Notice to that Rule Participant.

2.43. Prudential Requirements

2.43.A1. In this section 2.43, a reference to "Rule Participant" is a reference to the relevant Market Participant or the relevant Network Operator as the case may be (and is not a reference to any other Rule Participant).

2.43.1. AEMO must develop a WEM Procedure dealing with:

(a) determining Credit Limits;

(b) assessing persons against the Acceptable Credit Criteria;

(c) Credit Support arrangements, including:

i. the form of acceptable guarantees and bank letters of credit;

ii. where and how it will hold Security Deposits and how the costs and fees of holding Security Deposits will be met;

iiA. the circumstances that may require Credit Support to be replaced for the purposes of clause 2.38.3; and

iii. the application of monies drawn from Credit Support in respect of amounts owed by the relevant Rule Participant to AEMO.

(d) calculation of Trading Margins;

(e) the list of factors to be taken into account for assessing the expected value of transactions;

(f) issuing of Margin Calls; and

(g) other matters relating to clauses 2.37 to 2.42.

Emergency Powers

2.44. Minister's Emergency Powers

2.44.1. If the Minister requests the Economic Regulation Authority or AEMO to suspend the application of all or any of these ESM Rules (other than this section 2.44) or any element of the market in connection with the exercise of emergency powers under the Energy Operators (Powers) Act 1979 or under emergency provisions of other legislation, then the Economic Regulation Authority or AEMO, as applicable, must do so.

2.44.2. The Economic Regulation Authority or AEMO, as applicable, must lift a suspension as soon as practicable after the Minister requests the Economic Regulation Authority or AEMO to do so.

2.44.3. The Economic Regulation Authority or AEMO, as applicable, must promptly notify Market Participants of any suspension or lifting of a suspension.

2.44.4. During a suspension, the Economic Regulation Authority or AEMO, as applicable, may give directions to Market Participants as to the operation of the market, and Market Participants must comply with those directions.

3 Power System Security and Reliability

Security and Reliability

3.1. SWIS Operating Standards

3.1.1. The frequency and time error standards for the SWIS are as defined in Chapter 3B and Appendix 13.

3.1.2. The voltage standards for a Network in the SWIS are as defined in the Technical Rules that apply to that Network.

3.1A. Operating Protocol

3.1A.1. If AEMO reasonably believes it is necessary to support the management of Power System Security and Power System Reliability, AEMO and a Network Operator must jointly develop and maintain an Operating Protocol in accordance with this section 3.1A.

3.1A.2. An Operating Protocol must describe how AEMO and the relevant Network Operator will coordinate their performance of relevant Power System Security and Power System Reliability related responsibilities under these ESM Rules. An Operating Protocol must include, but is not limited to:

(a) governance arrangements for the Operating Protocol, including the change management process for the Operating Protocol;

(b) descriptions of relevant Operating Zones in the SWIS and the types of information that must be shared by AEMO and the Network Operator concerning the relevant Operating Zones;

(c) general operational communication processes to be followed by AEMO and the Network Operator, including communication processes for applicable SWIS Operating States and for issuing and responding to directions under these ESM Rules;

(d) processes for the management of Islands within the SWIS;

(e) processes and responsibilities for the management of emergencies, including the delegation of functions by AEMO to the Network Operator in an emergency as contemplated by clause 2.1A.3 of these ESM Rules;

(f) general principles and processes that AEMO and the Network Operator may follow in relation to voltage control and management;

(g) principles and processes for load shedding and restoration;

(h) general principles and processes for security management and coordination;

(i) processes for the sharing of information between AEMO and the Network Operator to support operational planning processes and the maintenance of Power System Security and Power System Reliability;

(j) processes to support Network outage reviews;

(k) any reporting requirements to support the processes described in the Operating Protocol; and

(l) any other matter AEMO and the Network Operator determine to be necessary for the maintenance of Power System Security and Power System Reliability.

3.1A.3. AEMO and a Network Operator must use reasonable endeavours to operate and provide information in accordance with the applicable Operating Protocol.

3.1A.4. In accordance with the communication processes specified in an applicable Operating Protocol, a Network Operator must notify and advise AEMO where it identifies threats to Power System Security or Power System Reliability outside of the Operating Zones specified in the Operating Protocol.

3.1A.5. Where an Operating Protocol has been jointly developed in accordance with clause 3.1A.1, AEMO must publish an agreed version of the Operating Protocol on the WEM Website as soon as reasonably practicable.

3.1A.6. AEMO must publish the first agreed version of the Operating Protocol applicable to Western Power's Network on the WEM Website by no later than 1 October 2022.

3.1A.7. In consultation with the relevant Network Operator, AEMO may redact confidential or sensitive information from an Operating Protocol published on the WEM Website.

3.1A.8. If AEMO and Western Power have not agreed a version of the relevant Operating Protocol by 1 October 2022, then the document titled ‘Operating Protocol – AEMO and Western Power (Non-Binding)’ bearing the document reference ‘SO_WA_OP-6470’ is the Operating Protocol for the purposes of clause 3.1A.1 and, subject to clause 3.1A.7, must be published by AEMO on the WEM Website.

Voltage Control

3.1A.9. AEMO, in consultation with a Network Operator, may determine a Secure Operational Voltage Envelope for each Operating Zone.

3.1A.10. When determining a Secure Operational Voltage Envelope under clause 3.1A.9, AEMO must consider:

(a) any voltage standards applicable to the Network Operator’s Network under the relevant Technical Rules;

(b) any specific voltage requirements identified by a Network Operator; and

(c) the operation of Facilities and other equipment within their defined capability limits.

3.1A.11. To the extent reasonably practicable, a Network Operator must operate its Network within the Secure Operational Voltage Envelopes specified by AEMO. If a Network Operator cannot operate within the specified Secure Operational Voltage Envelope, it must notify AEMO and provide relevant information and documentation in accordance with the communication processes contemplated by the applicable Operating Protocol.

3.1A.12. AEMO must notify the relevant Network Operator of the Secure Operational Voltage Envelope for each Operating Zone (as determined by AEMO under clause 3.1A.9) in accordance with the processes described in the Operating Protocol.

3.2. Technical Envelope, Security and Equipment Limits

3.2.1. An Equipment Limit means any limit on the operation of a Facility's equipment that is provided as Standing Data for the Facility, or otherwise provided to AEMO by a Rule Participant for its Facility's equipment in accordance with clause 3.2.2.

3.2.2. AEMO must record Equipment Limit information in accordance with the WEM Procedure specified in clause 3.2.7.

3.2.3. [Blank]

3.2.4. [Blank]

3.2.5. The Technical Envelope represents the limits within which the SWIS can be operated in each SWIS Operating State. In establishing and modifying the Technical Envelope under clause 3.2.6, AEMO must:

(a) respect the relevant Equipment Limits;

(b) respect all SWIS Operating Standards;

(c) respect all Essential System Service Standards;

(d) take into account those parts of the SWIS which are not designed to be operated to the planning criteria in the relevant Technical Rules;

(e) respect any applicable Inertia Requirements;

(f) respect any applicable Power System Stability Requirements, including any applicable System Strength Requirements; and

(g) take into account all other matters AEMO considers relevant to assessing Power System Security and Power System Reliability.

3.2.6. AEMO must establish and modify the Technical Envelope in accordance with clause 3.2.5 and the WEM Procedure specified in clause 3.2.7.

3.2.7. AEMO must develop a WEM Procedure documenting:

(a) the process to be followed by Rule Participants in providing Equipment Limit information to AEMO;

(b) the process to be followed by AEMO in establishing and modifying the Technical Envelope, including how AEMO will utilise Equipment Limit information;

(c) the processes to be followed by AEMO to enable it to ensure the SWIS operates according to the Technical Envelope applicable to each SWIS Operating State;

(d) the process to be followed by AEMO to determine Inertia Requirements; and

(e) the process to be followed by AEMO to assess and maintain Power System Stability, including System Strength.

3.2.8. AEMO must ensure the SWIS operates in accordance with the WEM Procedure specified in clause 3.2.7 and the Technical Envelope for the applicable SWIS Operating State.

3.2A. Security and Reliability Planning and Coordination with Network Operators

3.2A.1. Where AEMO considers it necessary, AEMO may require a Network Operator to develop and implement a plan or provide AEMO with information to assist AEMO in ensuring that Power System Security and Power System Reliability is maintained.

3.2A.2. Where AEMO requires a Network Operator to develop a plan under clause 3.2A.1, the Network Operator must consult with AEMO on the development of the plan and seek AEMO's approval of the plan within the time agreed with AEMO.

3.2A.3. AEMO may, acting reasonably:

(a) agree to the implementation of the plan developed by the Network Operator under clause 3.2A.1; or

(b) reject the plan developed by the Network Operator under clause 3.2A.1 in which case the Network Operator must make all necessary amendments to the plan so that it is acceptable to AEMO within the time agreed with AEMO.

3.2A.4. Where AEMO requires a Network Operator to provide information under clause 3.2A.1, the Network Operator must consult with AEMO as to the scope, manner

and form of the information it is required to provide under clause 3.2A.1 and provide the information within the time or times agreed with AEMO.

3.2A.5. Where, following receipt of the information under clause 3.2A.4, AEMO considers that further information is required, the Network Operator must consult with AEMO as to the scope, manner and form of the further information and provide the information within the time or times agreed with AEMO.

3.3. Reliable Operating State

3.3.1. The SWIS is in a Reliable Operating State when AEMO has not initiated any manual load shedding directions, and does not reasonably expect to initiate any manual load shedding directions, in accordance with the WEM Procedure referred to in clause 3.3.2.

3.3.2. AEMO must develop and maintain a WEM Procedure which:

(a) sets out how AEMO assesses reliability in relation to the following:

i. the Long Term PASA;

ii. the Medium Term PASA;

iii. the Short Term PASA;

iv. Pre-Dispatch Intervals and Dispatch Intervals; and

v. Outage assessment and approval; and

(b) describes the events that are included or not included in measuring Unserved Energy in relation to maintaining Power System Reliability and Power System Adequacy.

3.3.3. The Power System Reliability Principles are:

(a) the SWIS should be operated such that it is in a Reliable Operating State to the extent practicable;

(b) subject to maintaining Power System Security, where the SWIS is not in a Reliable Operating State, or is not forecast to be in a Reliable Operating State, AEMO must take all reasonable actions to restore or maintain a Reliable Operating State as soon as practicable; and

(c) AEMO must assess risks to Power System Adequacy and act to minimise any risks to Power System Adequacy in accordance with the WEM Procedure referred to in clause 3.3.2.

3.4. Satisfactory and Secure Operating States

3.4.1. The SWIS is in a Satisfactory Operating State when the SWIS is operating in accordance with all relevant requirements of the Technical Envelope.

3.4.2. The SWIS is in a Secure Operating State when the SWIS is able to return to a Satisfactory Operating State following a Credible Contingency Event in accordance with the Power System Security Principles and the requirements of the Technical Envelope.

3.4.3. The Power System Security Principles are:

(a) the power system should be operated such that it is and will remain in a Secure Operating State to the extent practicable;

(b) following a Contingency Event, AEMO should take all reasonable actions to return to a Secure Operating State as soon as possible, and in any case within 30 minutes, other than during a Low Reserve Condition or when in an Emergency Operating State;

(c) sufficient Inertia should be available to meet applicable Inertia Requirements; and

(d) sufficient capability should be maintained at applicable locations in the SWIS to meet the applicable Power System Stability Requirements, including any System Strength Requirements.

3.4.4. In order to restore and maintain Power System Security or Power System Reliability, AEMO may, in addition to the provisions specified in Chapter 7:

(a) reject Planned Outages that have not yet commenced;

(b) issue Outage Recall Directions;

(c) utilise the overload capacity of Scheduled Facilities (as indicated in Standing Data);

(d) direct Facilities to adjust output or operate in a particular way, in accordance with the Registered Generator Performance Standards applicable to the Facility where relevant, and otherwise in accordance with information available to AEMO;

(e) direct a Network Operator, in which case AEMO must first consult with the relevant Network Operator, to operate network equipment, or equipment under a Network Operator's control or direction, in specific ways; or

(f) direct a Network Operator, in which case AEMO must first consult with the relevant Network Operator, to disconnect generating equipment, load and/or other equipment connected to the Network Operator's network.

3.4.5. AEMO may take any other actions it considers are required, consistent with good electricity industry practice, in order to maintain Power System Security or Power System Reliability, having regard to the provisions specified in Chapter 7.

3.4.5A. Where AEMO issues a direction under clauses 3.4.4(d), 3.4.4(e) or 3.4.4(f) or takes any other action under clause 3.4.5, AEMO must record:

(a) the date and time of the direction or action;

(b) the name of the Registered Facility or relevant equipment impacted by the direction or action;

(c) the nature of the direction or action; and

(d) the reasons for the direction or action.

3.4.6. Rule Participants must:

(a) subject to clause 3.4.7, comply with directions issued by AEMO in accordance with clause 3.4.4; and

(b) use reasonable endeavours to assist AEMO to ensure the SWIS remains in a Satisfactory Operating State or Secure Operating State, including providing information and coordinating with AEMO on directions as required by AEMO.

3.4.7. A Rule Participant is not required to comply with a direction issued by AEMO, in accordance with clause 3.4.4, if such compliance would endanger the safety of any person, damage equipment, or breach any applicable law.

3.4.8. Where a Rule Participant cannot comply with a direction issued by AEMO in accordance with clause 3.4.4 it must notify AEMO immediately and provide the reasons why it cannot comply with the direction.

3.5. Emergency Operating State

3.5.1. The SWIS is in an Emergency Operating State when AEMO considers that circumstances exist on the SWIS that impact the ability of AEMO to operate the SWIS as intended in accordance with these ESM Rules.

3.5.1A. AEMO must develop a WEM Procedure which sets out conditions under which AEMO may declare an Emergency Operating State. To avoid doubt, the WEM Procedure referred to in this clause 3.5.1A does not limit the ability of AEMO to declare an Emergency Operating State.

3.5.2. An Emergency Operating State as defined in these ESM Rules does not necessarily correspond to a civil emergency, or emergencies as defined in legislation but may commence as a result of these.

3.5.3. AEMO must ensure that when it becomes aware of any actions by a Rule Participant that in AEMO's opinion would be reasonably likely to lead to an Emergency Operating State, AEMO takes all actions necessary and within its control to prevent the Rule Participant engaging in such actions.

3.5.4. When the SWIS is in an Emergency Operating State, AEMO must not require Registered Facilities to operate inconsistently with their Equipment Limits for the Emergency Operating State.

3.5.5. When the SWIS is in an Emergency Operating State, AEMO may, in addition to any other powers AEMO has:

(a) direct any Rule Participant to provide Essential System Services where they are capable of doing so;

(b) issue directions to Rule Participants to operate Registered Facilities at a particular level or in a particular way; and

(c) take any other actions it considers necessary, consistent with good electricity industry practice, in order to return the SWIS from the Emergency Operating State.

3.5.5A. If AEMO issues a direction under clauses 3.5.5(a) or 3.5.5(b), or takes any other action under clause 3.5.5(c), AEMO must record as soon as practicable:

(a) the date and time of the direction or action;

(b) the name of the Registered Facility or relevant equipment impacted by the direction or action;

(c) the nature of the direction or action; and

(d) the reasons for the direction or action.

3.5.6. AEMO must ensure the SWIS returns from an Emergency Operating State as soon as possible.

3.5.7. Subject to clause 3.5.6, while operating under an Emergency Operating State, AEMO must attempt to ensure the SWIS operates according to the principles set out in clause 7.2.4, to the extent that is reasonably practicable to do so in the circumstances.

3.5.8. When the SWIS is in an Emergency Operating State, Rule Participants must:

(a) subject to clause 3.5.9, comply with directions issued by AEMO in accordance with clauses 3.4.4 and 3.5.5; and

(b) otherwise, use their best endeavours to assist AEMO to ensure the SWIS returns from the Emergency Operating State.

3.5.9. A Rule Participant is not required to comply with any directions issued by AEMO, in accordance with clause 3.5.5, if such compliance would endanger the safety of any person, damage equipment, or breach any applicable law.

3.5.10. Where a Rule Participant cannot comply with a direction issued by AEMO in accordance with clause 3.5.5, it must notify AEMO immediately and provide AEMO with the reasons why it cannot comply with the direction.

3.6. Under Frequency Load Shedding

3.6.1. AEMO must:

(a) subject to clause 3.6.3, determine the UFLS Requirements, taking into account the SWIS Frequency Operating Standards; and

(b) publish the UFLS Requirements, and any amendments to them, on the WEM Website.

3.6.2. The UFLS Requirements must contain guidance to enable each Network Operator whose Network is impacted by the UFLS Requirements to design and implement automatic under frequency load shedding schemes that support Power System Security in respect of their Network. The guidance must include:

(a) the quantity of load required for shedding, or guidance on how to determine the required quantities;

(b) prioritisation of load types;

(c) details of any staging requirements;

(d) initiation criteria;

(e) speed of operation;

(f) any required variation in settings or functional requirements based on conditions in the SWIS; and

(g) any other relevant matters required to support Power System Security.

3.6.3. AEMO must consult in good faith with each Network Operator whose Network the UFLS Requirements apply to when AEMO determines the UFLS Requirements in accordance with clause 3.6.1 and periodically reviews the UFLS Requirements under clause 3.6.11.

3.6.4. AEMO or a Network Operator may propose an amendment to the UFLS Requirements. In respect of a proposed amendment:

(a) where AEMO is proposing the amendment, AEMO must consult in good faith with each Network Operator whose Network is likely to be impacted by the proposed amendment;

(b) where a Network Operator is proposing the amendment, the Network Operator must consult in good faith with AEMO and each other Network Operator whose Network is likely to be impacted by the proposed amendment; and

(c) AEMO must only progress the proposed amendment where AEMO and each Network Operator whose Network is likely to be impacted by the proposed amendment agree, acting reasonably, that the proposed amendment is reasonably necessary.

3.6.5. Each Network Operator whose Network the UFLS Requirements apply to must develop and maintain an UFLS Specification. The UFLS Specification must set out how the Network Operator's schemes meet the UFLS Requirements.

3.6.6. Each Network Operator must submit the UFLS Specification that it has developed for its Network under clause 3.6.5 to AEMO for approval, and following the initial approval of the UFLS Specification, whenever:

(a) the Network Operator seeks to amend its UFLS Specification; or

(b) amendments are required as a result of an amendment to the UFLS Requirements.

3.6.7. Where AEMO receives an UFLS Specification from a Network Operator under clause 3.6.6, AEMO must, within a reasonable timeframe agreed with the relevant Network Operator, determine whether to approve or reject the UFLS Specification or the amendment to it, as applicable. Where AEMO:

(a) approves the UFLS Specification or the amendment to it, as applicable, AEMO must notify the relevant Network Operator that the UFLS Specification or the amendment to it, as applicable, has been approved; or

(b) rejects the UFLS Specification or the amendment to it, as applicable, AEMO must notify the relevant Network Operator:

i. that the UFLS Specification or the amendment to it, as applicable, has been rejected; and

ii. the amendments to the UFLS Specification that AEMO reasonably considers are required for the UFLS Specification to meet the UFLS Requirements.

3.6.8. Where a Network Operator receives a notice from AEMO under clause 3.6.7(b), the Network Operator:

(a) may consult with AEMO on the amendments AEMO considers are reasonably required to the UFLS Specification, both parties acting reasonably and in good faith; and

(b) must resubmit the UFLS Specification incorporating the amendments requested by AEMO under clause 3.6.7(b)(ii) or as agreed with AEMO pursuant to clause 3.6.8(a), as applicable, to AEMO for approval under clause 3.6.7.

3.6.9. Each Network Operator must implement and maintain systems, schemes or standards in accordance with its UFLS Specification, and must agree a timeframe with AEMO for changes to its systems, schemes, or standards triggered by any changes to its UFLS Specification.

3.6.10. Each Network Operator must, in respect of its Network, provide a report to AEMO on the compliance of its UFLS Specification with the UFLS Requirements:

(a) annually, on the projected ability to meet the requirements over a future ten-year horizon; and

(b) within a timeframe agreed with AEMO, both parties acting reasonably, following each under frequency load shedding event.

3.6.11. Without limiting AEMO's ability to amend the UFLS Requirements in accordance with this section 3.6, AEMO must review the UFLS Requirements to ensure they are appropriate and consistent with the requirements of this section 3.6 within three years of the date the UFLS Requirements are first published by AEMO under clause 3.6.1(b) and then at least once in every three-year period from completion of the previous review.

3.7. System Restart

System Restart Standard and System Restart Plan

3.7.1. AEMO must determine the System Restart Standard in accordance with clause 3.7.2.

3.7.2. The System Restart Standard:

(a) must identify the minimum length of time for which a System Restart Service may be required to operate continuously following a system shutdown or major supply disruption;

(b) must specify the technical requirements that a Registered Facility must demonstrate to be eligible to provide a System Restart Service;

(c) must include guidelines addressing the diversity of System Restart Services, including diversity of locations within the SWIS;

(d) must include requirements for mitigating against the risk of unavailability of any System Restart Service during a system shutdown or major supply disruption; and

(e) may include any other matters that AEMO determines are necessary to ensure the SWIS is restarted in the event of a system shutdown or major supply disruption.

3.7.3. AEMO must develop and maintain the System Restart Plan for the purposes of managing and coordinating restart and restoration of the SWIS in the event of a system shutdown or major supply disruption.

3.7.4. The System Restart Plan must:

(a) be consistent with the System Restart Standard;

(b) cover the whole of the SWIS but may consist of one or more separable components; and

(c) take into account any Local Black Start Procedures.

3.7.5. AEMO must in:

(a) developing the System Restart Plan in accordance with clause 3.7.3; and

(b) making any revisions to the System Restart Plan pursuant to clauses 3.7.10 or 3.7.11,

consult in good faith with each Network Operator that AEMO considers may be impacted by the System Restart Plan, or the proposed revision to it, to assist AEMO to ensure that the System Restart Plan is effective and achievable, including in relation to viable restart paths.

3.7.6. Each Network Operator that may be impacted by the System Restart Plan must conduct any studies or analyses that are reasonably required to provide input into the System Restart Plan, within a reasonable timeframe to be agreed with AEMO.

3.7.7. AEMO must, in developing, and making revisions to, the System Restart Plan, take into account any input provided by a Network Operator under clause 3.7.6, including any information in relation to:

(a) viable restart paths; and

(b) following a successful restart, the restoration of any sensitive Loads on the Network Operator's Network.

3.7.8. Where a Network Operator considers that the conditions on its Network have changed sufficiently to require changes to the System Restart Plan, the Network Operator:

(a) may request AEMO to review the System Restart Plan; and

(b) must, where a request is made by the Network Operator under clause 3.7.8(a), provide details of the changes to the conditions on its Network with the request.

3.7.9. Where the System Restart Plan, or any revision to it, requires a Network Operator to change or modify any Network equipment, AEMO and the Network Operator must agree a timeframe that is sufficient for the Network Operator to make any

such change or modification, including time to undertake appropriate and reasonable testing.

3.7.10. Where AEMO:

(a) has received a request from a Network Operator under clause 3.7.8; or

(b) considers, for any reason, that the System Restart Standard (or any part of it) is no longer achievable or effective,

AEMO must review the System Restart Standard or the System Restart Plan, or both, if required, and make any revisions that AEMO considers are necessary to ensure that the System Restart Standard and the System Restart Plan are achievable and effective for restarting the SWIS in the event of a system shutdown or major supply disruption.

3.7.11. Without limiting the frequency of reviews AEMO may undertake in accordance with clause 3.7.10, AEMO must review the System Restart Standard and the System Restart Plan to ensure they are appropriate and consistent with the requirements of this section 3.7 within three years of the commencement of the System Restart Standard and System Restart Plan and then at least once in every three-year period from completion of the previous review.

Local Black Start Procedures

3.7.12. AEMO must publish guidelines for developing Local Black Start Procedures on the WEM Website.

3.7.13. Unless exempted by AEMO (in its absolute discretion), a Market Participant with a Registered Facility that contains an Energy Producing System must:

(a) develop and maintain Local Black Start Procedures in accordance with the guidelines published by AEMO under clause 3.7.12 and any modifications published under clause 3.7.16; and

(b) promptly provide the Local Black Start Procedures to AEMO, including any amendments to them.

3.7.14. Local Black Start Procedures must provide sufficient information to enable AEMO to understand the likely condition and capabilities of Registered Facilities following a system shutdown or major supply disruption such that AEMO is able to develop and maintain the System Restart Plan.

3.7.15. If AEMO forms the view, acting reasonably, that it would be useful for the effective operation of the System Restart Plan, AEMO must provide each Network Operator with the Local Black Start Procedures that AEMO considers are relevant to the Network Operator.

3.7.16. Following a review conducted under clause 3.7.10 or clause 3.7.11, AEMO may modify the guidelines for Local Black Start Procedures by publishing the modified guidelines on the WEM Website, which are deemed to take effect from the date of publication or later date notified by AEMO.

3.7.17. Following any modification to the guidelines for Local Black Start Procedures, AEMO may require a Market Participant with a Registered Facility that contains an Energy Producing System to amend the Local Black Start Procedures for the Registered Facility. Any such request by AEMO must:

(a) set out the reasons for the requested amendments; and

(b) specify a timeframe, which must be reasonable having regard to the extent and complexity of the request, by when the amendments to the Market Participant's Local Black Start Procedures for the Registered Facility must be made.

Publication

3.7.18. AEMO must publish the System Restart Standard, including any revisions following a review in accordance with clause 3.7.10 or clause 3.7.11, on the WEM Website.

3.7.19. The System Restart Plan, and any revisions following a review in accordance with clause 3.7.10 or clause 3.7.11, are Confidential Information. Notwithstanding this classification, AEMO may disclose information contained in the System Restart Plan with System Restart Service Providers and prospective System Restart Service Providers, where AEMO considers that disclosure would support provision of a System Restart Service.

Obligations to Restart the SWIS

3.7.20. AEMO must use its reasonable endeavours to ensure the SWIS is restarted and restored in the event of a system shutdown or major supply disruption.

3.7.21. In performing its obligation under clause 3.7.20, AEMO must, when coordinating with Network Operators regarding the restoration of the SWIS following a successful restart, have reasonable regard to information provided by Network Operators.

3.7.22. Each Network Operator must use its reasonable endeavours to ensure that, at all times, its Network is capable of being restarted or restored in accordance with the System Restart Plan in the event of a system shutdown or major supply disruption.

3.7.23. Each Network Operator must take all actions necessary to support and enable AEMO to implement the System Restart Plan in the event the System Restart Plan is enacted, including by:

(a) complying with any directions from AEMO;

(b) providing timely information to AEMO on the status of its Network and whether the System Restart Plan may need to be adjusted to address the actual conditions on the Network at that time;

(c) coordinating with AEMO during the restoration of the SWIS on revisions that may be required to the System Restart Plan to address the actual conditions on the Network during the restoration; and

(d) cooperating with any requests from AEMO, including using best endeavours to provide any information requested by AEMO within the time specified by AEMO.

3.7.24. Where directed by AEMO, a Market Participant must take all actions necessary to support the enactment of the System Restart Plan, including by:

(a) committing or de-committing any, or all, of its Facilities, or individual energy producing units within its Facilities, or operating them in a manner required by AEMO;

(b) operating a Facility or individual energy producing unit or equipment within a Facility in a particular manner, consistent with the relevant Registered Generator Performance Standards or Standing Data for that Facility;

(c) providing an Essential System Service if the Facility is accredited for that Essential System Service; and

(d) cooperating with any requests from AEMO, including using best endeavours to provide any information requested by AEMO within the time specified by AEMO.

Procurement of System Restart Services

3.7.25. AEMO must use its reasonable endeavours to procure System Restart Services to meet the System Restart Standard.

3.7.26. AEMO may enter into a System Restart Service Contract with a Market Participant.

3.7.27. AEMO must prepare a specification for a System Restart Service requirement to meet the System Restart Standard in accordance with the WEM Procedure specified in clause 3.7.40.

3.7.28. AEMO must publish a call for submissions for the provision of System Restart Service, no later than 20 Business Days prior to the proposed closing date for submissions, on the WEM Website and at least one major tender portal.

3.7.29. AEMO must include in the call for submissions referred to in clause 3.7.28:

(a) the date and time for lodgement of submissions;

(b) contact details for AEMO;

(c) a description of the technical requirements, including any locational requirements, for the System Restart Service;

(d) the location on the WEM Website of the standard form contract referred to in clause 3.7.30; and

(e) the location on the WEM Website of the specification prepared by AEMO in accordance with clause 3.7.27 for the System Restart Service.

3.7.30. AEMO must develop, maintain and publish on the WEM Website, a standard form contract for the provision of a System Restart Service which must include, at a minimum, the following fields:

(a) the name of the Market Participant and its Registered Facility that is proposed to provide the System Restart Service;

(b) the offer price for each cost component specified by AEMO, which may include, where applicable:

i. a price to cover the cost of capital works;

ii. a service availability price, including for ongoing maintenance works;

iii. a service testing price; and

iv. a service usage price;

(c) the proposed contract term for the System Restart Service;

(d) the availability requirements for the System Restart Service; and

(e) a standard list of terms and conditions to apply to the contract.

3.7.31. A submission made by a prospective System Restart Service Provider in response to a call for submissions under clause 3.7.28 must:

(a) be made in good faith;

(b) incorporate the standard form contract published by AEMO in accordance with clause 3.7.30;

(c) be capable of being accepted by AEMO and binding on the Market Participant and AEMO; and

(d) include the cost information and any assumptions used to calculate the proposed offer for the provision of the System Restart Service.

3.7.32. Any costs incurred by a prospective System Restart Provider to determine the adequacy and capability of its equipment to assist it in making a valid submission under clause 3.7.31 are to be borne by that prospective System Restart Provider. To avoid doubt, this includes the costs of any negotiations with a Network

Operator in respect to any Network equipment augmentation that may assist the prospective System Restart Service Provider in making a valid submission.

3.7.33. Where a prospective System Restart Service Provider initiates discussions with a Network Operator with respect to a proposed submission made by the prospective System Restart Service Provider under clause 3.7.31, the Network Operator must negotiate in good faith with the prospective System Restart Service Provider with respect to identifying and, if possible, resolving issues that would prevent the delivery of effective System Restart Services proposed by the prospective System Restart Service Provider.

Sharing System Restart Service submissions

3.7.34. Where a prospective System Restart Service Provider makes a submission under clause 3.7.31, the Market Participant consents to AEMO sharing information contained in the submission in accordance with clause 3.7.35.

3.7.35. AEMO may, as part of assessing a submission made under clause 3.7.31, provide details of the submission, except for the offer price and any other commercially sensitive information, to each relevant Network Operator to assist AEMO to determine whether the proposal in the submission is technically feasible, including whether any augmentation of the Network would be required to make the proposal technically feasible.

Awarding System Restart Service Contract

3.7.36. Where AEMO accepts a submission made under clause 3.7.31, it must:

(a) notify the Market Participant within five Business Days of accepting the submission; and

(b) publish a notice on the WEM Website within five Business Days of accepting the submission.

3.7.36A. AEMO and Market Participants, when entering into a System Restart Service Contract, must use the standard form contract published under clause 3.7.30.

3.7.36B. AEMO may allow a System Restart Service contract to vary from the standard form contract where AEMO considers that those variations are reasonably required, having regard to the specific characteristics of the Facility providing the System Restart Service.

3.7.37. AEMO's acceptance of a submission made under clause 3.7.31 forms a binding System Restart Service Contract between the Market Participant and AEMO.

Network Operator’s Obligations to Facilitate System Restart Services

3.7.38. A Network Operator must:

(a) provide any information to AEMO and conduct any analysis which AEMO reasonably requires in order for AEMO to assess the capability of a proposed System Restart Service to meet the System Restart Standard; and

(b) where it is reasonable and practicable to do so, participate in or facilitate testing of a System Restart Service proposed to be provided by a prospective System Restart Service Provider, and any further testing once a System Restart Service Provider is contracted to provide a System Restart Service, to confirm the ongoing availability of the System Restart Service in accordance with the terms of the System Restart Service Contract.

Recovery of Costs

3.7.39. Except to the extent specified in these ESM Rules or the System Restart Service Contract, AEMO, each Network Operator and each System Restart Service Provider must bear their own costs in respect of:

(a) a System Restart Service Contract (including, to avoid doubt, the preparation or negotiation of it in accordance with this section 3.7); and

(b) the provision of a System Restart Service.

3.7.40. AEMO must document in a WEM Procedure:

(a) the methodology and processes it uses to determine the System Restart Standard and System Restart Plan;

(b) any matters, in addition to the requirements specified in clause 3.7.30, that the standard form contract for System Restart Service submissions may address;

(c) the factors AEMO may consider when determining whether changes from the standard form contract are reasonably required for the purposes of clause 3.7.36B;

(d) the processes to be followed by AEMO and Rule Participants in relation to the procurement of System Restart Services by AEMO;

(e) the methodologies and processes to be followed by AEMO in:

i. determining whether a System Restart Service submission is valid;

ii. analysing and selecting System Restart Service submissions to meet the System Restart Standard; and

iii. accepting a System Restart Service submission to become an effective System Restart Service Contract;

(f) the processes to be followed by AEMO in conducting a review under clauses 3.7.10 and 3.7.11 and consulting with Network Operators; and

(g) any other matters AEMO considers as reasonably required in relation to System Restart Service provision or operation.

3.8. Investigating Significant Incidents in the SWIS

3.8.1. AEMO must investigate any incidents, including incidents in the operation of equipment comprising the SWIS, that:

(a) endanger Power System Security or Power System Reliability to a significant extent;

(b) cause significant disruption to the operation of the Central Dispatch Process set out in section 7.6;

(c) AEMO considers has had, or had the potential to have had, a significant impact on the effectiveness of the market; or

(d) cause significant deviation from the SWIS's normal operating conditions.

3.8.2. If an incident referred to in clause 3.8.1 occurs:

(a) AEMO may require the Rule Participants involved in the incident to provide data, information or a report on the incident within a reasonable time period specified by AEMO;

(b) AEMO may require a Network Operator to provide data, information or a report (including, without limitation, from any measuring equipment) in respect of the incident within a reasonable time period specified by AEMO;

(c) a Rule Participant must comply with any request by AEMO for data, information or a report under clause 3.8.2(a) or clause 3.8.2(b); and

(d) AEMO may conduct its own investigation of, or engage independent experts to report on, the incident.

3.8.2A. Following the investigation, AEMO must provide a report detailing its findings to the Coordinator and the Economic Regulation Authority. The report must identify any Confidential Information.

3.8.3. Following the investigation, AEMO must publish a report detailing its findings and including:

(a) any reports provided in accordance with clause 3.8.2(d) after AEMO has removed any Confidential Information; and

(b) a description of any changes to the ESM Rules or WEM Procedures that AEMO considers necessary to prevent the future occurrence of similar incidents.

3.8.4. If AEMO considers that changes in the ESM Rules are necessary, it must draft and submit a suitable Rule Change Proposal.

3.8.5. If AEMO considers that changes in a WEM Procedure which these ESM Rules contemplate will be developed by AEMO are necessary, it must draft a suitable Procedure Change Proposal and progress it using the Procedure Change Process in section 2.10.

3.8.5A. If AEMO has recommended any changes to the WEM Procedures which these ESM Rules contemplate will be developed by the Economic Regulation Authority, then if the Economic Regulation Authority considers they are necessary, it must draft a suitable Procedure Change Proposal and progress it using the Procedure Change Process in section 2.10.

3.8.6. If AEMO has recommended any changes to the WEM Procedures which these ESM Rules contemplate will be developed by a Network Operator, then if the Network Operator considers they are necessary, it must draft a suitable Procedure Change Proposal and progress it using the Procedure Change Process in section 2.10.

3.8.7. If AEMO recommends to the Economic Regulation Authority pursuant to clause 3.8.5A or a Network Operator pursuant to clause 3.8.6 that changes to a WEM Procedure are necessary, the Economic Regulation Authority or the Network Operator, as applicable, must publish:

(a) the changes recommended by AEMO; and

(b) its decision and reasons as to whether the changes recommended by AEMO are necessary,

on the Economic Regulation Authority's or the Network Operator's website, as applicable.

3.8A. Contingency Events

3.8A.1. A Contingency Event is an event affecting the SWIS which AEMO expects would be likely to involve:

(a) the failure or removal from operational service of one or more energy producing units, Facilities and/or Network elements; or

(b) an unplanned change in load, Intermittent Generation or other elements of the SWIS not controlled by AEMO.

3.8A.2. A Credible Contingency Event means one or more Contingency Events, the occurrence of which AEMO considers in accordance with the WEM Procedure referred to in clause 3.8A.4 to be reasonably possible in the prevailing circumstances, taking into account the Technical Envelope. Without limitation, examples of Credible Contingency Events include:

(a) the unexpected automatic or manual disconnection of, or the unplanned change in output of, one or more operating energy producing units or Facilities;

(b) the unexpected disconnection of one or more major items of Network equipment; or

(c) Non-credible Contingency Events reclassified as Credible Contingency Events in accordance with the WEM Procedure referred to in clause 3.8A.4.

3.8A.3. A Non-credible Contingency Event means a Contingency Event other than a Credible Contingency Event. Without limitation, examples of Non-credible Contingency Events include simultaneous disruptive events such as:

(a) multiple Facility failures; or

(b) failure of multiple items of Network equipment.

3.8A.4. AEMO must develop and maintain a WEM Procedure which sets out:

(a) the process for determination and classification of Credible Contingency Events;

(b) the Contingency Reclassification Conditions;

(c) the factors that AEMO may take into account in reclassifying a Contingency Event in accordance with this section 3.8A;

(d) the process for reclassifying a Non-credible Contingency Event as a Credible Contingency Event;

(e) the procedures for notifying affected Rule Participants under clause 3.8A.7, including the time by which a notification must be given; and

(f) a description of the Contingency Events that are generally considered as Credible Contingency Events, taking into consideration relevant requirements in the Technical Rules of the relevant Network Operator.

3.8A.5. AEMO must:

(a) determine a Credible Contingency Event; and

(b) reclassify a Non-credible Contingency Event as a Credible Contingency Event,

in accordance with the WEM Procedure referred to in clause 3.8A.4.

3.8A.6. Where AEMO determines a new Credible Contingency Event, or reclassifies a Non-credible Contingency Event as a Credible Contingency Event, AEMO must:

(a) publish the determination or reclassification on the WEM Website; and

(b) notify affected Rule Participants in accordance with the WEM Procedure referred to in clause 3.8A.4 of all relevant information, including but not limited to:

i. the name of the new Credible Contingency Event;

ii. a description of the new Credible Contingency Event;

iii. any relevant timeframes in respect of the new Credible Contingency Event; and

iv. if applicable, the Contingency Reclassification Conditions that gave rise to the reclassification of a Non-credible Contingency Event as a Credible Contingency Event.

3.8A.7. If any of the information provided to Rule Participants in accordance with clause 3.8A.6 changes in any material respect, AEMO must publish the changes on the WEM Website and notify the affected Rule Participants in accordance with the WEM Procedure referred to in clause 3.8A.4.

3.8B. Review of DPV Shake-Off and Load Shake-Off Impact on Contingency Events

3.8B.1. Western Power must, in accordance with this section 3.8B, conduct a review of the methods for estimating DPV Shake-Off and Load Shake-Off MW quantities arising from Contingency Events in the SWIS at least once in every two years. Western Power must:

(a) publish the final report for its first review by 30 June 2027; and

(b) publish the final report for each subsequent review no later than two years after the publication date of the final report for the previous review.

3.8B.2. In conducting a review under clause 3.8B.1, Western Power must, in consultation with AEMO:

(a) undertake modelling and analysis using available records of previous Contingency Events to estimate the MW quantities of DPV Shake-Off and Load Shake-Off associated with those events;

(b) undertake analysis of the factors that influence the MW quantities of DPV Shake-Off and Load Shake-Off arising from Credible Contingency Events in the SWIS; and

(c) develop or refine, as applicable, methods for estimating DPV Shake-Off and Load Shake-Off MW quantities to be used by AEMO when determining:

i. the Largest Credible Supply Contingency and Largest Credible Load Contingency for each Dispatch Interval and Pre-Dispatch Interval; and

ii. Frequency Co-optimised Essential System Service requirements for each Dispatch Interval and Pre-Dispatch Interval.

3.8B.3. In conducting a review under clause 3.8B.1, Western Power must, at least four months prior to the date by which it must publish the final report, publish:

(a) a draft report containing a draft of the information required under clauses 3.8B.5(a), 3.8B.5(b), 3.8B.5(c), 3.8B.5(d) and 3.8B.5(g);

(b) a request for submissions on the draft report; and

(c) the closing date for submissions, which must be at least 20 Business Days after the date of publication of the draft report.

3.8B.4. Western Power must publish any submissions it receives in response to a draft report published under clause 3.8B.3 on its website, and take those submissions into account when preparing its final report under clause 3.8B.5.

3.8B.5. Following the closing date for submissions on a report published under clause 3.8B.3, Western Power must publish a final report containing:

(a) details of the modelling and analysis undertaken and the outcomes of the modelling and analysis;

(b) details of the methods developed or refined under clause 3.8B.2(c);

(c) details of the input parameters required by the methods specified under clause 3.8B.2(c), including the sources of input parameters, initial values, and details of mechanisms for the review and update of parameters where appropriate;

(d) an assessment of any limitations on the accuracy of the proposed methods and potential options to address those limitations;

(e) a summary of submissions received by Western Power on the draft report;

(f) Western Power's response to the issues raised in submissions; and

(g) any other matters Western Power considers relevant to the review.

3.8B.6. Western Power must provide to AEMO any information Western Power holds that is reasonably required by AEMO to implement the methods specified by Western Power in a final report under clause 3.8B.5(b).

3.8B.7. If AEMO decides to vary the methods it uses for the purposes described in clause 3.8B.2(c) from the methods specified by Western Power in the most recent final report published under clause 3.8B.5, then AEMO must publish the reasons for its decision on the WEM Website.

Essential System Services

3.9. Definitions of Essential System Services

3.9.1. Regulation is the service, measured in MW, of frequently adjusting the Injection or Withdrawal of a Facility in accordance with an AEMO centralised control scheme in order to assist in maintaining the SWIS Frequency according to the Frequency Operating Standards.

3.9.2. Regulation Raise is a Regulation service, measured in MW of response capability, that operates to raise the SWIS Frequency.

3.9.3. Regulation Lower is a Regulation service, measured in MW of response capability, that operates to lower the SWIS Frequency.

3.9.4. Contingency Reserve is the service, measured in MW, of holding response capability associated with a Facility in reserve so that the relevant Facility can rapidly adjust Injection or Withdrawal in order to assist in maintaining the SWIS Frequency according to the Frequency Operating Standards after a Contingency Event.

3.9.5. Contingency Reserve Raise is a Contingency Reserve service, measured in MW of response capability, that enables a Facility to adjust Injection or Withdrawal to raise the SWIS Frequency.

3.9.6. Contingency Reserve Lower is a Contingency Reserve service, measured in MW of response capability, that enables a Facility to adjust Injection or Withdrawal to lower the SWIS Frequency.

3.9.7. Rate of Change of Frequency Control Service (“**RoCoF Control Service**”) is the service, measured in MWs, of providing Inertia which provides instantaneous response to slow down the rate of change of the SWIS Frequency.

3.9.8. System Restart Service is the service of an Energy Producing System starting without requiring energy to be supplied from a Network to assist in the re-energisation of the SWIS in the event of system shutdown, or a major supply disruption.

3.9.9. Non-Co-optimised Essential System Service ("NCESS") is an Essential System Service that is procured in accordance with section 3.11B.

3.10. Essential System Service Standards

3.10.1. Subject to clause 3.12.2, AEMO must schedule and dispatch sufficient Regulation to ensure that the frequency in the SWIS is maintained within the Normal Operating Frequency Band and the Normal Operating Frequency Excursion Band in accordance with Chapter 3B.

3.10.2. When determining the quantity of Regulation to schedule and dispatch in accordance with clause 3.10.1, AEMO must take into account the historic and expected variability of the frequency in the SWIS.

3.10.3. Subject to clause 3.12.2, AEMO must schedule and dispatch sufficient Contingency Reserve and RoCoF Control Service to ensure that, in combination, following a Credible Contingency Event the frequency in the SWIS is maintained within:

(a) the relevant Frequency Band; and

(b) the RoCoF Safe Limit.

3.11. Determining & Procuring Frequency Co-optimised Essential System Service Requirements

3.11.1. Where the quantities of any Frequency Co-optimised Essential System Service expected to be required in a Dispatch Interval, or the combined quantities of more than one Frequency Co-optimised Essential System Service which are to be provided by the same accredited Facility, is greater than the accredited Essential System Service capacity for that Frequency Co-optimised Essential System Service under the appropriate load forecast as determined in accordance with the WEM Procedure referred to in clause 3.17.11 ("**FCESS Accreditation Shortfall**"), AEMO must identify:

(a) the times of the affected Dispatch Intervals; and

(b) the maximum incremental Frequency Co-optimised Essential System Service requirement for each of the affected Dispatch Intervals.

3.11.2. AEMO must identify, record and publish on the WEM Website by no later than noon on the first Business Day following the day on which the Trading Day ends:

(a) the number of Dispatch Intervals in the previous 90 Trading Days for which, four hours ahead of the relevant Dispatch Interval, AEMO has scheduled a shortfall in each Frequency Co-optimised Essential System Service, as a result of AEMO's obligations under clauses 3.12.1 and 3.12.2, in the Available Capacity Scenario; and

(b) the number of Dispatch Intervals in the previous 90 Trading Days for which AEMO directed a Market Participant to commit a Facility to provide a Frequency Co-optimised Essential System Service due to a forecast real-time shortfall not being resolved in response to a Low Reserve Condition Declaration ("**FCESS Participation Shortfall**").

3.11.3. Where the number of Dispatch Intervals identified in clause 3.11.2(b) is greater than the threshold specified in the WEM Procedure referred to in clause 3.11.4 for each Dispatch Interval identified in clause 3.11.2(b), AEMO must identify and publish on the WEM Website within 15 Business Days:

(a) the times of each of the Dispatch Intervals;

(b) the total shortfall quantity of the Frequency Co-optimised Essential System Service required in each Dispatch Interval; and

(c) the difference between the Market Clearing Price for the Dispatch Interval and the Market Clearing Price which was initially calculated for the Dispatch Interval before AEMO applied the intervention pricing procedure described in the WEM Procedure referred to in clause 7.11C.11.

3.11.4. AEMO must document in a WEM Procedure the process and basis to determine the number of Dispatch Intervals in any 90 Trading Day period in which it issues directions for a specific Frequency Co-optimised Essential System Service that, once reached, requires AEMO to trigger the SESSM in accordance with section 3.15A.

3.11.5. In developing the WEM Procedure referred to in clause 3.11.4, AEMO must have regard to:

(a) the impact of the directions on AEMO's dispatch process; and

(b) the cost of ongoing directions to Market Participants made pursuant to clause 7.7.5 (including in the form of Intervention Pricing).

3.11.6. Where:

(a) AEMO identifies a FCESS Accreditation Shortfall and, in its reasonable opinion, the FCESS Accreditation Shortfall will not be met by Market Participant activity; or

(b) the number of Dispatch Intervals in any 90 Trading Day period identified in clause 3.11.2(b) is greater than or equal to the threshold specified in the WEM Procedure referred to in clause 3.11.4,

AEMO must trigger the SESSM in accordance with section 3.15A and must identify the quantity of forecast shortfall and the times of the Dispatch Intervals forecast to be affected.

3.11.7. AEMO must document in a WEM Procedure the methodologies and processes to be followed by AEMO in determining, for each Pre-Dispatch Interval and Dispatch Interval:

(a) the quantity of Regulation to schedule and dispatch, including:

i. the identification and measurement of sources of variability; and

iii. the method by which the quantity of Regulation required is calculated;

(b) the combination of Contingency Reserve and RoCoF Control Service required to maintain the frequency of the SWIS within the Credible

Contingency Event Frequency Band, including the use of Facility Speed Factors for a Facility; and

(c) the expected quantities of any other Frequency Co-optimised Essential System Services required in each Dispatch Interval or Pre-Dispatch Interval to meet the Essential System Service Standards.

3.11A. Triggering Procurement of Non-Co-optimised Essential System Services (NCESS)

3.11A.1. The Coordinator may only trigger procurement of a NCESS in accordance with this section 3.11A.

3.11A.2. If AEMO or a Network Operator reasonably considers that one or more of the following events has occurred or applies:

(a) the forecasted or actual amount of Energy Uplift Payments due to binding Network Constraints has reached a level which may not be consistent with the State Electricity Objective;

(b) the forecasted or actual number of AEMO Intervention Events to relieve non-frequency control constraints such as loss of reactive power or System Strength indicates a network security problem, and a case could be made to procure a locational security NCESS;

(c) the Transmission System Plan prepared under section 4.5B, or the Network Opportunity Map, identifies that a suitable non-network investment option may meet network adequacy requirements to help maintain SWIS Power System Security and Power System Reliability standards;

(d) a need to establish a non-network solution has been identified, arising at any time during a network planning cycle, and not previously identified through the standard planning processes;

(e) a modification to an existing Power System Security or Power System Reliability standard or the introduction of a new Power System Security or Power System Reliability standard within a network planning cycle may trigger the need to procure a NCESS; or

(f) AEMO considers, in the course of its normal power system operations, that a significant threat to Power System Security or Power System Reliability exists or is emerging, and the existing mechanisms under these ESM Rules may not be sufficient to address the threat,

then:

(g) AEMO must notify the relevant Network Operator, or the Network Operator must notify AEMO (as applicable), of each event that AEMO or the Network Operator (as applicable) considers has occurred or applies, as soon as practicable but in any event before making a submission under clause 3.11A.2(h); and

(h) AEMO or the relevant Network Operator (or, at their discretion, both of them) must make a submission (jointly or separately) to request the Coordinator to determine whether to trigger an NCESS procurement process in accordance with section 3.11B.

3.11A.2A. The Coordinator, in consultation with AEMO and a Network Operator, must develop, and publish on the WEM Website, a guideline providing further details regarding the events described in clause 3.11A.2.

3.11A.3. A submission by a Network Operator or AEMO under clause 3.11A.2 must:

(a) be in writing;

(b) be made by a date that the Network Operator or AEMO, as applicable, reasonably considers allows sufficient time to enable the NCESS procurement process set out in section 3.11B to be conducted; and

(c) contain sufficient information and analysis regarding the potential or actual impact on Power System Security, Power System Reliability or costs for each trigger event in clause 3.11A.2 that is specified in the submission to enable the Coordinator to consider the factors outlined in clause 3.11A.7.

3.11A.4. The Coordinator may trigger an NCESS procurement process in accordance with section 3.11B where any one or more of the following events has occurred or applies:

(a) the forecast or actual amount of Energy Uplift Payments resulting from one or more binding Constraints imposes an unreasonable level of costs on the market, when assessed against the State Electricity Objective;

(b) the Market Clearing Price for any of the Frequency Co-optimised Essential System Services is unreasonable for a sustained period when assessed against the State Electricity Objective;

(c) the Whole of System Plan published under section 4.5A indicates alternative network investment options may exist that are reasonably likely to meet a relevant identified network need;

(d) the Amending Rules in a Final Rule Change Report require a new service; or

(e) the Coordinator has received a submission from a Network Operator or AEMO pursuant to clause 3.11A.2.

3.11A.5. When determining under clause 3.11A.4 whether or not to trigger an NCESS procurement process in accordance with section 3.11B, the Coordinator may:

(a) where the Coordinator has received a submission under clause 3.11A.3, request any reasonable further information or analysis from AEMO or the Network Operator to supplement the submission, and AEMO or the Network Operator, as applicable, must provide the information or analysis

by the time specified in the request, which must be reasonable having regard to the nature of the information or analysis requested;

(b) consult with AEMO or a Network Operator; and

(c) undertake any reasonable studies, analysis or assessment to support her or his decision.

3.11A.6. The Coordinator must determine whether to trigger the procurement of an NCESS under clause 3.11A.4:

(a) where the Coordinator has received a submission from AEMO or a Network Operator under clause 3.11A.2, within 20 Business Days of the later of:

i. receipt of the submission; and

ii. receipt of any further information or analysis under clause 3.11A.5; or

(b) where the Coordinator becomes aware of any other event specified in clause 3.11A.4, within 20 Business Days of the later of:

i. becoming aware of the event; and

ii. receipt of any further information or analysis under clause 3.11A.5 relating to the event.

3.11A.7. The Coordinator must take the following factors into account when determining whether to trigger the procurement of an NCESS under clause 3.11A.4:

(a) where the issue relates to Power System Security or Power System Reliability, the extent to which an NCESS will address the issue;

(b) the extent to which an NCESS will minimise costs in the Wholesale Electricity Market;

(c) the relative merits between procuring an NCESS or augmenting the network;

(d) whether it is suspected that there is a potential exercise of market power;

(e) whether the procurement of an NCESS is consistent with the State Electricity Objective; and

(f) whether procurement of an NCESS will be in the long-term interests of consumers.

3.11A.8. Where the Coordinator determines under clause 3.11A.4 to trigger an NCESS procurement process in accordance with section 3.11B, the Coordinator must publish a determination on the Coordinator's Website, redacting any commercially sensitive or other confidential information, together with the following:

(a) details of any submission received under clause 3.11A.2;

(b) reasons for triggering the procurement of an NCESS;

(c) any supporting studies, analysis or assessments relied on by the Coordinator in deciding to trigger the procurement of an NCESS;

(d) whether AEMO or a Network Operator (in which case, the name of the Network Operator is to be specified), or both of them, is to procure an NCESS and pay for the service; and

(e) any other matters relevant to the Coordinator's decision or procurement of an NCESS.

3.11A.9. AEMO or the Network Operator, or both of them, as directed under clause 3.11A.8(d), must commence an NCESS procurement process in accordance with section 3.11B.

3.11A.10. Where the Coordinator determines under clause 3.11A.4 not to trigger an NCESS procurement process, the Coordinator must publish a notice on the Coordinator's Website, redacting any commercially sensitive or other confidential information, setting out the reasons for her or his decision.

3.11B. Procuring Non-Co-optimised Essential System Services

Expression of interest

3.11B.1. AEMO or the Network Operator, as directed under clause 3.11A.8(d), must prepare a draft NCESS Service Specification in accordance with clause 3.11B.5. In preparing the draft NCESS Service Specification, AEMO and the Network Operator must consult with each other on the draft NCESS Service Specification.

3.11B.2. Within 20 Business Days, or as reasonably agreed with the Coordinator, of the publication of the Coordinator's determination under clause 3.11A.8, AEMO or the Network Operator, as applicable, must advertise a call for expressions of interest by:

(a) publishing a notice on the WEM Website, in the case of AEMO, or publishing a notice on the Network Operator's website, in the case of the Network Operator; and

(b) publishing a notice on at least one major tender portal.

3.11B.3. AEMO or the Network Operator, as applicable, must include in each notice referred to in clause 3.11B.2:

(a) the date and time for lodgement of expressions of interest, which must not be less than 20 Business Days after the date the last notice is published in accordance with clause 3.11B.2;

(b) the location on the WEM Website, in the case of AEMO, or the Network Operator's website, in the case of the Network Operator, of the draft NCESS Service Specification;

(c) contact details for AEMO or the Network Operator, as applicable; and

(d) the location on the WEM Website, in the case of AEMO, or the Network Operator's website, in the case of the Network Operator, of the expression of interest form referred to in clause 3.11B.3A.

3.11B.3A. AEMO or the Network Operator, as applicable, must develop and publish on the WEM Website, in the case of AEMO, or the Network Operator's website, in the case of the Network Operator, an expression of interest form, setting out the details prospective service providers must provide in response to a call for expressions of interest, which must include whether the facility or equipment that may be able to provide the service can fully or partially meet the draft NCESS Service Specification.

3.11B.4. Within 20 Business Days, or as reasonably agreed with the Coordinator, of the closing date for expressions of interest under clause 3.11B.3, AEMO or the Network Operator, as applicable, must consult with the Coordinator to determine whether, based on the expressions of interest received:

(a) the NCESS procurement process should proceed, in which case, AEMO or the Network Operator, as applicable, must prepare a final NCESS Service Specification, which must be consistent with the draft NCESS Service Specification, and publish a call for NCESS Submissions in accordance with clause 3.11B.6;

(b) the NCESS procurement process should proceed subject to modifications to the Service Specification, in which case, AEMO or the Network Operator, as applicable, must prepare a revised NCESS Service Specification and publish a call for NCESS Submissions in accordance with clause 3.11B.6; or

(c) the NCESS procurement process should not proceed, in which case, AEMO or the Network Operator, as applicable, must:

i. publish a notice on the WEM Website, in the case of AEMO, or the Network Operator's website, in the case of the Network Operator, notifying that the NCESS procurement process will not proceed and the reasons for the decision; and

ii. notify each person that submitted an expression of interest that procurement of the NCESS is not proceeding and the location on the WEM Website, in the case of AEMO, or the Network Operator's website, in the case of the Network Operator, of the notice referred to in clause 3.11B.4(c)(i).

3.11B.5. An NCESS Service Specification must, at a minimum, include:

(a) the service requirements;

(b) the expected technical capability of a facility or equipment that may be able to provide the service;

(c) where applicable, the likely network location where the service is to be provided;

(d) the maximum quantity of the service required;

(e) the expected commencement and duration of the service;

(eA) reasonable expectation of the frequency of service utilisation, the expected duration of each utilisation and when the service is expected to be utilised during typical days;

(f) any operational requirements or limitations;

(g) the material contractual terms associated with the NCESS, including required pricing structure;

(h) the selection criteria that may apply to the NCESS Submissions; and

(i) any other relevant matters.

3.11B.6. In advertising a call for NCESS Submissions in accordance with clause 3.11B.4(a), AEMO or the Network Operator, as applicable, must:

(a) publish a notice requesting NCESS Submissions:

i. on the WEM Website, in the case of AEMO, or the Network Operator's website, in the case of the Network Operator; and

ii. on at least one major tender portal; and

(b) notify Market Participants in writing.

3.11B.6A. AEMO or the Network Operator, as applicable, must include in each notice referred to in clause 3.11B.6:

(a) the date and time for lodgement of NCESS Submissions, which must:

i. not be less than 20 Business Days after the date the last notice is published in accordance with clause 3.11B.6; and

ii. be in accordance with the form referred to in clause 3.11B.7;

(b) contact details for AEMO or the Network Operator, as applicable; and

(c) the location on the WEM Website, in the case of AEMO, or the Network Operator's website, in the case of the Network Operator, of the NCESS Submission form referred to in clause 3.11B.7;

(d) the location on WEM Website, in the case of AEMO, or the Network Operator's website, in the case of the Network Operator, of the NCESS Service Specification referred to in clause 3.11B.5; and

(e) any qualifying criteria in respect of making an NCESS Submission in accordance with clause 3.11B.8.

3.11B.7. An NCESS Submission form must, at a minimum, include:

(a) the name and type of facility or equipment, and whether it is registered or intended to be registered under these ESM Rules;

(b) the name of the Market Participant or service provider, as applicable, in respect to the facility or equipment;

(c) the quantity of service the facility or equipment will provide for the NCESS;

(d) the timing and duration of the service availability for the NCESS;

(e) the location of the facility or equipment on the network;

(f) any operational requirements or limitations that must be respected for use of the facility or equipment for the NCESS;

(g) where the NCESS Submission is made in respect to a type of technology that would ordinarily be capable of being assigned Certified Reserve Capacity, the information required to be provided by the Market Participant or service provider to demonstrate that it will be able to meet the relevant requirements in clause 4.10.1 in respect of each Reserve Capacity Cycle that the Facility would be eligible to participate in over the period of the NCESS Contract;

(gA) where the NCESS Submission is made in respect to a type of technology that would not ordinarily be capable of being assigned Certified Reserve Capacity, the information required to be provided by the Market Participant or service provider to demonstrate that it is not able to meet the relevant requirements of clause 4.10.1;

(h) whether the facility or equipment participates, or will participate, in Central Dispatch or is accredited or will be accredited under these ESM Rules to provide an Essential System Service;

(i) the fixed costs for that facility or equipment applicable for the period of the NCESS Contract, including any Capacity Credit payments expected or received;

(iA) if the facility or equipment would ordinarily be capable of being assigned Certified Reserve Capacity, whether the Market Participant or service provider would require any reimbursement for any reduction in a Reserve Capacity settlement amount determined for it under clause 9.8.2 that is a direct consequence of the enablement or dispatch of the NCESS;

(iB) if the NCESS involves a Non-Contestable Customer;

(j) the highest price at which the facility or equipment will provide the NCESS when enabled or dispatched; and

(k) any other payment that the facility or equipment requires to provide the NCESS.

Participation in NCESS Procurement

3.11B.8. An NCESS Submission must:

(a) be made in good faith;

(b) be made in accordance with the NCESS Submission form referred to in clause 3.11B.7 and contain any other information requested; and

(c) include the cost information and any assumptions used to calculate the proposed NCESS payment structure.

3.11B.8A. Synergy is the only Market Participant or service provider that may make an NCESS Submission that involves a Non-Contestable Customer.

Selection process and signing of NCESS Contract

3.11B.9. Within 20 Business Days, or as reasonably agreed with the Coordinator, of the closing date for NCESS Submissions, AEMO or the Network Operator, as applicable, must:

(a) in accordance with clause 3.11B.10, select one or more NCESS Submissions which:

i. comply with the requirements in clause 3.11B.7;

ii. meet the NCESS Service Specification published in the request for NCESS Submissions; and

iii. in AEMO's or the Network Operator's reasonable opinion, as applicable, will result in the highest value for money for providing the NCESS; and

(b) notify the relevant Market Participant or service provider that their NCESS Submission has been selected.

3.11B.10. Subject to clause 3.11B.12, when determining which NCESS Submissions to select under clause 3.11B.9, AEMO or the Network Operator, as applicable, must:

(a) exclude NCESS Submissions that do not comply with the NCESS Service Specification;

(aA) exclude NCESS Submissions from applicants other than Synergy that propose to involve a Non-Contestable Customer; and

(b) exclude NCESS Submissions for new facilities or equipment where:

i. insufficient evidence has been provided to support NCESS delivery dates; or

ii. sufficient Environmental Approvals have not been granted.

3.11B.11. AEMO or the Network Operator, as applicable, must, when assessing highest value for money under clause 3.11B.9(a)(iii) in respect of an NCESS Submission:

(a) conduct cost-benefit analysis or other assessments to demonstrate how the NCESS Submission will maximise value for money; and

(b) take into account all costs in the Wholesale Electricity Market, including, but not limited to, costs relating to Certified Reserve Capacity in respect to the Facility or equipment the subject of the NCESS Submission.

3.11B.12. AEMO or the Network Operator, as applicable, may decide to not select any NCESS Submissions where AEMO or the Network Operator considers, in their absolute discretion, that none of the NCESS Submissions represent value for money. Where this occurs, AEMO or the Network Operator, as applicable, must publish the reasons for the decision on the WEM Website, in the case of AEMO, or on the Network Operator's website, in the case of the Network Operator.

3.11B.13. Where a Network Operator intends to enter into an NCESS Contract that it reasonably believes may require operational coordination with AEMO in order to manage Power System Security or Power System Reliability, or that is captured in the Operating Protocol referred to in clause 3.1A.1, the Network Operator must, prior to issuing the NCESS Contract to the relevant Market Participant or service provider, consult with AEMO, and

(a) agree an operational process for coordination of scheduling, dispatch, enablement and monitoring of the NCESS with AEMO; and

(b) where AEMO requires control of the NCESS, agree the relevant requirements for control with AEMO and specify the agreed requirements in the NCESS Contract.

3.11B.14. Each Market Participant or service provider who is notified in accordance with clause 3.11B.9(b) that their NCESS Submission has been selected must, within 10 Business Days of receiving the executed NCESS Contract from AEMO or the Network Operator, as applicable:

(a) enter into an NCESS Contract with AEMO or the Network Operator, as applicable;

(b) where the service provider is required to be registered under these ESM Rules, make an application in accordance with these ESM Rules to become registered as a Rule Participant in the relevant class; and

(c) where the facility or equipment that will provide the NCESS is required to be registered under these ESM Rules, make an application in accordance

with these ESM Rules to register the facility or equipment in the relevant Facility Class.

3.11B.15. AEMO or the Network Operator, as applicable, must publish the following details regarding each NCESS Contract on the WEM Website, in the case of AEMO, or the Network Operator's website, in the case of the Network Operator, as soon as practicable after the NCESS Contract has been signed by all parties:

(a) the name of each Market Participant or service provider and the Facility or equipment that will provide the NCESS;

(b) the location on the network of the Facility or equipment;

(c) the type and quantity of service the Facility or equipment will provide as NCESS;

(d) the timing and duration of the NCESS to be provided under the NCESS Contract; and

(e) the payment structure and the amounts specified in the NCESS Contract, including but not limited to:

i. if applicable, the price to make the Facility or equipment available for enablement or dispatch, and the nature of the availability obligations;

ii. if applicable, the price at which the Facility or equipment will provide the NCESS when enabled or dispatched; and

iii. if applicable, any other payment that the Facility or equipment is entitled to, to provide the NCESS.

3.12. Essential System Service Dispatch

3.12.1. AEMO must schedule and dispatch Registered Facilities (or cause them to be scheduled and dispatched) to meet the Essential System Service Standards in each Dispatch Interval in accordance with Chapter 7.

3.12.2. AEMO must schedule or dispatch Registered Facilities for energy in preference to Frequency Co-optimised Essential System Service.

3.13. [Blank]

3.14. [Blank]

3.15. Review of Essential System Service Process and Standards

3.15.1. The Coordinator, with the assistance of AEMO, must carry out a review on the Essential System Service Standards and the basis for setting Essential System Service requirements.

3.15.1A. The Coordinator must conduct the first review under clause 3.15.1 within two and a half years of the New WEM Commencement Day and then, subject to clause 3.15.1B, at least once in every three year period from completion of the previous review.

3.15.1B. The Coordinator may conduct a review contemplated by clause 3.15.1 earlier than the time referred to in clause 3.15.1A if it reasonably forms the opinion that any of the metrics developed under clause 3.15.2 are significantly departing from the targets set in the previous review.

3.15.1C. A review conducted pursuant to clause 3.15.1A or clause 3.15.1B must include:

(a) technical analyses determining the relationship between the quantity of Essential System Service scheduled and dispatched against the technical parameters in the Frequency Operating Standards;

(b) economic analyses determining the relationship between technical parameters (including, without limitation, frequency operating bands and Oscillation Control Constraint Equation parameters) and overall cost of supply of energy and Essential System Services;

(c) a cost-benefit study on the effects on the Network and Market Participants of providing and using higher or lower levels of each Essential System Service;

(d) identification of the costs and benefits of changing technical parameters, including the potential for increasing or decreasing the overall cost to supply energy and Essential System Services;

(e) a review of the processes and effectiveness of the SESSM if it was triggered during the review period; and

(f) a public consultation process.

3.15.2. As part of each review under clause 3.15.1A or clause 3.15.1B, the Coordinator, with the support of AEMO, must determine and publish a set of metrics to be used for ongoing monitoring of Essential System Services, which must include:

(a) technical outcomes, such as dispatched Essential System Service quantities, number of accredited Facilities, number of capable Facilities and the historical performance of those Facilities;

(b) financial outcomes, such as Market Clearing Prices and Essential System Service costs; and

(c) economic outcomes, such as the overall electricity costs faced by consumers.

3.15.3. The Coordinator must publish a report containing:

(a) the inputs and results of the technical reviews conducted pursuant to clause 3.15.1A and clause 3.15.1B and cost-benefit studies;

(b) the submissions received by the Coordinator in the consultation process, a summary of those submissions, and any responses to issues raised in those submissions;

(c) any recommendations for the inclusion of a new Essential System Service, changes to Essential System Service Standards and the basis for setting Essential System Service requirements; and

(d) the metrics and targets to be used for ongoing monitoring of Essential System Services.

3.15.4. The Coordinator must publish the report referred to in clause 3.15.3 no later than:

(a) for the first report, two and a half years of the New WEM Commencement Day; and

(b) thereafter, three years after publishing the previous review.

3.15.5. If the Coordinator recommends any changes in a report published under clause 3.15.3, the Coordinator must, as relevant:

(a) draft a Rule Change Proposal in accordance with clause 2.5.1 to implement those changes;

(b) draft a suitable Procedure Change Proposal and progress it using the Procedure Change Process in section 2.10; or

(c) recommend to AEMO that it amend a WEM Procedure which these ESM Rules contemplate will be developed by AEMO, in which case AEMO must draft a suitable Procedure Change Proposal and progress it using the Procedure Change Process in section 2.10.

3.15A. Supplementary Essential System Service Mechanism (SESSM)

Triggering the SESSM

3.15A.1. AEMO may only trigger the SESSM in accordance with clause 3.11.6.

3.15A.2. The Economic Regulation Authority may only trigger the SESSM when, pursuant to a review by the Coordinator under clauses 3.15.1A or 3.15.1B or the Economic Regulation Authority's monitoring pursuant to clause 2.16.9, it reasonably considers that Real-Time Market outcomes are not consistent with the efficient operation of the Real-Time Market in respect of Frequency Co-optimised Essential System Services or the State Electricity Objective.

3.15A.3. Where AEMO is required to trigger the SESSM, AEMO must, within five Business Days of determining to trigger the SESSM, publish on the WEM Website:

(a) the reasons why it is required to trigger the SESSM;

(b) the Frequency Co-optimised Essential System Services it determines to be procured through the SESSM;

(c) where AEMO identifies an FCESS Accreditation Shortfall in accordance with clause 3.11.1, the additional quantity of the relevant Frequency Co-optimised Essential System Services AEMO considers would rectify the shortfall;

(d) the SESSM Service Specification, prepared in accordance with clause 3.15A.6, for each Frequency Co-optimised Essential System Service to be procured under the SESSM; and

(e) where the number of Dispatch Intervals in any 90 Trading Day period referred to in clause 3.11.4 is reached, the number of Dispatch Intervals where AEMO was required to give a direction for a specific Frequency Co-optimised Essential System Service that otherwise would not have been required if Frequency Co-optimised Essential System Services had been procured pursuant to the SESSM for that 90 Trading Day period.

3.15A.4. When the Economic Regulation Authority triggers the SESSM pursuant to clause 3.15A.2 it must publish:

(a) the reasons why it triggered the SESSM;

(b) the Frequency Co-optimised Essential System Services it determines to be procured through the SESSM;

(c) whether the Frequency Co-optimised Essential System Services are required for certain time intervals only (for example, day of week, time of year), or are required more generally; and

(d) an estimate of the difference between the cost of Frequency Co-optimised Essential System Services in the Real-Time Market and the Economic Regulation Authority's reasonable estimate of the cost of those Frequency Co-optimised Essential System Services if they were procured in an efficient Real-Time Market.

3.15A.5. The Economic Regulation Authority must document in a WEM Procedure the process it will undertake to identify inefficient Real-Time Market outcomes pursuant to clause 3.15A.2, which may include, but is not limited to:

(a) comparing individual Facility offers of Frequency Co-optimised Essential System Services with:

i. offers of Frequency Co-optimised Essential System Services from similar Facilities;

ii. expected or known costs for that Facility;

iii. offers from the same Facility in different time periods;

iv. historic offers of Frequency Co-optimised Essential System Services in the Real-Time Market; and

v. the Frequency Co-optimised Essential System Services offer construction guidelines published by the Economic Regulation Authority;

(b) comparing existing Facility costs with potential new facility entrant costs;

(c) an analysis of the information received from expressions of interest forms submitted in accordance with section 3.15B; and

(d) comparing Frequency Co-optimised Essential System Services market outcomes with other relevant jurisdictions.

SESSM Service specification

3.15A.6. When the SESSM is triggered under clause 3.15A.1 or clause 3.15A.2, AEMO must prepare a SESSM Service Specification for each Frequency Co-optimised Essential System Service being procured under the SESSM which must include the:

(a) name of the Frequency Co-optimised Essential System Service or services;

(b) SESSM Service Commencement Date;

(c) SESSM Service Timing;

(d) SESSM Award Duration;

(e) SESSM Service Quantity Profile; and

(f) SESSM Availability Requirement.

3.15A.7. Where the SESSM has been triggered by AEMO, the SESSM Service Timing and SESSM Service Quantity Profile must align with the relevant quantities and times identified by AEMO under clause 3.11.6.

3.15A.8. Where the SESSM has been triggered by the Economic Regulation Authority, the SESSM Service Timing must align with the relevant times identified by the Economic Regulation Authority under clause 3.15A.4 and the SESSM Service Quantity Profile must align with the quantities of the relevant Frequency Co-optimised Essential System Service identified by AEMO in the most recent Medium Term PASA.

Participation

3.15A.9. The facilities that may participate in a SESSM procurement are:

(a) a Registered Facility, whether or not it is accredited to provide a Frequency Co-optimised Essential System Service under clause 2.34A.1; or

(b) a new facility that is not registered under the ESM Rules.

3.15A.10. Where AEMO has identified a FCESS Accreditation Shortfall under clause 3.11.1, then a Facility that is accredited under clause 2.34A.1 to provide a Frequency Co-optimised Essential System Service may only participate in a SESSM procurement for that Frequency Co-optimised Essential System Service by proposing an increase in its accredited capability to provide that Frequency Co-optimised Essential System Service.

3.15A.11. Where the Economic Regulation Authority triggers the SESSM, subject to clause 3.15A.13, the Economic Regulation Authority may designate one or more Registered Facilities that must participate in the SESSM procurement process.

3.15A.12. Where the Economic Regulation Authority has designated a Registered Facility pursuant to clause 3.15A.11, the Market Participant responsible for that Registered Facility must offer up to the lesser of the SESSM Service Quantity Profile or the available accredited capability in excess of any existing SESSM Award for the applicable Frequency Co-optimised Essential System Service.

3.15A.13. The Economic Regulation Authority may only designate a Registered Facility pursuant to clause 3.15A.11:

(a) that the Economic Regulation Authority reasonably considers is able to meet the SESSM Service Specification;

(b) that is accredited for that Frequency Co-optimised Essential System Service under clause 2.34A.1 and the Market Participant responsible for that Registered Facility has made a Real-Time Market Submission including Price-Quantity Pairs for the relevant Frequency Co-optimised Essential System Service;

(d) if the Facility has available accredited capability in excess of any existing SESSM Award for the applicable Frequency Co-optimised Essential System Service; and

(e) if, in the Economic Regulation Authority's opinion, the Market Participant for the designated Facility has, or is expected to be able to exercise, market power in respect of the designated Facility, either alone or in combination with any one or more of the Market Participant's other Facilities, for the applicable Frequency Co-optimised Essential System Service.

To avoid doubt, the Economic Regulation Authority may, but is not obliged to, consult with AEMO in respect of designating a Facility pursuant to clause 3.15A.11.

3.15A.14. Where the Economic Regulation Authority has designated a Facility pursuant to clause 3.15A.11, the Economic Regulation Authority must notify:

(a) AEMO, and provide details of the Facility; and

(b) the relevant Market Participant responsible for the Facility.

3.15A.15. A Facility that has not been designated by the Economic Regulation Authority pursuant to clause 3.15A.11 may still participate in a SESSM procurement process triggered by the Economic Regulation Authority.

3.15A.16. Where the Economic Regulation Authority has designated a Registered Facility pursuant to clause 3.15A.11, the Market Participant responsible for the Registered Facility must submit a SESSM Submission to the SESSM procurement process.

Procurement notice

3.15A.17. Where the SESSM is triggered under clause 3.15A.1 or clause 3.15A.2, AEMO must advertise a call for SESSM Submissions, no later than 20 Business Days prior to the proposed closing date for SESSM Submissions.

3.15A.18. In advertising the call for SESSM Submissions in accordance with clause 3.15A.19, AEMO must:

(a) publish a notice on the WEM Website;

(b) publish a notice on at least one major tender portal;

(c) directly contact any Market Participants designated by the Economic Regulation Authority pursuant to clause 3.15A.11; and

(d) issue a Market Advisory.

3.15A.19. AEMO must include in each notice referred to in clause 3.15A.18:

(a) the date and time for lodgement of SESSM Submissions, which must be in accordance with the form referred to in clause 3.15A.20;

(b) contact details for AEMO;

(c) a description of the quantity, type and timing of the required Frequency Co-optimised Essential System Service;

(d) the location on the WEM Website of the SESSM Submission form referred to in clause 3.15A.20; and

(e) the location on the WEM Website of the SESSM Service Specification for the Frequency Co-optimised Essential System Service referred to in clause 3.15A.6.

Response requirements

3.15A.20. AEMO must develop and publish a SESSM Submission form which must include the following fields for the SESSM procurement:

(a) the SESSM Availability Quantity for each Dispatch Interval in the SESSM Award Duration up to the quantity set out in the SESSM Service Specification for the existing or new facility which may vary according to the time periods set out in the SESSM Service Specification;

(b) the proposed SESSM Availability Payment, which:

i. is the total amount payable across the SESSM Award Duration for offering the SESSM Availability Quantity into the Real-Time Market; and

ii. must be equal to or less than the incremental fixed costs, if any, that are not already covered by any Capacity Credit payments, which would otherwise be incurred to make available the SESSM Availability Quantity of the Frequency Co-optimised Essential System Service in addition to any Base ESS Quantity of that Frequency Co-optimised Essential System Service;

(c) the proposed SESSM Offer Cap, which must reflect the variable costs inclusive of margin of providing the relevant Frequency Co-optimised Essential System Service, and which:

i. is the highest price which the Market Participant or person intending to be a Market Participant will offer the applicable Frequency Co-optimised Essential System Service into the Real-Time Market; and

ii. may vary according to the time periods set out in the SESSM Service Specification;

(d) the SESSM Award Duration; and

(e) where the SESSM includes more than one Frequency Co-optimised Essential System Service, whether the SESSM Submission is contingent on holding a SESSM Award for more than one Frequency Co-optimised Essential System Service that is also included in the SESSM and, if so, which ones.

3.15A.21. A SESSM Submission submitted by a Market Participant in response to a call for SESSM Submissions under clause 3.15A.17 must:

(a) be made in good faith;

(b) be in the form published by AEMO in accordance with clause 3.15A.20; and

(c) include the cost information and any assumptions used to calculate the proposed SESSM Offer Cap and SESSM Availability Payment.

3.15A.22. Where a Market Participant submits a SESSM Submission under clause 3.15A.21 in respect of an accredited Facility, the SESSM Submission must also include:

(a) a comparison of the proposed SESSM Availability Quantity of the Facility to its historic quantities offered in the Real-Time Market over the past 12 months in Dispatch Intervals within the SESSM Service Timing; and

(b) [Blank]

(c) [Blank]

(d) a comparison of the proposed SESSM Offer Cap for the Facility to its historic offer prices offered in the Real-Time Market over the past 12 months.

3.15A.23. Where a Market Participant submits a SESSM Submission under clause 3.15A.21 in respect of a new or existing facility which is:

(a) not accredited for the relevant Frequency Co-optimised Essential System Service; or

(b) accredited for the relevant Frequency Co-optimised Essential System Service and which is proposing to increase the quantity of the relevant Frequency Co-optimised Essential System Service for which it is accredited,

the SESSM Submission must also include:

(c) whether or not the facility has applied for, or been granted, Certified Reserve Capacity or Capacity Credits in respect of the capacity that would provide the Frequency Co-optimised Essential System Service;

(d) if the Facility, or relevant part of the Facility, has not applied for or been granted Certified Reserve Capacity or Capacity Credits, the information listed in clause 4.10.1(c), and any other evidence required under the relevant WEM Procedure in support of the Key Project Dates;

(e) the expected Standing Enablement Minimum;

(f) the expected generation cost at the Standing Enablement Minimum;

(g) evidence of the capability of the Facility to provide the relevant Frequency Co-optimised Essential System Service, as specified in the relevant WEM Procedure; and

(h) expected start-up costs for the Facility.

3.15A.24. A Market Participant wishing to participate in the SESSM may make one or more SESSM Submissions in respect of a single facility which:

(a) comply with the requirements of SESSM Submissions specified in clauses 3.15A.21 to 3.15A.23 as applicable;

(b) comply with the SESSM Service Specification;

(c) include an SESSM Availability Quantity less than or equal to the maximum quantity identified in the SESSM Service Quantity Profile, which must

include any allowance for the effects of temperature on the capability of the Facility;

(d) are binding for the SESSM Award Duration as specified in the SESSM Service Specification;

(e) may have different SESSM Availability Quantities; and

(f) are not contingent on being awarded a SESSM Award for more than one Frequency Co-optimised Essential System Service.

3.15A.25. Where a Market Participant has made a SESSM Submission under clause 3.15A.24, it may make one or more additional SESSM Submissions in respect of the same facility which:

(a) have the same SESSM Availability Quantity and SESSM Offer Cap but have a different SESSM Award Duration and SESSM Availability Payment; or

(b) have the same SESSM Availability Quantity, SESSM Offer Cap and SESSM Award Duration but have a different SESSM Availability Payment and are contingent on the Facility being selected for more than one SESSM Award.

Selection analysis and approval

3.15A.26. Within 20 Business Days of the date and time for lodgement of SESSM Submissions specified in clause 3.15A.19(a), AEMO must:

(a) select the SESSM Submissions which:

i. comply with the requirements of clauses 3.15A.24 and 3.15A.25; and

ii. meet the SESSM Service Specification which, taken together, in AEMO's opinion will result in the lowest cost of providing the Frequency Co-optimised Essential System Service in accordance with clause 3.15A.27;

(b) identify the Market Participants and the Facilities who it approves and intends to grant a SESSM Award; and

(c) notify the Economic Regulation Authority in accordance with clause 3.15A.29.

3.15A.27. When selecting the lowest cost combination of SESSM Submissions in accordance with clause 3.15A.26(a), AEMO must:

(a) exclude SESSM Submissions that do not comply with the SESSM Service Specification;

(b) exclude SESSM Submissions for new facilities where insufficient evidence has been provided to support the Key Project Dates or that all necessary Environmental Approvals have been granted;

(c) identify historical Dispatch Intervals matching the SESSM Service Specification;

(d) calculate energy price profiles for energy matching the SESSM Service Timing for those Dispatch Intervals on the basis of three categories being average cost, high cost and low cost;

(e) calculate effective Frequency Co-optimised Essential System Service offer prices for each SESSM Submission comprising:

i. proposed SESSM Availability Payment divided by the sum of all SESSM Availability Quantities within the SESSM Award Duration;

ii. proposed SESSM Offer Cap; and

iii. expected FCESS Uplift Payments based on:

1. Standing Enablement Minimum;

2. start-up costs; and

3. minimum running costs; and

(f) calculate the lowest cost combination of SESSM Submissions to deliver the requirement under each of the three energy price profiles referred to in clause 3.15A.27(d);

(g) for submissions provided in accordance with clause 3.15A.21 adjust the SESSM Availability Quantity to account for Network Constraints; and

(h) adjust the SESSM Availability Quantity to account for AEMO's assessed capability of the Facility to provide the relevant Frequency Co-optimised Essential System Service.

3.15A.28. If AEMO is selecting Facilities to meet more than one SESSM Service Specification in a single SESSM procurement process, AEMO must:

(a) identify where the SESSM Submissions from a Facility for the provision of different Frequency Co-optimised Essential System Services would be provided from the same portion of the Facility's capacity;

(b) determine the order of selection for the affected Frequency Co-optimised Essential System Services;

(c) in selecting Facilities to provide each of the Frequency Co-optimised Essential System Services, exclude any SESSM Submissions for the Facility's capacity that has already been selected for a SESSM Award under a previous selection; and

(d) ensure that proposed SESSM Awards will deliver the total Essential System Service requirement.

3.15A.29. AEMO must notify the Economic Regulation Authority and the Coordinator of the outcome of the SESSM, including providing the Economic Regulation Authority and the Coordinator with the following information:

(a) the names of the parties and the facility details (including, if already registered, the identity of the Market Participants and the Facilities), it intends to grant a SESSM Award to;

(b) based on the results from the operation of clause 3.15A.27, the estimated aggregated cost of all SESSM Awards it intends to grant;

(c) the proposed SESSM Service Commencement Date;

(d) AEMO's reasonable estimate of the cost of procuring the Frequency Co-optimised Essential System Services based on the historic costs of the Frequency Co-optimised Essential System Services (as if the SESSM Awards it intends to grant were not made); and

(e) a comparison of the calculated effective Frequency Co-optimised Essential System Service offer prices to the prices for the Frequency Co-optimised Essential System Service in the Real-Time Market within the SESSM Service Timing for the relevant Frequency Co-optimised Essential System Service over the previous 12 months.

3.15A.30. AEMO must provide to the Economic Regulation Authority and the Coordinator all information and data provided by a Market Participant as part of a SESSM Submission within five Business Days of notifying the Economic Regulation Authority and the Coordinator of the outcome of its analysis and selection of SESSM Submissions.

3.15A.31. Where AEMO triggered the SESSM, the Economic Regulation Authority must, within 10 Business Days of AEMO notifying it pursuant to clause 3.15A.29, review the proposed SESSM Awards AEMO intends to grant and determine whether or not to veto the SESSM Awards AEMO intends to grant pursuant to clause 3.15A.32.

3.15A.32. If, following the review pursuant to clause 3.15A.31, the Economic Regulation Authority reasonably considers that AEMO has not followed the processes in clause 3.15A.26 and clause 3.15A.27, the Economic Regulation Authority may veto the SESSM Awards AEMO intends to grant, and may ask AEMO to revise its selection assessment and approval according to the process in clause 3.15A.26 and clause 3.15A.27.

3.15A.33. Where the Economic Regulation Authority triggered the SESSM, the Economic Regulation Authority must, within 20 Business Days of AEMO notifying it pursuant to clause 3.15A.29, review the proposed SESSM Awards AEMO intends to grant

and determine whether or not to veto the SESSM Awards AEMO intends to grant pursuant to clause 3.15A.34.

3.15A.34. If, following a review pursuant to clause 3.15A.33, the Economic Regulation Authority reasonably considers that:

(a) the SESSM Awards AEMO intends to grant will not reduce the cost to the market of the relevant Frequency Co-optimised Essential System Service, the Economic Regulation Authority must, within 20 Business Days of AEMO notifying it pursuant to clause 3.15A.29, veto any or all of the SESSM Awards AEMO intends to grant; or

(b) a Market Participant's SESSM Submission does not reflect the costs and assumptions referred to in clause 3.15A.20(b) or clause 3.15A.20(c) or was not provided in good faith in accordance with clause 3.15A.21, the Economic Regulation Authority may, within 20 Business Days of AEMO notifying it pursuant to clause 3.15A.29, veto the SESSM Award AEMO intends to grant to the Market Participant.

3.15A.35. Where the Economic Regulation Authority reasonably considers that a Market Participant has breached the obligation to make a SESSM Submission in good faith in accordance with clause 3.15A.21, then in addition to its powers under clause 3.15A.34(b), the Economic Regulation Authority may do any or all of:

(a) issue a warning to the Market Participant pursuant to clause 2.13.36(a); and

(b) determine that a breach has taken place, in which case the Economic Regulation Authority may issue a penalty notice in accordance with the ESM Regulations.

Notification

3.15A.36. If the Economic Regulation Authority notifies AEMO that it will not veto a SESSM Award AEMO intends to grant in accordance with clause 3.15A.34, AEMO must grant the SESSM Award as submitted to the Economic Regulation Authority in accordance with clause 3.15A.29 and:

(a) notify the relevant Market Participants or persons responsible for the Facilities that it has selected to grant a SESSM Award;

(b) publish information about the SESSM process including:

i. the number and identity of respondents; and

ii. the information on the SESSM Awards as notified to the Economic Regulation Authority in accordance with clause 3.15A.29, but excluding any information the Economic Regulation Authority may have received under clause 3.15A.30; and

(c) publish the terms of each SESSM Award granted including details of:

i. each Facility that was granted a SESSM Award;

ii. the SESSM Service Specification;

iii. the SESSM Award Duration;

iv. the SESSM Availability Payment;

v. the SESSM Offer Cap;

vi. where the SESSM Availability Payment is greater than zero, the Base ESS Quantity for each Dispatch Interval in the SESSM Award Duration; and

vii. the Per-Dispatch Interval SESSM Availability Payment.

3.15A.37. Subject to the obligation to publish the information in clause 3.15A.36 the information contained in any SESSM Submissions received pursuant to the SESSM is Confidential Information.

Obligation to comply

3.15A.38. A Market Participant that was granted a SESSM Award must comply with the SESSM Service Specification for that SESSM Award.

SESSM new entrants

3.15A.39. A Market Participant that is granted a SESSM Award for a Facility that is yet to commence operation must, within any timeframe specified by AEMO:

(a) if the Facility is not already registered, register the Facility in accordance with these ESM Rules; and

(b) if the Facility is not already accredited, ensure the Facility is accredited to provide the relevant Frequency Co-optimised Essential System Service in accordance with clause 2.34A.1, where the accredited capability for each Dispatch Interval in the SESSM Award Duration must be at least the sum of the Base ESS Quantity and the SESSM Availability Quantity.

3.15A.40. A Market Participant that is granted a SESSM Award for a facility that is yet to commence operation and for which it is not required to submit a report pursuant to clause 4.27.10 must file a report on progress with AEMO:

(a) at least once every three months from the date the SESSM Award is confirmed under clause 3.15A.36; and

(b) at least once every month commencing on the date that is six months prior to the SESSM Service Commencement Date,

or as otherwise agreed with AEMO.

3.15A.41. Each report provided pursuant to clause 3.15A.40 must include any changes to Key Project Dates.

3.15A.42. Within 10 Business Days of receiving a report provided pursuant to clause 3.15A.40, clause 4.27.10 or this clause 3.15A.42, as applicable, AEMO:

(a) must:

i. determine whether, in its reasonable opinion, the Facility, or part of the Facility, is unlikely to have completed all Commissioning Tests by the SESSM Service Commencement Date; and

ii. notify the Market Participant of its decision and provide reasons why the dates have been rejected; and

(b) may:

i. require the Market Participant to provide additional information;

ii. require the Market Participant to submit further reports or revise the Key Project Dates; and

iii. revise the SESSM Service Commencement Date or cancel the SESSM Award and, where it does so, must notify the Economic Regulation Authority.

3.15A.43. AEMO or the Economic Regulation Authority may re-trigger the SESSM if, as result of cancelling the SESSM Award:

(a) AEMO reasonably considers that one or more of the matters in clause 3.11.6 are satisfied; or

(b) the Economic Regulation Authority reasonably considers that Real-Time Market outcomes are not consistent with the efficient operation of the Real-Time Market in respect of Frequency Co-optimised Essential System Services or the State Electricity Objective.

SESSM performance monitoring

3.15A.44. During the SESSM Service Timing, AEMO must monitor the quantity of Frequency Co-optimised Essential System Service offered by a Facility that was granted a SESSM Award.

3.15A.45. Where a Facility that was granted a SESSM Award consistently fails to offer at least the sum of the SESSM Availability Quantity and the Base ESS Quantity for Dispatch Intervals within the SESSM Service Timing, AEMO may:

(a) revise the SESSM Availability Quantity to reflect the average quantity offered in Dispatch Intervals with adjustments for the effect of any Outages for the Facility; and

(b) revise the Per-Dispatch Interval Availability Payment by the same ratio as the adjustment to the SESSM Availability Quantity.

WEM Procedure

3.15A.46. AEMO must document in a WEM Procedure the process to be followed by AEMO and Market Participants in the SESSM. The WEM Procedure must include:

(a) the format and content of SESSM Service Specifications;

(b) the process for determining the SESSM Service Specifications;

(c) the evidence to be provided in respect of the viability of a proposed facility in support of the Key Project Dates provided under clause 3.15A.40 or clause 4.10.1(c);

(d) the evidence to be provided in respect of the capability of the Facility to provide the relevant Frequency Co-optimised Essential System Service;

(e) the methodology used to select, approve and grant SESSM Awards;

(f) the process for monitoring progress of new entrant Facilities that are granted a SESSM Award;

(g) the circumstances in which it would cancel the SESSM Award granted to a new entrant Facility that is unlikely to have completed all Commissioning Tests by the SESSM Service Commencement Date;

(h) the process for monitoring the performance of Facilities that are granted a SESSM Award;

(i) the process for assessing the capability of a facility to provide its nominated SESSM Availability Quantity due to Network Constraints; and

(j) the process for revising the SESSM Availability Quantity and the Per-Dispatch Interval Availability Payment under clause 3.15A.45.

3.15B. Expressions of Interest for Essential System Services

3.15B.1. From New WEM Commencement Day, at least once every two years, AEMO must conduct a Frequency Co-optimised Essential System Service expression of interest process.

3.15B.2. In conducting an expression of interest process pursuant to clause 3.15B.1, AEMO must advertise the call for expressions of interest no later than 20 Business Days prior to the proposed closing date for the expressions of interest.

3.15B.3. In advertising the call for expressions of interest under clause 3.15B.2, AEMO must:

(a) publish a notice on the WEM Website;

(b) publish a notice on at least one major tender portal; and

(c) issue a Market Advisory.

3.15B.4. AEMO must include in each notice referred to in clause 3.15B.3:

(a) the date and time for lodgement of an expression of interest, which must be in accordance with the form referred to in clause 3.15B.5;

(b) contact details for AEMO;

(c) a description of the quantity, type and timing of the historic requirements for the Frequency Co-optimised Essential System Services;

(d) the location on the WEM Website of detailed historic data on the timing and quantity of the Frequency Co-optimised Essential System Services in accordance with clause 7.13.1I; and

(e) the location on the WEM Website of the expression of interest form referred to in clause 3.15B.5.

3.15B.5. AEMO must develop and publish an expression of interest form, which must include the following fields:

(a) the type of the facility;

(b) the likely lead time required to develop and commission the facility;

(c) the likely network location of the facility;

(d) the quantity of each Frequency Co-optimised Essential System Service which could be made available from the facility, which may vary by time of day or year;

(e) the fixed costs of being available to offer the relevant Frequency Co-optimised Essential System Service;

(f) the variable costs of providing each relevant Frequency Co-optimised Essential System Service;

(g) any likely Standing Enablement Minimum limit;

(h) the likely cost per MWh of Injecting energy when operating at any Standing Enablement Minimum limit; and

(i) the start-up costs of the facility.

3.15B.6. The information contained in any expression of interest form submitted in accordance with this section 3.15B must be provided in good faith but is not binding on the respondent.

3.15B.7. Subject to clause 3.15B.8, the information contained in any expression of interest form submitted in accordance with this section 3.15B is Confidential Information.

3.15B.8. AEMO must provide all information contained in any expression of interest form submitted in accordance with this section 3.15B to the Economic Regulation Authority as soon as practicable following the closing date for the expressions of interest.

3.15B.9. The Economic Regulation Authority may use any information provided in expressions of interest forms submitted in accordance with this section 3.15B in its monitoring and review functions under these ESM Rules, including its monitoring pursuant to clause 2.16.9, and in deciding whether to trigger the SESSM in accordance with clause 3.15A.2.

Medium and Short Term Planning

3.16. Projected Assessment of System Adequacy

3.16.1. AEMO must conduct periodic PASA assessments in accordance with this section 3.16 and the WEM Procedure referred to in clause 3.16.10 covering the following periods:

(a) at least each week of the 36 month period from the starting date of the assessment ("**Medium Term PASA**"); and

(b) at least each day of the seven day period from the starting date of the assessment ("**Short Term PASA**").

3.16.2. The objective of the Medium Term PASA and Short Term PASA is to:

(a) provide an assessment of the likelihood and impact of security and reliability related scenarios on the SWIS that may affect the ability of AEMO to maintain Power System Security and Power System Reliability;

(b) provide information on the impact of Outages to support AEMO and other Rule Participants in Outage planning processes; and

(c) develop demand forecasts to support Rule Participants in making decisions about supply, demand and Outages.

3.16.3. A Rule Participant must use best endeavours to provide AEMO with all required information necessary for AEMO to prepare the Medium Term PASA and Short Term PASA as set out and in accordance with the timeframes specified in the WEM Procedure referred to in clause 3.16.10, including additional information or clarifications sought by AEMO.

3.16.4. AEMO must review any information provided by Rule Participants in accordance with clause 3.16.3 and, where necessary, seek additional information or clarification in accordance with the process described in the WEM Procedure referred to in clause 3.16.10.

3.16.5. Where a Rule Participant becomes aware that the information it provided AEMO in accordance with clause 3.16.3 has materially changed, then it must re-submit the relevant information to AEMO as soon as practicable, and in any case in accordance with the obligations and timeframes described in the WEM Procedure referred to in clause 3.16.10.

3.16.6. In conducting a Medium Term PASA or a Short Term PASA, AEMO may, if AEMO considers that it is consistent with the objectives of the Medium Term PASA or Short Term PASA specified in clause 3.16.2, use any information developed by AEMO in performing its functions under these ESM Rules or any other information known to AEMO in addition to, or in place of, information provided by Rule Participants under clause 3.16.3 and clause 3.16.5.

3.16.7. As soon as practicable following the publication of the Medium Term PASA, AEMO must publish on the WEM Website for each Trading Day in the 36 month period included in the most recently published Medium Term PASA:

(a) AEMO's determination of the most probable daily peak demand;

(b) any alternative demand forecasts as specified in the WEM Procedure referred to in clause 3.16.10; and

(c) AEMO's determination of the most probable daily highest Four-Hour Demand Increase.

3.16.7A. The Four-Hour Demand Increase for a Trading Interval is to be calculated as follows:

$$FHDI(t) = (OPDEM(t) - |OPWITH(t)|) - (OPDEM(t-8) - |OPWITH(t-8)|)$$

where:

(a) FHDI(t) is the Four-Hour Demand Increase for Trading Interval t;

(b) OPDEM(t) is the Operational Demand for the last Dispatch Interval in Trading Interval t;

(c) OPWITH(t) is the Operational Withdrawal for the last Dispatch Interval in Trading Interval t.

~~3.16.7. As soon as practicable following the publication of the Medium Term PASA, AEMO must publish on the WEM Website the following forecast demand information for the SWIS:~~

~~(a) AEMO's determination of the most probable daily peak demand; and~~

~~(b) any alternative demand forecasts as specified in the WEM Procedure referred to in clause 3.16.10,~~

~~for each Trading Day in the 36 month period included in the most recently published Medium Term PASA.~~

3.16.8. After AEMO conducts each Medium Term PASA or Short Term PASA, AEMO must publish a report, which has confidential or sensitive data aggregated or redacted (as applicable), summarising the information from the relevant assessment which must, at a minimum, include:

(a) any key assumptions made in the assessment;

(b) any projected inability to maintain Power System Security;

(c) any projected inability to maintain Power System Reliability as assessed in accordance with the WEM Procedure referred to in clause 3.3.2;

(d) requirements for and forecast shortfall in Essential System Services; and

(e) any other information described in the WEM Procedure referred to in clause 3.16.10.

3.16.9. AEMO may publish an updated version of a Medium Term PASA or a Short Term PASA outside of the timeline specified in the WEM Procedure referred to in clause 3.16.10 where AEMO considers that there has been a material change in the matters impacting a Medium Term PASA or a Short Term PASA, and publication would be consistent with the objectives of either the Medium Term PASA or Short Term PASA specified in clause 3.16.2 (as applicable).

3.16.10. AEMO must develop a WEM Procedure which sets out:

(a) the process it follows in:

i. preparing and conducting each Medium Term PASA and Short Term PASA and determining and assessing risks to Power System Security and Power System Reliability; and

ii. preparing demand forecast information for the purposes of this section 3.16;

(b) any additional information to be included when publishing the Medium Term PASA or Short Term PASA under clause 3.16.8;

(c) the information that AEMO requires from Rule Participants in order to conduct the Medium Term PASA and Short Term PASA which may include, but not be limited to:

i. energy producing unit modelling data and limits;

ii. relevant energy constraints applicable to each Facility or equipment within a Facility;

iii. local modelling information, including inverter availability and locational details as applicable; and

iv. information required in relation to Demand Side Programmes and Electric Storage Resources;

(d) the format and timeframes by which the required information in clause 3.16.10(c) must be submitted to AEMO;

(e) the process and timeframes by which AEMO may request additional information or clarification from the Rule Participant in respect of the required information in clause 3.16.10(c) submitted to AEMO;

(f) the process by which AEMO will use any information developed by AEMO in performing its functions under these ESM Rules or any other information known to AEMO in addition to, or in place of, information provided by Rule Participants under clause 3.16.3 and clause 3.16.5 for the purposes of preparing a Medium Term PASA or a Short Term PASA;

(g) the timetable and frequency for which AEMO will conduct and publish a Medium Term PASA and a Short Term PASA;

(h) the granularity of information to be published in the Medium Term PASA and the Short Term PASA, where that granularity must be at least that specified in clause 3.16.1; and

(i) any additional demand forecast information to be published as per clause 3.16.8.

3.17. Low Reserve Conditions

3.17.1. Where AEMO considers that, in accordance with the WEM Procedure referred to in clause 3.17.11, and taking into account the requirements specified in the WEM Procedure referred to in clause 3.2.7, for a particular period of time there is a risk of:

(a) insufficient capacity to meet expected energy demand;

(b) load shedding in order to maintain Power System Security; or

(c) an Essential System Service shortfall that compromises AEMO's ability to maintain Power System Security or Power System Reliability,

AEMO may declare a Low Reserve Condition in relation to that period of time (**Low Reserve Condition Declaration**). To avoid doubt, AEMO may make a Low Reserve Condition Declaration in respect of any or all of the matters in this clause 3.17.1 for a period of time in the present or the future.

3.17.2. Every six months from the New WEM Commencement Day, AEMO must publish a Low Reserve Condition Report in accordance with clause 3.17.3.

3.17.3. A Low Reserve Condition Report must include:

(a) whether there have been any Low Reserve Conditions Declarations made;

(b) observations in respect of trends as to when and why Low Reserve Conditions Declarations are being made;

(c) a summary of the leading factors or causes of any Low Reserve Conditions Declarations made; and

(d) a description of the actions that were taken to resolve any Low Reserve Conditions,

during the relevant reporting period.

3.17.4. AEMO must as soon as reasonably practicable publish any Low Reserve Condition Declaration made.

3.17.5. The publication of a Low Reserve Condition Declaration must, to the extent reasonably practicable, include:

(a) the nature and extent of the Low Reserve Condition;

(b) the time period over which the Low Reserve Condition Declaration applies;

(c) the circumstances that AEMO considers may require it to implement an AEMO Intervention Event in accordance with the WEM Procedure referred to in clause 3.17.11; and

(d) if AEMO considers it may be required to implement an AEMO Intervention Event, an estimate of the latest time at which it would need to intervene through a AEMO Intervention Event if the response from the market would not remove the requirement to do so.

3.17.6. Where AEMO has made a Low Reserve Condition Declaration, AEMO must as soon as reasonably practicable publish notice of:

(a) any cancellation of the Low Reserve Condition Declaration; or

(b) any amendment to the Low Reserve Condition Declaration where AEMO considers that there is, or has been, a significant change in the relevant conditions impacting the status or circumstances of the Low Reserve Condition.

3.17.7. AEMO may, if it reasonably considers it is required in order to estimate, or support the estimate of the latest time referred to in clause 3.17.5(d), request information from Rule Participants.

3.17.8. A Rule Participant must comply with a request made by AEMO under clause 3.17.7 within the time specified in the request or another time agreed with AEMO.

3.17.9. AEMO must regularly review an estimate of the latest time referred to in clause 3.17.5(d) and, where it considers that the estimate is not accurate, publish a revised estimate.

3.17.10. Any information provided by a Rule Participant in response to a request under clause 3.17.8 is Confidential Information.

3.17.11. AEMO must develop a WEM Procedure that sets out how AEMO will assess a Low Reserve Condition and make a Low Reserve Condition Declaration, which must:

(a) describe how AEMO assesses if available capacity has become insufficient to avoid load shedding given reasonably foreseeable conditions and events;

(b) describe how AEMO assesses the probability of accredited Essential System Service providers being insufficient to meet the Essential System Service Standards;

(c) specify at least three probability levels at which AEMO will make Low Reserve Condition Declaration in relation to a specified period of time, indicating an increasing probability of load shedding (other than the reduction or disconnection of Interruptible Loads);

(d) describe how an assessment of the probability levels described in clause 3.17.11(c) applies in relation to different periods of time;

(e) describe the notification processes and timeframes AEMO will follow when making a Low Reserve Condition Declaration; and

(f) describe the intervention process that AEMO will follow for resolving a Low Reserve Condition, including describing general intervention principles and the interaction with section 7.7.

3.17.12. The assessment of the probability levels described in the WEM Procedure referred to in clause 3.17.11(d) must be consistent with good electricity industry practice and must take into account:

(a) actual and forecast conditions on the SWIS;

(b) the likelihood of the occurrence and impact on the SWIS of events that are foreseeable in nature but unpredictable in timing; and

(c) a prudent allowance for forecasting errors.

3.18. Outages

3.18.1. The obligations specified in this section 3.18 and sections 3.18A to 3.21 apply to Equipment List Facilities and Self-Scheduling Outage Facilities.

3.18.2. Where a reference is made to an Outage of a Registered Facility or item of equipment in this section 3.18 and sections 3.18A to 3.21, this includes partial and complete outages and de-ratings of the Registered Facility or item of equipment.

3.18.3. An outage ("**Outage**"):

(a) occurs where any Outage Capability of an Outage Facility could not, or would not be able to, fully respond to a permitted instruction or direction to the Market Participant or Network Operator from AEMO, that is consistent with, as applicable:

i. the Equipment Limits for the Outage Facility;

ii. in respect of an Outage Facility of a Network Operator, any relevant information or limits relating to the capability of the Outage Facility provided by the Network Operator to AEMO, including information

provided to AEMO in accordance with the WEM Procedure referred to in clause 2.27A.10(a); or

iii. any relevant limits specified in an NCESS Contract or SESSM Award.

(b) applies to each Outage Capability expected from the Outage Facility as specified in the WEM Procedure referred to in clause 3.18.4;

(c) does not occur for an Outage Capability in respect of energy of a Semi-Scheduled Facility or Non-Scheduled Facility that contains an Intermittent Generating System where:

i. there is a shortfall of the intermittent energy source used by the Intermittent Generating System to generate electricity; or

ii. the average reduction of Remaining Available Capacity over the relevant Dispatch Interval is less than:

$$\min(0.1 \times \text{Nameplate_Capacity}, 10)$$

where Nameplate_Capacity is the total nameplate capacity of the Facility's Energy Producing System specified under Appendix 1(c)(i) or Appendix 1(d)(i), as applicable;

(d) does not occur for the energy Outage Capability of a Facility as a result of temperature de-rating that is consistent with the Standing Data or Registered Generator Performance Standards for the Facility; and

(e) [Blank]

(f) does not occur for any Facility where that Facility has failed to comply with a Dispatch Instruction in circumstances detailed in the WEM Procedure referred to in clause 3.18.4.

3.18.4. AEMO must develop a WEM Procedure dealing with:

(a) the submission, evaluation and approval of Outage Plans, including applicable timelines, which must include a requirement for AEMO to notify a Market Participant or Network Operator where AEMO determines that an Outage Plan or Planned Outage is at risk of rejection, or the Outage Facility is recalled to service from a Planned Outage;

(b) the circumstances where a Facility has failed to comply with a Dispatch Instruction for the purpose of clause 3.18.3(f), which should also include where the Facility has a delayed response to a Dispatch Instruction;

(c) any requirements for Rule Participants to notify or seek consent to commence or complete an Outage, including any relevant processes to be followed where the Facility or item of equipment is being taken out of service, or returned to service;

(d) Outage coordination, which must include:

i. for the purposes of clause 3.18C.3, specifying the matters to be considered when determining whether an Impacted Participant has been unduly impacted by the Outage Plan of an Impacting Participant; and

ii. the processes and any other matters referred to in clause 3.18C.12;

(e) information requirements for processes relating to Outages, including, but not limited to:

i. minimum information requirements for an Outage Plan; and

ii. any other supporting information that may be used by AEMO to evaluate or assess an Outage Plan;

(f) forecast assumptions and the method to be used for Outage Evaluations, which may differ across evaluation timeframes;

(g) the method for assessing whether there would be a shortfall of available accredited capacity to provide Essential System Services if an Outage Plan is approved;

(gA) the method for assessing whether there would be a shortfall of Flexible Capacity if an Outage Plan is approved;

(h) publication of Outage-related information, which must include the information in clauses 3.22.1, 3.22.1A and 3.22.2; and

(i) any other matters relating to this section 3.18 and sections 3.18A to 3.21.

3.18A. Equipment List and Self-Scheduling Outage Facilities

3.18A.1. AEMO must maintain a list of all equipment on the SWIS that it determines is subject to Outage scheduling in accordance with this section 3.18A and sections 3.18B to 3.21 ("**Equipment List**").

3.18A.2. AEMO must publish the Equipment List on the WEM Website and must, as soon as practicable after it becomes aware of an error relating to the Equipment List, or otherwise determines that a change is required to the Equipment List, update the Equipment List to address the error or reflect the change and publish the updated Equipment List on the WEM Website.

3.18A.3. The Equipment List must include:

(a) any part of a transmission system that could limit the output of an Energy Producing System that AEMO has included on the Equipment List, however described by AEMO;

(b) all Scheduled Facilities holding Capacity Credits;

(c) all Semi-Scheduled Facilities holding Capacity Credits with a Standing Data nameplate capacity that equals or exceeds 10 MW and all Semi-Scheduled Facilities containing an Electric Storage Resource;

(d) all Energy Producing Systems serving an Intermittent Load under clause 2.30B.2(a) with a System Size that equals or exceeds 10 MW;

(e) all Registered Facilities accredited under section 2.34A to provide an Essential System Service, or subject to an NCESS Contract; and

(f) any other equipment that AEMO determines must be subject to Outage scheduling to maintain Power System Security and Power System Reliability, which may include secondary network equipment, or communication and control systems, however described by AEMO.

3.18A.4. The Equipment List may specify that an Equipment List Facility is subject to Outage scheduling by AEMO only at certain times of the year.

3.18A.5. A Market Participant and a Network Operator must schedule Outages for each of its Equipment List Facilities in accordance with this section 3.18A and sections 3.18B to 3.21.

3.18A.6. AEMO must maintain a list of Self-Scheduling Outage Facilities that it determines must submit Outage Plans to AEMO in accordance with this section 3.18A and sections 3.18B to 3.21 ("**Self-Scheduling Outage Facility List**").

3.18A.7. AEMO must publish the Self-Scheduling Outage Facility List on the WEM Website and must, as soon as practicable after it becomes aware of an error relating to the Self-Scheduling Outage Facility List, or otherwise determines that a change is required to the Self-Scheduling Outage Facility List, update the Self-Scheduling Outage Facility List to address the error or reflect the change and publish the updated Self-Scheduling Outage Facility List on the WEM Website.

3.18A.8. The Self-Scheduling Outage Facility List must include:

(a) any Scheduled Facility, Semi-Scheduled Facility, Non-Scheduled Facility, and any Energy Producing System serving an Intermittent Load and to which clause 2.30B.2(a) relates, that is not an Equipment List Facility; and

(b) any other equipment that AEMO determines must submit Outage Plans to AEMO to maintain Power System Security and Power System Reliability however described by AEMO, which may include secondary equipment.

3.18A.9. The Self-Scheduling Outage Facility List may specify that a Self-Scheduling Outage Facility is required to submit Outage Plans to AEMO only at certain times of the year.

3.18A.10. A Market Participant and a Network Operator must submit Outage Plans to AEMO for each of its Self-Scheduling Outage Facilities in accordance with this section 3.18A and sections 3.18B to 3.21.

3.18B. Submission of Outage Plan

3.18B.1. An outage plan ("**Outage Plan**") must:

(a) relate to an Outage of the Facility;

(b) relate to a specific Outage Capability of the Facility; and

(c) only be for the purposes of Outage Facility Maintenance.

3.18B.2. A Market Participant or Network Operator must submit a request to AEMO to approve an Outage Plan for an Equipment List Facility or Self-Scheduling Outage Facility.

3.18B.3. An Outage Plan must contain:

(a) details of the Outage Plan including:

i. the Outage Facility affected by the Outage and, where relevant, each Facility Technology Type of the Facility affected by the Outage;

ii the Outage Capabilities affected by the Outage for the Outage Facility and for each Facility Technology Type of the Outage Facility;

iii. a description of the purpose of the Outage;

iv. the Outage Commencement Interval and Outage Completion Interval;

v. an Outage Contingency Plan;

vi. where relevant, the Remaining Available Capacity of each Outage Capability for the Outage Facility;

vii. where relevant, the Remaining Available Capacity for each Facility Technology Type for the Outage Facility;

viii. where relevant, the Outage Return To Service Commencement Interval and Outage Return To Service Completion Interval for each Outage Return To Service Period; and

ix. confirmation of any applicable Availability Declaration Exemption,

as specified in the WEM Procedure referred to in clause 3.18.4;

(b) an Outage First Submission Date; and

(c) any other details specified in the WEM Procedure referred to in clause 3.18.4.

3.18B.4. Despite clause 3.18B.8(c)(i), a Market Participant or Network Operator may submit an Outage Plan for approval where, for that Outage Plan ("**Availability Declaration Exemption**"):

(a) the purpose of the Outage is to conduct Mandatory Routine Maintenance and the following conditions are satisfied:

i. the applicable deadline for the proposed Mandatory Routine Maintenance falls within the Outage Period;

ii. the Market Participant or Network Operator is aware that if the Mandatory Routine Maintenance is not undertaken before or during the Outage Period that at least one Outage Capability will otherwise suffer an Outage for part of the Outage Period because the applicable deadline for the Mandatory Routine Maintenance will have passed;

iii. the Market Participant or Network Operator is not aware of any other reason why, if AEMO rejected the Outage Plan, the relevant Outage Capability would otherwise be affected; and

iv. the Outage Plan includes the details of the Mandatory Routine Maintenance; or

(b) the Outage will immediately follow a Planned Outage of the relevant Outage Capability, AEMO has not received a notification under clause 3.18D.9 in respect of the earlier Planned Outage, and the Market Participant or Network Operator is not aware of any other reason why the relevant Outage Capability would otherwise be affected if the Outage Plan did not proceed.

3.18B.5. If, at the time a Market Participant submits an Outage Plan that is a request for Opportunistic Maintenance for a Scheduled Facility:

(a) the Facility is not synchronised;

(b) the proposed start time for the relevant Outage Facility Maintenance is before the time when the Facility could be synchronised in accordance with its relevant Equipment Limits; and

(c) the Outage Plan includes the proposed start time of the Outage Facility Maintenance,

then, the Market Participant may exclude from the start of the relevant Outage Period in that Outage Plan, any Dispatch Intervals during which the Facility could not be synchronised in accordance with its Equipment Limits, provided that the Market Participant:

(d) does not commence the relevant Outage Facility Maintenance until the request is approved by AEMO; and

(e) immediately withdraws the request if AEMO has not approved the request prior to the Dispatch Interval in which the relevant Outage Facility Maintenance is intended to commence.

3.18B.6. An Outage Plan and any information submitted as part of the request to approve an Outage Plan by a Market Participant or a Network Operator must represent the good faith intention of the Market Participant or Network Operator that the requested Outage is for the purpose of Outage Facility Maintenance.

3.18B.7. An Outage Plan and any information submitted as part of the request to approve an Outage Plan for a Self-Scheduling Outage Facility, must represent the good faith intention of the Market Participant or Network Operator that the Outage is for the purpose of Outage Facility Maintenance.

3.18B.8. A Market Participant or Network Operator must submit an Outage Plan in accordance with the following requirements, as applicable:

(a) for an Outage exceeding 24 hours in duration for an Equipment List Facility or a Self-Scheduling Outage Facility, no later than 10:00 AM on the day prior to the Scheduling Day for the Trading Day on which the Outage Commencement Interval falls;

(b) for an Outage of up to 24 hours in duration:

i. in respect of a Self-Scheduling Outage Facility, no later than 120 minutes before the Outage Commencement Interval;

ii. in respect of an Equipment List Facility proposing to undertake Opportunistic Maintenance:

1. at any time between:

A. 10:00 AM on the day prior to the Scheduling Day for the Trading Day on which the Outage Commencement Interval falls; and

B. 120 minutes before the Outage Commencement Interval; and

2. where the Outage Period must be separated by at least 24 hours from any other Outage Period for Opportunistic Maintenance for the Equipment List Facility; and

iii. for an Outage of an Equipment List Facility that is not Opportunistic Maintenance, no later than 10:00 AM on the day prior to the Scheduling Day for the Trading Day on which the Outage Commencement Interval falls;

(c) where the Market Participant or Network Operator reasonably believes that:

i. except where an Availability Declaration Exemption applies, if the Outage Plan was rejected, the relevant remaining Outage Capability of the Equipment List Facility or Self-Scheduling Outage Facility would otherwise not be affected; and

ii. it would be able to complete the proposed Outage Facility Maintenance and the relevant Outage Capability would no longer be on Outage by the end of the proposed Outage Period; and

(d) no earlier than 3 years prior to the day on which the Outage Commencement Interval falls.

3.18C. Outage Coordination

3.18C.1. For the purposes of this section 3.18C:

(a) a Network Operator that submits an Outage Plan that impacts an Outage Facility (other than a Load) of a Market Participant is an “Impacting Participant”; and

(b) a Market Participant whose Outage Facility (other than a Load) is impacted by a Network Operator is an “Impacted Participant”,

where "impacts" and "impacted" are determined as per the process identified in the WEM Procedure in clause 3.18.4.

3.18C.2. An Outage Plan that is submitted by an Impacting Participant, who is aware of an impact, must include a confirmation that the Impacting Participant:

(a) has notified each Impacted Participant of the Outage at least three months prior to the Outage Commencement Interval; or

(b) has written agreement for the Outage to proceed from each Impacted Participant.

3.18C.3. An Impacted Participant may request AEMO to undertake Outage coordination where:

(a) it reasonably considers that its Outage Facility will be unduly impacted by an Outage Plan having regard to matters specified in the WEM Procedure referred to in clause 3.18.4;

(b) it has requested the Impacting Participant to vary the Outage Period or any other component of the Outage Plan in order to minimise the impact on its Outage Facility; and

(c) its request is made in accordance with the process specified in the WEM Procedure referred to in clause 3.18.4.

3.18C.4. Following a request from an Impacted Participant under clause 3.18C.3, AEMO must determine, acting reasonably, and in accordance with the principles specified in clause 3.18C.5 and the WEM Procedure referred to in clause 3.18.4, whether the Outage Plan submitted by the Impacting Participant should be revised and the revisions that are required to be made.

3.18C.5. When making a determination under clause 3.18C.4, AEMO must have regard to the following principles in the following order of importance:

(a) any Power System Security or Power System Reliability implications if the Outage Plan submitted by the Impacting Participant did not occur at the Outage Commencement Interval and for the Outage Period requested;

(b) whether the Outage Plan submitted by the Impacting Participant was foreshadowed in the Outage Intention Plan;

(c) the notice provided by the Impacting Participant for the Outage Plan and the timing of the request for Outage coordination by the Impacted Participant;

(d) the technical reasons for the Outage Facility Maintenance, and the implications for the Outage Facility if the Outage Facility Maintenance is not commenced at the Outage Commencement Interval requested;

(e) any reasons, other than financial implications, provided by the Impacting Participant in the Outage Plan as to why the Outage Plan could not be varied as requested by the Impacted Participant;

(f) any other principles referred to in clause 3.18C.12(d); and

(g) any other information provided by the Impacting Participant or an Impacted Participant to AEMO as part of the Outage coordination.

3.18C.6. AEMO must notify each Impacted Participant and the Impacting Participant of its determination under clause 3.18C.4 as soon as practicable.

3.18C.7. AEMO may include in the Outage coordination any other Impacted Participant when undertaking Outage coordination whether or not that Impacted Participant has requested Outage coordination by AEMO.

3.18C.8. In making a determination in respect of the coordination of an Outage, AEMO must consult, in accordance with any process specified in the WEM Procedure referred to in clause 3.18.4, with each Impacted Participant.

3.18C.9. A Market Participant and Network Operator must comply with a determination by AEMO under clause 3.18C.4, and, if required, revise or withdraw the Outage Plan.

3.18C.10. Where AEMO notifies a Market Participant or Network Operator that an Outage Plan submitted by it is unacceptable, and the Economic Regulation Authority does not give AEMO a direction under clause 3.18F.6(e), then AEMO and the Market Participant or Network Operator must use best endeavours to agree an alternative time for the relevant Outage Plan.

3.18C.11. [Blank]

3.18C.12. AEMO must set out the processes for, and any other matters relating to, Outage coordination in the WEM Procedure referred to in clause 3.18.4, which must include:

(a) the conditions that must apply before an Impacted Participant can make a request for Outage coordination under clause 3.18C.3;

(b) the types of determinations that AEMO may make under clause 3.18C.4, which may be more than one, including:

i. that no revisions to the Outage Plan submitted by the Impacting Participant are required;

ii. that the Outage Commencement Interval specified in the Outage Plan submitted by the Impacting Participant be revised; or

iii. that the Outage Commencement Interval specified in any Outage Plan submitted by the Impacted Participant be revised;

(c) the factors which AEMO must take into account when making a determination under clause 3.18C.4, which must include that the:

i. primary focus must be on the Impacted Participant's Planned Outages, requested Outage Plans, or Outage Plans foreshadowed in the Outage Intention Plan; and

ii. secondary focus must be on all other factors, such as the time of year; and

(d) any principles AEMO must take into account when making a determination under clause 3.18C.4 in addition to the principles specified in clause 3.18C.5.

3.18D. Outage Revision

3.18D.1. A Market Participant or a Network Operator may revise a Planned Outage at any time prior to the Outage Completion Interval specified in the Planned Outage, provided:

(a) the revised Outage Commencement Interval is not earlier than the previous Outage Commencement Interval;

(b) the revised Outage Completion Interval is not later than the previous Outage Completion Interval;

(c) any revised Remaining Available Capacity for the Outage Facility, as relevant, is not proposed to be further reduced from the previous submission; and

(d) any revisions to other aspects of the Planned Outage are not prohibited by the WEM Procedure referred to in clause 3.18.4.

3.18D.2. An Outage Plan that has not been approved or rejected by AEMO or withdrawn by the Rule Participant may be revised at any time provided that the revised Outage Plan would meet the requirements specified in clause 3.18B.8 if it was submitted as a new Outage Plan at the time of revision.

3.18D.3. AEMO may, but is not required to, undertake an Outage Evaluation for an Outage Plan revised under clauses 3.18D.1 or 3.18D.2 where the reason for the revision is one or more of the following:

(a) the Outage Period is proposed to be reduced;

(b) any relevant Remaining Available Capacity for the Outage Facility is proposed to be increased from the previous submission; or

(c) the Outage Contingency Plan is proposed to be varied.

3.18D.4. Where an Outage Plan no longer meets the requirements detailed in 3.18B.8, the Market Participant or Network Operator must revise, or withdraw, the Outage Plan.

3.18D.5. Other than for Opportunistic Maintenance, despite a revision to an Outage Plan, the Outage Plan will retain the original Outage First Submission Date.

3.18D.6. Subject to clause 3.18D.3, AEMO must assess a revision to an Outage Plan in accordance with the Outage Evaluation Criteria.

3.18D.7. A Market Participant or Network Operator that no longer intends that the relevant Outage Capability of its Outage Facility will be subject to an Outage for the purpose of Outage Facility Maintenance must notify AEMO and withdraw the Outage Plan or Planned Outage as soon as practicable.

3.18D.8. A Market Participant or Network Operator who becomes aware of any changes to the information in an Outage Plan submitted to AEMO under clause 3.18B.2 must revise or withdraw the Outage Plan as soon as practicable.

3.18D.9. A Market Participant or Network Operator who is aware, or ought to be aware in the circumstances that, except where an Availability Declaration Exemption applies, if the Outage Plan was rejected, all of the relevant Outage Capability would still be subject to an Outage for any part of the Outage Period, must as soon as practicable:

(a) revise the Outage Plan to amend the Outage Period or increase any relevant Remaining Available Capacity (or both) to meet the requirements specified in clause 3.18B.8;

(b) if the Outage Plan is not approved, withdraw the Outage Plan; or

(c) if the Outage Plan is approved, notify AEMO.

3.18E. Outage Evaluation

3.18E.1. For each Outage Plan that AEMO is required to undertake an Outage Evaluation, AEMO must:

(a) where possible to do so, and subject to all required information being available, undertake the Outage Evaluation as soon as practicable after the Outage Plan has been submitted or revised;

(b) notify the relevant Market Participant or Network Operator as soon as practicable of the outcome of the Outage Evaluation;

(c) publish the status of the Outage Plan following completion of the Outage Evaluation, including an assessment of whether a Planned Outage is at risk of rejection; and

(d) keep a record of the Outage Evaluation, together with the reasons for each Outage Evaluation and assessment.

3.18E.2. For an Outage Plan that is not yet approved, if:

(a) the relevant Outage Capability is subject to a Planned Outage and AEMO has received a notification under clause 3.18D.9 in relation to that Planned Outage;

(b) the relevant Outage Capability is subject to a Planned Outage and AEMO is aware that it should have received a notification under clause 3.18D.9 in relation to that Planned Outage; or

(c) the relevant Outage Capability is subject to a Forced Outage,

then, AEMO must delay the Outage Evaluation for that Outage Plan until:

(d) the relevant Outage Capability is returned to service; or

(e) AEMO receives evidence to its satisfaction from the Market Participant or Network Operator that the relevant Outage Capability would not be subject to an Outage before the Outage Commencement Interval in the Outage Plan that is awaiting approval.

3.18E.3. AEMO must reject an Outage Plan for an Equipment List Facility or Self-Scheduling Outage Facility if it is aware that any of the requirements for an Outage Plan in clause 3.18B.8 have not been met or complied with.

3.18E.4. If an Outage Plan for a Self-Scheduling Outage Facility is not rejected by AEMO under clause 3.18E.3, AEMO is deemed to have approved the Outage Plan from the time AEMO received the request for approval of the Outage Plan under clause 3.18B.2.

3.18E.5. AEMO must evaluate all Outage Plans for Equipment List Facilities as required by these ESM Rules by assessing the Outage Plan against the Outage Evaluation Criteria (“**Outage Evaluation**”). This evaluation must:

(a) be undertaken on Outage Plans in the order in which they are submitted to AEMO unless AEMO considers it is more efficient or effective to evaluate Outage Plans out of order;

(b) be based on the information available to AEMO at the time the Outage Evaluation is undertaken;

(c) occur when an Outage Plan is received or revised and where required as part of the PASA studies; and

(d) where an Availability Declaration Exemption applies in respect of Mandatory Routine Maintenance, not result in the Outage Plan being rejected due to that Mandatory Routine Maintenance not being completed before the applicable deadline.

3.18E.6. In respect of an Outage Evaluation for an Outage Plan of an Equipment List Facility for Opportunistic Maintenance, AEMO:

(a) may reject the Outage Plan if it considers there is inadequate time to undertake the Outage Evaluation;

(b) is deemed to have rejected the Outage Plan 120 minutes before the Outage Commencement Interval if the Outage Evaluation has not been completed and the relevant Market Participant or Network Operator has not been notified of the Outage Evaluation outcome; and otherwise

(c) must approve the Outage Plan if it considers the Outage Evaluation Criteria has been met.

3.18E.7. In respect of an Outage Evaluation for an Outage Plan of an Equipment List Facility that is not for Opportunistic Maintenance, AEMO:

(a) must approve or reject each Outage Plan using the Outage Evaluation Criteria and in accordance with the WEM Procedure referred to in clause 3.18.4;

(b) must not show bias towards a Market Participant or Network Operator in evaluating the Outage Plan other than as required by the process for prioritisation set out in the WEM Procedure referred to in clause 3.18.4;

(c) may reject an Outage Plan where the Outage Plan First Submission Date was less than six weeks before the Outage Commencement Interval without evaluation if, in its opinion, the submitting party has not allowed adequate time for the Outage Plan to be assessed;

(d) may approve an Outage Plan where the Outage Evaluation Criteria are met for the Outage Period;

(e) may approve an Outage Plan, despite the Outage Evaluation Criteria not being met, if AEMO reasonably considers that rejecting the Outage Plan would pose a greater threat to Power System Security or Power System Reliability over the long term;

(f) is deemed to have rejected the Outage Plan at 2:00 PM on the Trading Day two days prior to the Outage Commencement Interval, if the Outage Evaluation has not been completed and the relevant Market Participant or Network Operator has not been notified of the Outage Evaluation outcome; and

(g) may consider more than one Outage Plan together and approve or reject the Outage Plans as a group.

3.18E.8. The Outage Evaluation Criteria ("**Outage Evaluation Criteria**") is met when in AEMO's opinion there will be sufficient Network in service and capacity, including Demand Side Programme capacity, available for dispatch to maintain Power System Security and Power System Reliability in accordance with the Power System Security Principles and Power System Reliability Principles, taking into account the methods and criteria specified in the WEM Procedure referred to in clause 3.18.4.

3.18E.9. AEMO may undertake a single Outage Evaluation for a group of related Outage Plans. When a group of Outage Plans that are considered together do not meet the Outage Evaluation Criteria, then AEMO must follow the process for prioritisation in the WEM Procedure referred to in clause 3.18.4.

3.18E.10. AEMO must set out the processes for, and any other matters relating to, the prioritisation of Outage Plans in the WEM Procedure referred to in clause 3.18.4, which must include, subject to maintaining Power System Security and Power System Reliability, that AEMO will:

(a) give priority to rescheduled Outage Plans that were approved and subsequently recalled or rejected by AEMO over unapproved Outage Plans;

(b) give priority to approved Outage Plans over unapproved Outage Plans;

(c) give priority to any Outage Plans that are not Opportunistic Maintenance;

(d) give priority to Outage Plans in the order of the Outage First Submission Date, subject to reviewing the impact of a changed Outage Period on other Outage Plans that have been submitted; and

(e) consider:

i. the technical reasons for the Outage Facility Maintenance;

ii. the technical implications for the relevant equipment if the Outage Facility Maintenance is not carried out; and

iii. the ability to reschedule Outage Plans including considering the Remaining Available Capacity, as relevant, for the relevant Outage Capability over the Outage Period.

3.18E.11. AEMO may reject a Planned Outage for an Equipment List Facility or a Self-Scheduling Outage Facility where:

(a) there has been a change in power system conditions after AEMO has approved the relevant Outage Plan; and

(b) AEMO considers that, as a result of the change, either:

i. the Planned Outage would no longer be approved when applying the Outage Evaluation Criteria; or

ii. in the case of a Self-Scheduling Outage Facility, if the Planned Outage were to proceed it would result in a risk to Power System Security or Power System Reliability.

3.18E.12. AEMO must inform the relevant Market Participant or Network Operator immediately if it makes a decision to reject a Planned Outage under clause 3.18E.11.

3.18E.13. Where AEMO rejects an Outage Plan in accordance with this section 3.18E, AEMO must provide reasons to the Rule Participant that submitted the Outage Plan.

3.18E.14. Subject to clause 3.18E.15, a Market Participant and a Network Operator must comply with a decision by AEMO not to approve or to reject an Outage Plan, and the relevant Market Participant or Network Operator must ensure that the proposed Outage is not taken unless otherwise approved under a revision to the Outage Plan or new Outage Plan.

3.18E.15. A Market Participant and a Network Operator is not required to comply with clause 3.18E.14 if such compliance would endanger the safety of any person, damage equipment, or violate any applicable law.

3.18E.16. Where a Market Participant or a Network Operator cannot comply with clause 3.18E.14, the Market Participant or Network Operator must notify AEMO as soon as practicable and provide the reason why it cannot comply, which must be a reason specified in clause 3.18E.15.

3.18F. Economic Regulation Authority Review of AEMO Decisions

3.18F.1. A Market Participant or Network Operator responsible for an Equipment List Facility may request the Economic Regulation Authority to reassess the inclusion of the Equipment List Facility on the Equipment List.

3.18F.2. Following a request by a Market Participant or Network Operator under clause 3.18F.1, the Economic Regulation Authority must consult with AEMO and the Market Participant or Network Operator as to whether the Equipment List Facility should remain on the Equipment List.

3.18F.3. The Economic Regulation Authority may direct AEMO to remove an Equipment List Facility from the Equipment List where, as a result of a reassessment requested under clause 3.18F.1, it considers that:

(a) AEMO has not followed the ESM Rules or WEM Procedure referred to in clause 3.18.4; and

(b) if AEMO had followed the ESM Rules and the WEM Procedure referred to in clause 3.18.4, then the Equipment List Facility would not have been on the Equipment List.

3.18F.4. If the Economic Regulation Authority gives AEMO a direction under clause 3.18F.3, then AEMO must, as soon as practicable, remove the Equipment List Facility specified in the direction from the Equipment List and publish the updated Equipment List on the WEM Website.

3.18F.5. Where AEMO notifies a Market Participant or Network Operator that an Outage Plan has been rejected by AEMO, the Market Participant or Network Operator may apply to the Economic Regulation Authority to reassess the decision on the grounds that AEMO has not followed the ESM Rules or the WEM Procedure referred to in clause 3.18.4 within ten Business Days of being notified of AEMO's decision and no later than five Business Days prior to the date of the proposed Outage Commencement Interval.

3.18F.6. If an application under clause 3.18F.5 to reassess AEMO's decision is made:

(a) the Market Participant or Network Operator must submit a written application to the Economic Regulation Authority, and forward a copy to AEMO, stating the reasons why it considers that AEMO's decision should be reassessed and providing any supporting evidence;

(b) until the Economic Regulation Authority completes its reassessment, AEMO's decision continues to have effect;

(c) AEMO must submit records relating to the Outage Evaluations relevant to the assessment of the Outage Plan rejected to the Economic Regulation Authority within two Business Days of being informed of an application by a Market Participant or Network Operator under clause 3.18F.6(a);

(d) the Economic Regulation Authority must consult with AEMO and the Market Participant or Network Operator concerning the Outage Plan and must make a complete assessment by the earlier of ten Business Days of receiving the application under clause 3.18F.5 or two Business Days prior to the date of the proposed Outage Commencement Interval;

(e) the Economic Regulation Authority may direct AEMO that the Outage Plan should be approved where it finds that:

i. AEMO did not follow the ESM Rules or the WEM Procedure referred to in clause 3.18.4; and

ii. if AEMO had followed the ESM Rules or the WEM Procedure referred to in clause 3.18.4, the Outage Plan would have been approved; and

(f) AEMO must approve the Outage Plan if directed by the Economic Regulation Authority in accordance with clause 3.18E.6(e).

3.18G. Economic Regulation Authority Study of the Impact of Network Operator Outages on the Market

3.18G.1. At least once in every five year period starting from the New WEM Commencement Day, the Economic Regulation Authority must conduct an economic study on the impact of Network Operator Outages on the market against the State Electricity Objective. In conducting the study, the Economic Regulation Authority must have regard to the most recent review conducted under clause 3.18GA.1.

3.18G.2. At the conclusion of a review under clause 3.18G.1, the Economic Regulation Authority must publish:

(a) the inputs and results of the economic study;

(b) all submissions received by Rule Participants as part of a consultation process conducted by the Economic Regulation Authority and any responses to issues raised in those submissions; and

(c) a report containing any recommended changes, formulated as one or more ESM Rule Change Proposals, recommended WEM Procedure changes or recommended changes to other relevant instruments (e.g. Access Code).

3.18G.3. If the Economic Regulation Authority recommends any changes to the ESM Rules or WEM Procedures in a report published under clause 3.18G.2(c), the Economic Regulation Authority must submit a Rule Change Proposal in accordance with clause 2.5.1 to effect the change.

3.18GA. Coordinator Review of Outage Planning Process

3.18GA.1. At least once in every five year period starting the New WEM Commencement Day, the Coordinator, with the assistance of AEMO, must conduct a review of the Outage planning process against the State Electricity Objective. At a minimum, the review must include:

(a) a technical study of the effectiveness of the Outage Evaluation Criteria; and

(b) a public consultation process with Rule Participants,

and must have regard to the most recent review conducted under clause 3.18G.1.

3.18GA.2. At the conclusion of a review under clause 3.18GA.1, the Coordinator must publish:

(a) the inputs and results of the technical study;

(b) all submissions received by Rule Participants as part of the consultation process and any responses to issues raised in those submissions; and

(c) a report containing any recommended changes to the Outage planning process, formulated as one or more ESM Rule Change Proposals, recommended WEM Procedure changes or recommended changes to other relevant instruments (e.g. Access Code).

3.18GA.3. If the Coordinator recommends any changes to the ESM Rules in a report published under clause 3.18GA.2(c), the Coordinator must progress a Rule Change Proposal in accordance with clause 2.5.1 to effect the change.

3.18H. Outage Compensation

3.18H.1. Where AEMO rejects a Planned Outage within 48 hours of the Outage Commencement Interval for the Outage Plan then, subject to clause 3.18H.2, the Market Participant ("**the claimant**") may claim compensation from AEMO.

3.18H.2. Compensation will only be paid if the Outage Plan rejected by AEMO under clause 3.18H.1 had an Outage Plan First Submission Date that was at least one year in advance of the Outage Commencement Interval for the Outage Plan.

3.18H.3. Compensation will be limited to the additional maintenance costs directly incurred by the claimant by AEMO rejecting the relevant Outage Plan. For the avoidance of doubt, compensation will not be paid for Opportunistic Maintenance.

3.18H.4. A claimant wishing to make a claim for compensation under clause 3.18H.1 must submit a written request to AEMO within three months of AEMO's decision to reject the approved Outage Plan, and provide invoices and other documents evidencing the costs referred to in clause 3.18H.3.

3.18H.5. AEMO must in respect of a claim for compensation under clause 3.18H.1:

(a) determine the amount of compensation to be paid to a claimant, within one month of AEMO receiving the claim;

(b) notify the claimant of the amount determined and the reasons for its decision; and

(c) calculate the amount of compensation on a per Trading Interval basis for the purposes of clause 9.11.4 for every Trading Interval covered by the Outage Period.

3.19. Outage Intention Plans

3.19.1. Subject to clause 3.19.3, Market Participants and Network Operators must submit an Outage Intention Plan that complies with the requirements contained in the WEM Procedure referred to in clause 3.19.11 to AEMO by 1 March annually. An Outage Intention Plan:

(a) must represent the Market Participant's or Network Operator's reasonable estimate of its expected Outages for the following calendar year; and

(b) is not binding on AEMO, the Market Participants or Network Operators.

3.19.2. A Market Participant or Network Operator may revise an Outage Intention Plan submitted in accordance with clause 3.19.1 before 1 March annually.

3.19.3. A Market Participant and a Network Operator is not required to comply with this section 3.19 in relation to a Self-Scheduling Outage Facility unless directed by AEMO in accordance with clause 3.19.4.

3.19.4 AEMO may direct a Self-Scheduling Outage Facility that is required to comply with this section 3.19.

3.19.5. AEMO must confirm receipt of an Outage Intention Plan or a revised Outage Intention Plan submitted by a Market Participant or a Network Operator in accordance with clauses 3.19.1, 3.19.2 or 3.19.9, as applicable.

3.19.6. AEMO must consider all validly submitted Outage Intention Plans for the relevant year and develop and publish an Interim Annual Consolidated Outage Intention Plan for the following calendar year in accordance with the WEM Procedure referred to in clause 3.19.11 by 1 May each year.

3.19.7. AEMO may use and consider any relevant information held by it or matters it deems relevant in considering Outage Intention Plans submitted by Market Participants and Network Operators and developing an Interim Annual Consolidated Outage Intention Plan or a Final Annual Consolidated Outage Intention Plan.

3.19.8. [Blank]

3.19.9. A Market Participant or Network Operator may revise, resubmit or withdraw an Outage Intention Plan following publication of the Interim Annual Consolidated Outage Intention Plan under clause 3.19.6 by 1 July the same year.

3.19.10. AEMO must publish the Final Annual Consolidated Outage Intention Plan for the following calendar year by 1 September annually.

3.19.11. AEMO must develop and maintain a WEM Procedure that:

(a) specifies the information that must be included in an Outage Intention Plan;

(b) sets out the process AEMO will follow in carrying out an Interim Annual Consolidated Outage Intention Plan and Final Annual Consolidated Outage Intention Plan, including the methodology and timetable to develop the Interim Annual Consolidated Outage Intention Plan and Final Annual Consolidated Outage Intention Plan; and

(c) the process and requirements for the revision and resubmission of Outage Intention Plans under clause 3.19.9.

3.20. Outage Recall

3.20.1 In order to maintain Power System Security or Power System Reliability, AEMO may, during the Outage Period for a Planned Outage, direct a Market Participant or Network Operator to return an Outage Facility to service in accordance with the relevant Outage Contingency Plan, or take other measures contained in the relevant Outage Contingency Plan ("**Outage Recall Direction**")

3.20.2. Subject to clause 3.20.3, Market Participants and Network Operators must comply with an Outage Recall Direction issued by AEMO under clause 3.20.1 and revise the relevant Outage Plan as soon as practicable.

3.20.3. Market Participants and Network Operators must comply with an Outage Recall Direction issued by AEMO under clause 3.20.1 unless such compliance would endanger the safety of any person, damage equipment, or violate any applicable law.

3.20.4. Where a Market Participant or a Network Operator cannot comply with an Outage Recall Direction issued by AEMO under clause 3.20.1, the Market Participant or Network Operator must notify AEMO as soon as practicable and provide the reasons why it cannot comply with the direction which must be a reason described in clause 3.20.3.

3.21. Forced Outages and Outage Quantity Calculations

3.21.1. A Forced Outage is any Outage, or part of any Outage, of an Outage Facility that has not been approved by AEMO, including:

(a) Outages as a result of:

i. a direction from AEMO under clause 2.28.3B; or

ii. a non-compliance with a Registered Generator Performance Standard;

(b) any Dispatch Intervals of an Outage that commence prior to its approved Outage Commencement Interval, or extend beyond its approved Outage Completion Interval; and

(c) where the Market Participant or Network Operator does not follow an Outage Recall Direction from AEMO to return the equipment to service within the time specified in the Outage Contingency Plan,

but does not include Outages of a Facility that occur within a period in which the Facility is subject to an approved Commissioning Test Plan and are caused by a failure of the Facility's equipment during that Commissioning Test Period.

3.21.2. If an Outage Facility suffers, or will suffer, a Forced Outage, the relevant Market Participant or Network Operator must:

(a) as soon as practicable after the Market Participant or Network Operator becomes aware of the Forced Outage, notify AEMO in accordance with the WEM Procedure referred to in clause 3.21.10 of:

i. the Outage Facility affected by the Outage and, where relevant, each Facility Technology Type of the Outage Facility affected by the Outage;

ii. the Outage Capabilities affected by the Outage for the Outage Facility and for each Facility Technology Type of the Outage Facility;

iii. the cause of the Outage;

iv. the date and time the Outage commenced or is expected to commence;

v. the date and time the Outage ended or is expected to end;

vi. where relevant, an estimate of the Remaining Available Capacity of each Outage Capability for the Outage Facility;

vii. where relevant, an estimate of the Remaining Available Capacity for each Facility Technology Type of the Outage Facility; and

viii. any other details specified in the WEM Procedure referred to in clause 3.21.10;

(b) provide AEMO with full available details of the Forced Outage referred to in clause 3.21.2(a), as well as the time that the information required in clause 3.21.2(a) was first notified to AEMO, in accordance with the WEM Procedure referred to in clause 3.21.10:

i. as soon as practicable;

ii. subject to clause 3.21.2A, using best endeavours to provide AEMO with the full available details within 24 hours of the Forced Outage occurring; and

iii. subject to clause 3.21.2A, in all cases no later than the end of the next Business Day of the Forced Outage occurring;

(c) must inform AEMO of any material change to the information provided under this clause as soon as practicable after becoming aware of that change, in the manner prescribed in the WEM Procedure referred to in clause 3.21.10; and

(d) notwithstanding the requirements of this clause 3.21.2, in respect of each affected Trading Day, as soon as practicable, and in any case no later than the end of the day that is fifteen calendar days after the day on which the Trading Day ends, provide AEMO with any further information or changes to the Forced Outage notification information provided under clause 3.21.2(b).

3.21.2A. A Market Participant or Network Operator is not required to comply with clauses 3.21.2(b)(ii) or 3.21.2(b)(iii) for a Self-Scheduling Outage Facility if AEMO has granted an exemption for the Self-Scheduling Outage Facility in accordance with the process described in the WEM Procedure referred to in clause 3.21.10.

3.21.3. Where additional information relating to a Forced Outage becomes available after the timeframes specified in clause 3.21.2:

(a) if the additional information is held by a Market Participant or Network Operator, the Market Participant or Network Operator must notify AEMO of the additional information as soon as practicable;

(b) AEMO may require a Market Participant or Network Operator to submit a Forced Outage reflecting that additional information; and

(c) a Market Participant or Network Operator may request AEMO to allow it to enter or revise a Forced Outage in order to reflect that additional information, including where that may result in the Forced Outage being withdrawn.

3.21.4. Where AEMO receives a request under 3.21.3(c), AEMO must review the information provided by the Market Participant or Network Operator and determine whether there is sufficient evidence to support the Forced Outage being revised or withdrawn, and must notify the Market Participant or Network Operator of its determination as soon as practicable.

3.21.5. AEMO must keep a record of all Forced Outages of which it is notified of under clause 3.21.2(a) or otherwise made aware.

3.21.6. The Peak Capacity Outage Quantity for a Planned Outage or Forced Outage o of a Separately Certified Component c of a Registered Facility that is a Non-Intermittent Generating System or Electric Storage Resource for a Dispatch Interval DI that is included in Planned Outage or Forced Outage o is:

$$PCQ(c,DI,o) = PrevRAC(c,DI,o) - RAC(c,DI,o)$$

where:

~~The Outage Quantity for a Planned Outage or Forced Outage o of a Separately Certified Component c of a Registered Facility that is a Non-Intermittent Generating System or Electric Storage Resource for a Dispatch Interval DI that is included in Planned Outage or Forced Outage o is:~~

~~Q(c,DI,o)= PrevRAC(c,DI,o) – RAC(c,DI,o)~~

~~where:~~

(a) PrevRAC(c,DI,o) is equal to:

i. MaxCap(c,DI), if Planned Outage or Forced Outage o was the first relevant outage to be submitted; or

ii. otherwise, the applicable Remaining Available Capacity for the relevant outage that was submitted most recently prior to the submission time of Planned Outage or Forced Outage o,

where relevant outage means a Planned Outage or Forced Outage for energy for Separately Certified Component c that includes Dispatch Interval DI;

(b) RAC(c,DI,o) is the applicable Remaining Available Capacity for Planned Outage or Forced Outage o;

(c) MaxCap(c,DI) is:

i. if Separately Certified Component c is a Non-Intermittent Generating System, the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from the Non-Intermittent Generating System under optimal conditions, as specified under Appendix 1(b)(x) or Appendix 1(c)(x) as applicable; or

ii. if Separately Certified Component c is an Electric Storage Resource, the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply across the Peak Electric Storage Resource Obligation Duration for Separately Certified Component c in Dispatch Interval DI to the relevant Network from the Electric Storage Resource under optimal conditions, as specified under Appendix 1(b)(xii) or Appendix 1(c)(xii) as applicable; and

(d) the applicable Remaining Available Capacity for a Planned Outage or Forced Outage is the Remaining Available Capacity under the Planned Outage or Forced Outage for Separately Certified Component c in Dispatch Interval DI for the applicable energy Outage Capability, which is:

i. if Separately Certified Component c is a Non-Intermittent Generating System, sent out capacity, net of embedded and Parasitic Loads, available for supply to the relevant Network from the Non-Intermittent Generating System; or

ii. if Separately Certified Component c is an Electric Storage Resource, sent out capacity, net of embedded and Parasitic Loads, available for supply across the Peak Electric Storage Resource Obligation Duration for Separately Certified Component c in Dispatch Interval DI to the relevant Network from the Electric Storage Resource.

3.21.7. The Peak Capacity Adjusted Forced Outage Quantity for Dispatch Interval DI for Separately Certified Component c of a Registered Facility is:

(a) if Separately Certified Component c is an Intermittent Generating System:

$$PCAFO(c, DI) = 0$$

~~(a) where Separately Certified Component c is an Intermittent Generating System:~~

~~$CAFO(c, DI) = 0$~~

(b) otherwise:

$$PCAFO(c, DI) = max\left(0, \sum_{o \in \boldsymbol{FO}} PCQ(c, DI, o) - \left(MaxCap(c, DI) - DefPRCOQ(c, DI)\right)\right)$$

where:

i. o ∈ FO denotes all Forced Outages o for Separately Certified Component c that include Dispatch Interval DI;

ii. PCQ(c,DI,o) is the Peak Capacity Outage Quantity for Outage o of Separately Certified Component c in Dispatch Interval DI as calculated in clause 3.21.6;

~~(b) otherwise:~~

~~$$CAFO(c, DI) = max\left(0, \sum_{o \in \boldsymbol{FO}} Q(c, DI, o) - \left(MaxCap(c, DI) - DefRCOQ(c, DI)\right)\right)$$~~

~~where:~~

~~i. o ∈ FO denotes all Forced Outages o for Separately Certified Component c that include Dispatch Interval DI;~~

~~ii. Q(c,DI,o) is the Outage Quantity for Outage o of Separately Certified Component c in Dispatch Interval DI as calculated in clause 3.21.6;~~

iii. MaxCap(c,DI) is:

1. if Separately Certified Component c is a Non-Intermittent Generating System, the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for

supply to the relevant Network from the Non-Intermittent Generating System under optimal conditions, as specified under Appendix 1(b)(x) or Appendix 1(c)(x) as applicable; or

2. if Separately Certified Component c is an Electric Storage Resource, the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply across the Peak Electric Storage Resource Obligation Duration for Separately Certified Component c in Dispatch Interval DI to the relevant Network from the Electric Storage Resource under optimal conditions, as specified under Appendix 1(b)(xii) or Appendix 1(c)(xii) as applicable; and

iv. DefPRCOQ(c,DI) is the Peak Reserve Capacity Obligation Quantity that would apply to Separately Certified Component c in Dispatch Interval DI if the Separately Certified Component was not subject to an Outage or an approved Commissioning Test Plan.

~~iv. DefRCOQ(c,DI) is the Reserve Capacity Obligation Quantity that would apply to Separately Certified Component c in Dispatch Interval DI if the Separately Certified Component was not subject to an Outage or an approved Commissioning Test Plan.~~

3.21.7A. The Peak Capacity Adjusted Forced Outage Quantity for Trading Interval t for Separately Certified Component c of a Registered Facility is:

$$\mathrm{PCAFO}(c,t) = \frac{\sum_{DI \in t} \mathrm{PCAFO}(c,DI)}{6}$$

where:

(a) DI ∈ t denotes all Dispatch Intervals DI in Trading Interval t; and

(b) PCAFO(c,DI) is the Peak Capacity Adjusted Forced Outage Quantity for Separately Certified Component c in Dispatch Interval DI as calculated in clause 3.21.7.

~~3.21.7A. The Capacity Adjusted Forced Outage Quantity for Trading Interval t for Separately Certified Component c of a Registered Facility is:~~

$$\mathrm{CAFO}(c,t) = \frac{\sum_{DI \in t} \mathrm{CAFO}(c,DI)}{6}$$

~~where:~~

~~(a) DI ∈ t denotes all Dispatch Intervals DI in Trading Interval t; and~~

~~(b) CAFO(c,DI) is the Capacity Adjusted Forced Outage Quantity for Separately Certified Component c in Dispatch Interval DI as calculated in clause 3.21.7.~~

3.21.7B. The Peak Capacity Adjusted Forced Outage Quantity for Trading Interval t for Registered Facility f is:

(a) where no Peak Capacity Credits are assigned to Registered Facility f in Trading Interval t or Registered Facility f is a Non-Scheduled Facility:

$$\mathrm{PCAFO}(f, t) = 0$$

(b) otherwise:

$$\mathrm{PCAFO}(f, t) = \sum_{c \in f} \mathrm{PCAFO}(c, t)$$

where:

i. $c \in f$ denotes all Separately Certified Components c of Facility f; and

ii. PCAFO(c,t) is the Peak Capacity Adjusted Forced Outage Quantity for Separately Certified Component c in Trading Interval t as calculated in clause 3.21.7A.

~~3.21.7B. The Capacity Adjusted Forced Outage Quantity for Trading Interval t for Registered Facility f is:~~

~~(a) where no Capacity Credits are assigned to Registered Facility f in Trading Interval t or Registered Facility f is a Non-Scheduled Facility:~~

~~$\mathrm{CAFO}(f, t) = 0$~~

~~(b) otherwise:~~

~~$$\mathrm{CAFO}(f, t) = \sum_{c \in f} \mathrm{CAFO}(c, t)$$~~

~~where:~~

~~i. $c \in f$ denotes all Separately Certified Components c of Facility f; and~~

~~ii. CAFO(c,t) is the Capacity Adjusted Forced Outage Quantity for Separately Certified Component c in Trading Interval t as calculated in clause 3.21.7A.~~

3.21.7C. The Peak Capacity Adjusted Forced Outage Quantity for Dispatch Interval DI for Registered Facility f is:

(a) if no Peak Capacity Credits are assigned to Registered Facility f in Dispatch Interval DI or Registered Facility f is a Non-Scheduled Facility:

$$\mathrm{PCAFO}(f, \mathrm{DI}) = 0$$

(b) otherwise:

$$\mathrm{PCAFO}(f, \mathrm{DI}) = \sum_{c \in f} \mathrm{PCAFO}(c, \mathrm{DI})$$

where:

i. $c \in f$ denotes all Separately Certified Components c of Facility f; and

ii. PCAFO(c,DI) is the Peak Capacity Adjusted Forced Outage Quantity for Separately Certified Component c in Dispatch Interval DI as calculated in clause 3.21.7.

~~3.21.7C. The Capacity Adjusted Forced Outage Quantity for Dispatch Interval DI for Registered Facility f is:~~

~~(a) where no Capacity Credits are assigned to Registered Facility f in Dispatch Interval DI or Registered Facility f is a Non-Scheduled Facility:~~

~~$CAFO(f, DI) = 0$~~

~~(b) otherwise:~~

~~$$CAFO(f, DI) = \sum_{c \in f} CAFO(c, DI)$$~~

~~where:~~

~~i. $c \in f$ denotes all Separately Certified Components c of Facility f; and~~

~~ii. CAFO(c,DI) is the Capacity Adjusted Forced Outage Quantity for Separately Certified Component c in Dispatch Interval DI as calculated in clause 3.21.7.~~

3.21.8. The Capacity Adjusted Planned Outage Quantity for Dispatch Interval DI for Separately Certified Component c of a Registered Facility is:

(a) if Separately Certified Component c is an Intermittent Generating System:

$$PCAPO(c, DI) = 0$$

~~(a) where Separately Certified Component c is an Intermittent Generating System:~~

~~$CAPO(c, DI) = 0$~~

(b) otherwise:

$$PCAPO(c,DI) = max\left(0, \sum_{o \in \boldsymbol{PO}} PCQ(c,DI,o) - max\left(0, MaxCap(c,DI) - DefPRCOQ(c,DI) - \sum_{o \in \boldsymbol{FO}} PCQ(c,DI,o)\right)\right) \text{~~}CAPO(c,DI)\text{~~}$$

~~$= max\left(0, \sum_{o \in \boldsymbol{PO}} Q(c,DI,o) - max\left(0, MaxCap(c,DI) - DefRCOQ(c,DI) - \sum_{o \in \boldsymbol{FO}} Q(c,DI,o)\right)\right)$~~

where:

i. o ∈ PO denotes all Planned Outages o for Separately Certified Component c that include Dispatch Interval DI;

ii. o ∈ FO denotes all Forced Outages o for Separately Certified Component c that include Dispatch Interval DI;

iii. PCQ(c,DI,o) is the Peak Capacity Outage Quantity for Outage o of Separately Certified Component c in Dispatch Interval DI as calculated in clause 3.21.6;

~~iii. Q(c,DI,o) is the Outage Quantity for Outage o of Separately Certified Component c in Dispatch Interval DI as calculated in clause 3.21.6;~~

iv. MaxCap(c,DI) is:

1. if Separately Certified Component c is a Non-Intermittent Generating System, the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from the Non-Intermittent Generating System under optimal conditions, as specified under Appendix 1(b)(x) or Appendix 1(c)(x) as applicable; or

2. if Separately Certified Component c is an Electric Storage Resource, the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply across the Peak Electric Storage Resource Obligation Duration for Separately Certified Component c in Dispatch Interval DI to the relevant Network from the Electric Storage Resource

under optimal conditions, as specified under Appendix 1(b)(xii) or Appendix 1(c)(xii) as applicable; and

v. DefPRCOQ(c,DI) is the Peak Reserve Capacity Obligation Quantity that would apply to Separately Certified Component c in Dispatch Interval DI if the Separately Certified Component was not subject to an Outage or an approved Commissioning Test Plan.

~~v. DefRCOQ(c,DI) is the Reserve Capacity Obligation Quantity that would apply to Separately Certified Component c in Dispatch Interval DI if the Separately Certified Component was not subject to an Outage or an approved Commissioning Test Plan.~~

3.21.8A. The Peak Capacity Adjusted Planned Outage Quantity for Trading Interval t for Separately Certified Component c of a Registered Facility is:

$$\mathrm{PCAPO}(c,t) = \frac{\sum_{DI \in t} \mathrm{PCAPO}(c,DI)}{6}$$

where:

(a) DI ∈ t denotes all Dispatch Intervals DI in Trading Interval t; and

(b) PCAPO(c,DI) is the Peak Capacity Adjusted Planned Outage Quantity for Separately Certified Component c in Dispatch Interval DI as calculated in clause 3.21.8.

~~3.21.8A. The Capacity Adjusted Planned Outage Quantity for Trading Interval t for Separately Certified Component c of a Registered Facility is:~~

$$\mathrm{CAPO}(c,t) = \frac{\sum_{DI \in t} \mathrm{CAPO}(c,DI)}{6}$$

~~where:~~

~~(a) DI ∈ t denotes all Dispatch Intervals DI in Trading Interval t; and~~

~~(b) CAPO(c,DI) is the Capacity Adjusted Planned Outage Quantity for Separately Certified Component c in Dispatch Interval DI as calculated in clause 3.21.8.~~

3.21.8B. The Peak Capacity Adjusted Planned Outage Quantity for Trading Interval t for Registered Facility f is:

(a) if no Peak Capacity Credits are assigned to Registered Facility f in Trading Interval t or Registered Facility f is a Non-Scheduled Facility:

$$\mathrm{PCAPO}(f,t) = 0$$

(b) otherwise:

$$\mathrm{PCAPO}(f,t) = \sum_{c \in f} \mathrm{PCAPO}(c,t)$$

where:

i. $c \in f$ denotes all Separately Certified Components c of Facility f; and

ii. PCAPO(c,t) is the Peak Capacity Adjusted Planned Outage Quantity for Separately Certified Component c in Trading Interval t as calculated in clause 3.21.8A.

~~3.21.8B. The Capacity Adjusted Planned Outage Quantity for Trading Interval t for Registered Facility f is:~~

~~(a) where no Capacity Credits are assigned to Registered Facility f in Trading Interval t or Registered Facility f is a Non-Scheduled Facility:~~

$$\text{~~CAPO}(f,t) = 0\text{~~}$$

~~(b) otherwise:~~

$$\text{~~CAPO}(f,t) = \sum_{c \in f} \text{CAPO}(c,t)\text{~~}$$

~~where:~~

~~i. $c \in f$ denotes all Separately Certified Components c of Facility f; and~~

~~ii. CAPO(c,t) is the Capacity Adjusted Planned Outage Quantity for Separately Certified Component c in Trading Interval t as calculated in clause 3.21.8A.~~

3.21.8C. The Peak Capacity Adjusted Planned Outage Quantity for Dispatch Interval DI for Registered Facility f is:

(a) if no Peak Capacity Credits are assigned to Registered Facility f in Dispatch Interval DI or Registered Facility f is a Non-Scheduled Facility:

$$\text{PCAPO}(f, \text{DI}) = 0$$

(b) otherwise:

$$\text{PCAPO}(f, \text{DI}) = \sum_{c \in f} \text{PCAPO}(c, \text{DI})$$

where:

i. $c \in f$ denotes all Separately Certified Components c of Facility f; and

ii. PCAPO(c,DI) is the Peak Capacity Adjusted Planned Outage Quantity for Separately Certified Component c in Dispatch Interval DI as calculated in clause 3.21.8.

~~3.21.8C. The Capacity Adjusted Planned Outage Quantity for Dispatch Interval DI for Registered Facility f is:~~

~~(a) where no Capacity Credits are assigned to Registered Facility f in Dispatch Interval DI or Registered Facility f is a Non-Scheduled Facility:~~

~~$CAPO(f, DI) = 0$~~

~~(b) otherwise:~~

~~$$CAPO(f, DI) = \sum_{c \in f} CAPO(c, DI)$$~~

~~where:~~

~~i. c ∈ f denotes all Separately Certified Components c of Facility f; and~~

~~ii. CAPO(c,DI) is the Capacity Adjusted Planned Outage Quantity for Separately Certified Component c in Dispatch Interval DI as calculated in clause 3.21.8.~~

3.21.9. [Blank]

3.21.10. AEMO must document the processes to be followed in reporting Forced Outages, including the determination of Forced Outage quantities pursuant to clause 4.26.1J, in a WEM Procedure.

3.21.11. The Flexible Capacity Outage Quantity for a Planned Outage or Forced Outage o of a Separately Certified Component c of a Registered Facility that is a Non-Intermittent Generating System or Electric Storage Resource for a Dispatch Interval DI that is included in Planned Outage or Forced Outage o is:

$$FCQ(c,DI,o) = PrevRAC(c,DI,o) - RAC(c,DI,o)$$

where:

(a) PrevRAC(c,DI,o) is equal to:

i. MaxCap(c,DI), if Planned Outage or Forced Outage o was the first relevant outage to be submitted; or

ii. otherwise, the applicable Remaining Available Capacity for the relevant outage that was submitted most recently prior to the submission time of Planned Outage or Forced Outage o,

where relevant outage means a Planned Outage or Forced Outage for Flexible Capacity for Separately Certified Component c that includes Dispatch Interval DI;

(b) RAC(c,DI,o) is the applicable Remaining Available Capacity for Planned Outage or Forced Outage o;

(c) MaxCap(c,DI) is:

i. if Separately Certified Component c is a Non-Intermittent Generating System, the maximum sent out capacity, net of

embedded and Parasitic Loads, that can be available for supply to the relevant Network from the Non-Intermittent Generating System under optimal conditions, as specified under Appendix 1(b)(xB) or Appendix 1(c)(xB) as applicable; or

ii. if Separately Certified Component c is an Electric Storage Resource, the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply across the Peak Electric Storage Resource Obligation Duration for Separately Certified Component c in Dispatch Interval DI to the relevant Network from the Electric Storage Resource under optimal conditions, as specified under Appendix 1(b)(xiiA) or Appendix 1(c)(xiiA) as applicable; and

(d) the applicable Remaining Available Capacity for a Planned Outage or Forced Outage is the Remaining Available Capacity under the Planned Outage or Forced Outage for Separately Certified Component c in Dispatch Interval DI for the applicable Flexible Capacity Outage Capability, which is:

i. if Separately Certified Component c is a Non-Intermittent Generating System, sent out capacity, net of embedded and Parasitic Loads, available for supply to the relevant Network from the Non-Intermittent Generating System; or

ii. if Separately Certified Component c is an Electric Storage Resource, sent out capacity, net of embedded and Parasitic Loads, available for supply across the Flexible Electric Storage Resource Obligation Intervals to the relevant Network from the Electric Storage Resource.

3.21.12. The Flexible Capacity Adjusted Forced Outage Quantity for Dispatch Interval DI for Separately Certified Component c of a Registered Facility is:

(a) if Separately Certified Component c is an Intermittent Generating System:

$$\mathrm{FCAFO(c, DI)} = 0$$

(b) otherwise:

$$FCAFO(c, DI) = max\left(0, \sum_{o \in \boldsymbol{FO}} FCQ(c, DI, o) - (MaxCap(c, DI) - DefFRCOQ(c, DI))\right)$$

where:

i. o ∈ FO denotes all Forced Outages o for Separately Certified Component c that include Dispatch Interval DI;

ii. FCQ(c,DI,o) is the Flexible Capacity Outage Quantity for Outage o of Separately Certified Component c in Dispatch Interval DI as calculated in clause 3.21.11;

iii. MaxCap(c,DI) is:

1. if Separately Certified Component c is a Non-Intermittent Generating System, the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from the Non-Intermittent Generating System under optimal conditions, as specified under Appendix 1(b)(xB) or Appendix 1(c)(xB) as applicable; or

2. if Separately Certified Component c is an Electric Storage Resource, the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply across the Peak Electric Storage Resource Obligation Duration for Separately Certified Component c in Dispatch Interval DI to the relevant Network from the Electric Storage Resource under optimal conditions, as specified under Appendix 1(b)(xiiA) or Appendix 1(c)(xiiA) as applicable; and

iv. DefFRCOQ(c,DI) is the Flexible Reserve Capacity Obligation Quantity that would apply to Separately Certified Component c in Dispatch Interval DI if the Separately Certified Component was not subject to an Outage or an approved Commissioning Test Plan.

3.21.13. The Flexible Capacity Adjusted Forced Outage Quantity for Trading Interval t for Separately Certified Component c of a Registered Facility is:

$$\mathrm{FCAFO}(c,t) = \frac{\sum_{DI \in t} \mathrm{FCAFO}(c,DI)}{6}$$

where:

(a) DI ∈ t denotes all Dispatch Intervals DI in Trading Interval t; and

(b) FCAFO(c,DI) is the Flexible Capacity Adjusted Forced Outage Quantity for Separately Certified Component c in Dispatch Interval DI as calculated in clause 3.21.12.

3.21.14. The Flexible Capacity Adjusted Forced Outage Quantity for Trading Interval t for Registered Facility f is:

(a) if no Flexible Capacity Credits are assigned to Registered Facility f in Trading Interval t:

$$\mathrm{FCAFO}(f,t) = 0$$

(b) otherwise:

$$\mathrm{FCAFO(f,t)} = \sum_{c \in f} \mathrm{FCAFO(c,t)}$$

where:

i. c ∈ f denotes all Separately Certified Components c of Facility f; and

ii. FCAFO(c,t) is the Flexible Capacity Adjusted Forced Outage Quantity for Separately Certified Component c in Trading Interval t as calculated in clause 3.21.13.

3.21.15. The Flexible Capacity Adjusted Forced Outage Quantity for Dispatch Interval DI for Registered Facility f is:

(a) if no Flexible Capacity Credits are assigned to Registered Facility f in Dispatch Interval DI:

$$\mathrm{FCAFO(f,DI)} = 0$$

(b) otherwise:

$$\mathrm{FCAFO(f,DI)} = \sum_{c \in f} \mathrm{FCAFO(c,DI)}$$

where:

i. c ∈ f denotes all Separately Certified Components c of Facility f; and

ii. FCAFO(c,DI) is the Flexible Capacity Adjusted Forced Outage Quantity for Separately Certified Component c in Dispatch Interval DI as calculated in clause 3.21.12.

3.21.16. The Flexible Capacity Adjusted Planned Outage Quantity for Dispatch Interval DI for Separately Certified Component c of a Registered Facility is:

(a) if Separately Certified Component c is an Intermittent Generating System:

$$\mathrm{FCAPO(c,DI)} = 0$$

(b) otherwise:

$$FCAPO(c,DI) = max\left(0, \sum_{o \in \boldsymbol{PO}} FCQ(c,DI,o) - max\left(0, MaxCap(c,DI) - DefFRCOQ(c,DI) - \sum_{o \in \boldsymbol{FO}} FCQ(c,DI,o)\right)\right)$$

where:

i. o ∈ PO denotes all Planned Outages o for Separately Certified Component c that include Dispatch Interval DI;

ii. o ∈ FO denotes all Forced Outages o for Separately Certified Component c that include Dispatch Interval DI;

iii. FCQ(c,DI,o) is the Flexible Capacity Outage Quantity for Outage o of Separately Certified Component c in Dispatch Interval DI as calculated in clause 3.21.11;

iv. MaxCap(c,DI) is:

1. if Separately Certified Component c is a Non-Intermittent Generating System, the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from the Non-Intermittent Generating System under optimal conditions, as specified under Appendix 1(b)(xB) or Appendix 1(c)(xB) as applicable; or

2. if Separately Certified Component c is an Electric Storage Resource, the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply across the Peak Electric Storage Resource Obligation Duration for Separately Certified Component c in Dispatch Interval DI to the relevant Network from the Electric Storage Resource under optimal conditions, as specified under Appendix 1(b)(xiiA) or Appendix 1(c)(xiiA) as applicable; and

v. DefFRCOQ(c,DI) is the Flexible Reserve Capacity Obligation Quantity that would apply to Separately Certified Component c in Dispatch Interval DI if the Separately Certified Component was not subject to an Outage or an approved Commissioning Test Plan.

3.21.17. The Flexible Capacity Adjusted Planned Outage Quantity for Trading Interval t for Separately Certified Component c of a Registered Facility is:

$$\mathrm{FCAPO}(c,t) = \frac{\sum_{DI \in t} \mathrm{FCAPO}(c,DI)}{6}$$

where:

(a) DI ∈ t denotes all Dispatch Intervals DI in Trading Interval t; and

(b) FCAPO(c,DI) is the Flexible Capacity Adjusted Planned Outage Quantity for Separately Certified Component c in Dispatch Interval DI as calculated in clause 3.21.16.

3.21.18. The Flexible Capacity Adjusted Planned Outage Quantity for Trading Interval t for Registered Facility f is:

(a) if no Flexible Capacity Credits are assigned to Registered Facility f in Trading Interval t:

$$\mathrm{FCAPO}(f,t) = 0$$

(b) otherwise:

$$\mathrm{FCAPO}(f,t) = \sum_{c \in f} \mathrm{FCAPO}(c,t)$$

where:

i. $c \in f$ denotes all Separately Certified Components c of Facility f; and

ii. FCAPO(c,t) is the Flexible Capacity Adjusted Planned Outage Quantity for Separately Certified Component c in Trading Interval t as calculated in clause 3.21.17.

3.21.19. The Flexible Capacity Adjusted Planned Outage Quantity for Dispatch Interval DI for Registered Facility f is:

(a) if no Flexible Capacity Credits are assigned to Registered Facility f in Dispatch Interval DI:

$$\mathrm{FCAPO}(f,\mathrm{DI}) = 0$$

(b) otherwise:

$$\mathrm{FCAPO}(f,\mathrm{DI}) = \sum_{c \in f} \mathrm{FCAPO}(c,\mathrm{DI})$$

where:

i. $c \in f$ denotes all Separately Certified Components c of Facility f; and

ii. FCAPO(c,DI) is the Flexible Capacity Adjusted Planned Outage Quantity for Separately Certified Component c in Dispatch Interval DI as calculated in clause 3.21.16.

Commissioning Tests

3.21A Commissioning Tests

Commissioning Test

3.21A.1. A Market Participant intending to conduct a Commissioning Test must only conduct the Commissioning Test under a Commissioning Test Plan approved by AEMO.

3.21A.2. Other than as permitted under clause 3.21A.15A, a Market Participant requesting approval of a Commissioning Test Plan must submit the Commissioning Test Plan

to AEMO for approval at least 7 Business Days before the start of the Commissioning Test Period, and in accordance with any additional timeframes for categories of Commissioning Test Plans specified in the WEM Procedure referred to in clause 3.21A.27.

3.21A.3. A Commissioning Test Plan submitted by a Market Participant must represent the good faith intention of the Market Participant to conduct the Commissioning Test.

3.21A.4. Following submission of a Commissioning Test Plan to AEMO for approval, where the Market Participant that submitted the Commissioning Test Plan reasonably believes that the Commissioning Test Plan will require coordination with a Network Operator, the Market Participant must:

(a) promptly notify the relevant Network Operator to inform them of the Commissioning Test Plan submission; and

(b) provide details to the relevant Network Operator of the relevant Commissioning Tests requiring coordination.

3.21A.5. AEMO must specify which activities must occur under a Commissioning Test Plan ("**Commissioning Tests**") in the WEM Procedure referred to in clause 3.21A.27, which must include activities conducted for any of the following reasons:

(a) for a Facility that has undergone significant maintenance as described in the WEM Procedure referred to in clause 3.21A.27(a);

(b) to test the control, monitoring or communications systems for a Facility;

(c) for a Facility to demonstrate compliance with Registered Generator Performance Standards under Chapter 3A;

(d) for a Facility to demonstrate its capability to be accredited, or continue to be accredited, to provide Essential System Services under section 2.34A; or

(e) any other reason specified in the WEM Procedure referred to in clause 3.21A.27 that has the potential to impact Power System Security or Power System Reliability.

3.21A.6. A Commissioning Test for an Outage Facility may cover periods in which some or all of the Outage Capabilities of the Outage Facility is subject to a Planned Outage or Forced Outage.

Requirements on information when submitting Commissioning Test Plan

3.21A.7. A Commissioning Test Plan must include:

(a) the name of the Facility or equipment to be tested;

(b) the purpose of the testing;

(c) details of any contracts or agreements relevant to testing activities;

(d) details of the proposed Commissioning Test Period, including the start and end Dispatch Intervals, and the preferred dates and times over which the proposed Commissioning Tests will occur;

(e) where applicable, any alternative periods within the Commissioning Test Period over which the proposed Commissioning Tests could be conducted;

(f) where relevant, details of any conditions that are required to be met prior to, or in order to conduct, the Commissioning Tests;

(g) contact details for the relevant contact persons who will be involved in the test activities in respect of the Facility to be tested, where such persons must be contactable by AEMO during all Dispatch Intervals during the Commissioning Test Period, and methods of communication with those persons;

(h) any other information specified by AEMO in the WEM Procedure referred to in clause 3.21A.27; and

(i) details of the Commissioning Tests.

Commissioning Test Plan Approval

3.21A.8. AEMO is not required to assess, and may reject, a Commissioning Test Plan where it reasonably considers that:

(a) inadequate information is provided in the Commissioning Test Plan;

(b) there is insufficient time to consider a revision to the Commissioning Test Plan in accordance with the WEM Procedure referred to in clause 3.21A.27; or

(c) the initial submission is not in accordance with the submission timeframes specified in clause 3.21A.2.

3.21A.9. Subject to clause 3.21A.13, AEMO must approve a Commissioning Test Plan that is made and submitted in accordance with this section 3.21A, unless, in its opinion, conducting the proposed Commissioning Tests, including at the proposed time and any alternative times in the Commissioning Test Plan, is likely to adversely affect Power System Security or Power System Reliability.

3.21A.10. Where AEMO considers that the conditions in respect of a Commissioning Test Plan have changed, or are likely to change, AEMO may re-assess a Commissioning Test Plan that has been approved to determine if, as a result of the changes or likely changes, it should remain approved.

3.21A.11. AEMO may reject a Commissioning Test Plan that has been approved where AEMO considers that, as a result of the change or likely change to conditions, conducting the Commissioning Test or Commissioning Tests are likely to adversely affect Power System Security or Power System Reliability.

3.21A.12. A Market Participant that has submitted a Commissioning Test Plan that no longer intends to conduct the Commissioning Test Plan must withdraw the Commissioning Test Plan.

3.21A.13. AEMO may coordinate with a Market Participant that has submitted a Commissioning Test Plan and any relevant Network Operator in order to determine conditions for conducting the Commissioning Test Plan that AEMO considers are more suitable for maintaining Power System Security and Power System Reliability.

3.21A.14. AEMO may share details of a Commissioning Test Plan and details of any associated Commissioning Tests with a relevant Network Operator for the purposes of coordinating the Commissioning Test Plan.

3.21A.15. A Market Participant that has submitted a Commissioning Test Plan may revise the details of the Commissioning Test Plan and, where those revised details include modified Commissioning Tests or a revised Commissioning Test Period, AEMO must re-assess the Commissioning Test Plan and, subject to clause 3.21A.13, determine whether the Commissioning Test Plan is rejected or can remain approved.

3.21A.15A. A Market Participant must submit a revised Commissioning Test Plan to AEMO for approval in accordance with the timeframes specified in the WEM Procedure referred to in clause 3.21A.27.

3.21A.16. AEMO may stop, reschedule or cancel a Commissioning Test under an approved Commissioning Test Plan at any time if it determines that conducting, or continuing to conduct, the Commissioning Test is likely to adversely affect Power System Security or Power System Reliability.

3.21A.17. Where AEMO:

(a) rejects a Commissioning Test Plan under clause 3.21A.8;

(b) rejects a Commissioning Test Plan under clause 3.21A.9;

(c) rejects a Commissioning Test Plan under clause 3.21A.11; or

(d) stops, reschedules or cancels a Commissioning Test under clause 3.21A.16,

AEMO must notify the relevant Market Participant as soon as practicable, provide reasons for its decision and use best endeavours to agree an alternative time for the Commissioning Test or Commissioning Test Plan as applicable.

3.21A.18. AEMO must not show bias towards a Market Participant in regard to approving or rejecting a Commissioning Test Plan.

3.21A.19. AEMO must notify a Market Participant as to whether it has approved or rejected a Commissioning Test Plan in accordance with the timelines specified in the WEM Procedure referred to in clause 3.21A.27, where a Commissioning Test Plan has yet to commence and this must be no later than 48 hours before the start of the proposed Commissioning Test Period.

3.21A.20. Where a Market Participant no longer intends to conduct a Commissioning Test under a Commissioning Test Plan that has been:

(a) submitted to AEMO for approval; or

(b) approved by AEMO,

the Market Participant must notify AEMO as soon as practicable and revise or withdraw the Commissioning Test Plan as required.

3.21A.21. On receipt of notification from a Market Participant under clause 3.21A.20, AEMO must:

(a) reassess a revised Commissioning Test Plan; and

(b) update the relevant report referred to in clause 3.21A.22 to reflect the changed status of the Commissioning Test Plan.

Requirement to publish Commissioning Test Plan

3.21A.22 AEMO must publish on the WEM Website and keep up to date information on each Commissioning Test Plan that AEMO approves, including:

(a) the status of the Commissioning Test Plan, including whether the Commissioning Test Plan has been withdrawn or has subsequently been rejected; and

(b) summary details of the Commissioning Test Plans as described in the WEM Procedure in clause 3.21A.27, which must include:

i. the name of the Facility;

ii. the Commissioning Test Period; and

iii. the purpose of the testing.

3.21A.23. The information published under clause 3.21A.22 must be published or updated, as applicable, as soon as practicable after, as relevant:

(a) the Commissioning Test Plan was approved by AEMO;

(b) the Commissioning Test Plan was rejected or withdrawn; or

(c) where revisions have been made to the Commissioning Test Plan, the most recent revision of the Commissioning Test Plan was approved.

Requirements for undertaking a Commissioning Test

3.21A.24. In conducting a Commissioning Test a Market Participant must conform to the approved Commissioning Test Plan.

3.21A.25. If a Market Participant intending to conduct or conducting a Commissioning Test cannot conform to the Commissioning Test Plan approved by AEMO for the Commissioning Test, the Market Participant must notify AEMO as soon as practicable.

3.21A.26. Where specified in the WEM Procedure referred to in clause 3.21A.27, Market Participants must conduct Commissioning Tests in accordance with the requirements specified in that WEM Procedure.

3.21A.27. AEMO must document the following in a WEM Procedure:

(a) a description of the activities that AEMO consider would constitute a Commissioning Test and therefore require submission of a Commissioning Test Plan under this section 3.21A, including a categorisation of the type of Commissioning Test or Commissioning Test Plan that AEMO reasonably considers would allow a Market Participant to determine the timeframes and processes applicable to a Commissioning Test Plan or Commissioning Test;

(b) any additional information required to be contained in a Commissioning Test Plan;

(c) the timelines for submitting and revising different categories of Commissioning Test Plans to AEMO, where the timelines must be no longer than 65 days;

(d) the criteria AEMO will use to assess whether to approve or reject a Commissioning Test Plan and to stop, reschedule or cancel a Commissioning Test in a Commissioning Test Plan;

(e) the process for notifying:

i. whether the Commissioning Test Plan has been rejected under clause 3.21A.8;

ii. whether the Commissioning Test Plan has been approved under clause 3.21A.9 and if the Commissioning Test Plan is approved, the minimum information that must be provided to the Market Participant which must include the approved dates and times where alternatives are specified in the submitted Commissioning Test Plan; or

iii. whether a Commissioning Test within the Commissioning Test Plan has been stopped, rescheduled or cancelled under clause 3.21A.16;

(f) the process for rescheduling a Commissioning Test within the Commissioning Test Period, including the process for Market Participants and AEMO to agree to a new date and time for the Commissioning Test;

(g) the process and timeframes for adjustments to an approved Commissioning Test Plan, including to the Commissioning Test Period;

(h) the summary details of a Commissioning Test Plan that AEMO will publish on the WEM Website; and

(i) the requirements for undertaking a Commissioning Test, including, without limitation, any actions to be taken by a Market Participant before, during and on completion of the Commissioning Test.

Outage Data Publication

3.22. Outage Data Publication

3.22.1. AEMO must as soon as practicable after AEMO receives an Outage Plan submission, or a change is made to an existing Outage Plan for an Equipment List Facility in its Outage computer system, publish the following details on the WEM Website:

(a) whether the submission or change is for Opportunistic Maintenance or not;

(b) the status of the Outage;

(c) the description of the Outage;

(d) the Outage First Submission Date, Outage Commencement Interval and Outage Completion Interval;

(e) the equipment impacted by the Outage, including, where relevant, the Facility name and Facility Technology Types for that Facility impacted by the Outage;

(f) summary details of the Contingency Plan;

(g) the Outage Return To Service Commencement Interval and Outage Return To Service Completion Interval for each Outage Return To Service Period listed in the Outage Plan;

(h) whether the Outage has been subject to an Outage Recall Direction;

(i) whether the Outage has been identified as at risk of rejection by AEMO;

(j) the date and time when:

i. the Outage Plan was received by AEMO or was subsequently revised by the Rule Participant responsible for the Outage Plan; or

ii. any amendment to the Outage status occurred;

(k) each Outage Capability impacted by the Outage and any associated Remaining Available Capacity quantities for the Outage Facility or the Facility Technology Types of the Outage Facility; and

(l) any other information specified in the WEM Procedure referred to in clause 3.18.4.

3.22.1A. Where AEMO rejects an Outage Plan or issues an Outage Recall Direction outside of its Outage computer system, AEMO must record its best estimate of when that decision was made and publish the estimated date and time of the decision as soon as practicable on the WEM Website.

3.22.2. AEMO must, as soon as practicable after AEMO receives a notification of a Forced Outage for an Equipment List Facility or a revision is made to an existing Forced Outage for an Equipment List Facility in its Outage computer system, publish on the WEM Website:

(a) the Outage Facility affected by the Outage and, where relevant, each Facility Technology Type of the Outage Facility affected by the Outage;

(b) the cause of the Outage;

(c) the date and time the Outage commenced or is expected to commence;

(d) the date and time the Outage ended or is expected to end;

(e) the date and time when:

i. AEMO was first notified of the Outage under clause 3.21.2(a);

ii. the Outage was first reported in AEMO's Outage computer system; or

iii. any amendments to the Outage information were received by AEMO;

(f) each Outage Capability impacted by the Outage and any associated Remaining Available Capacity quantities for the Outage Facility or the Facility Technology Types of the Outage Facility; and

(g) any other information specified in the WEM Procedure referred to in clause 3.18.4.

3.22.3. AEMO must prepare and publish on the WEM Website the Peak Refund Exempt Planned Outage Count and Flexible Refund Exempt Planned Outage Count for each Separately Certified Component of a Scheduled Facility or Semi-Scheduled Facility for each of the 1000 Trading Days up to and including the most recent Trading Day which AEMO has settled under Chapter 9.

3.23. [Blank]

Distributed Energy Resources Register

3.24. Distributed Energy Resources Register

3.24.1. On and from a day no earlier than the day that is six months after the day AEMO develops the WEM Procedure referred to in clause 3.24.8, AEMO must establish, maintain and update a DER Register.

3.24.2. The DER Register:

(a) must include DER Generation Information reported to AEMO by Network Operators in accordance with clause 3.24.5; and

(b) may include information of a type similar to the information referred to in clause 3.24.2(a) provided to AEMO by any person in connection with the performance of AEMO's functions under the ESM Rules, Regulations or the Electricity Industry Act.

3.24.3. By no later than 30 September 2020, a Network Operator must provide AEMO with all DER Generation Information that it holds in accordance with the WEM Procedure referred to in clause 3.24.8, or as otherwise agreed with AEMO.

3.24.4. AEMO will be taken to satisfy the requirement to establish and maintain a DER Register in clause 3.24.1 if it stores DER Register Information in one or more databases.

3.24.5. If a Network Operator receives DER Generation Information relating to connection points on its Network it must, in accordance with the WEM Procedure referred to in clause 3.24.8, provide that information to AEMO.

3.24.6. AEMO may use DER Register Information for the purpose of the exercise of its statutory functions under the Electricity Industry Act, Regulations, and these ESM Rules.

3.24.7. AEMO must publish details on the extent to which, in general terms, DER Register Information has informed AEMO's development or use of load forecasts, or the performance of its functions referred to in clause 3.24.6 and AEMO may, for this purpose, include such details as part of existing WEM Procedures or other publications produced by AEMO, or by publishing details on the WEM Website.

3.24.8. By no later than 1 July 2020, AEMO must develop and implement a WEM Procedure that specifies:

(a) details of the DER Generation Information that Network Operators must provide to AEMO under clauses 3.24.3 and 3.24.5, including any minimum

size of Small Generating Units or Storage Works for which a Network Operator is required to provide DER Generation Information;

(b) when Network Operators must provide and update DER Generation Information;

(c) how DER Generation Information should be provided to AEMO by Network Operators, including, for example, the format in which the information must be provided;

(d) how the information in the DER Register is stored by AEMO;

(e) the manner and form in which AEMO will publish details, in accordance with clause 3.24.7, on the extent to which DER Register Information has informed its load forecasts or its function for ensuring that the SWIS operates in a secure and reliable manner;

(f) details of how AEMO will provide Network Operators with access to DER Register Information under clause 3.24.14; and

(g) the contents, form and timing of the DER Register Report to be published by AEMO in accordance with clause 3.24.12 and how the DER Register Information to be included in that report will be aggregated.

3.24.9. In developing and amending the WEM Procedure referred to in clause 3.24.8, AEMO must:

(a) have regard to the reasonable costs of efficient compliance by Network Operators with the procedure compared to the likely benefits from the use of DER Generation Information as contemplated under this section 3.24;

(b) consider any risk of unauthorised use or disclosure of confidential information or personal information that may arise from including information in the DER Register compared to the likely benefits of including that information in the register; and

(c) subject to clause 3.24.10, comply with the Procedure Change Process.

3.24.10. AEMO is not required to comply with the Procedure Change Process when making the first WEM Procedure referred to in clause 3.24.8 or when making minor or administrative amendments to that WEM Procedure.

3.24.11. The WEM Procedure referred to in clause 3.24.8 must include a minimum period of 3 months between the date of publication and the date when the procedure commences other than when the procedure is amended under clause 3.24.10, in which case the procedure may commence on the date of publication.

3.24.12. AEMO must prepare and publish on the WEM Website a report of aggregated DER Register Information in accordance with the WEM Procedure referred to in clause 3.24.8.

3.24.13. The information in the DER Register Report must be aggregated such that it does not:

(a) directly or indirectly disclose confidential information; or

(b) result in a breach of applicable privacy legislation.

3.24.14. AEMO must provide or give access to DER Register Information to each Network Operator in relation to that Network Operator's Network in accordance with the WEM Procedure referred to in clause 3.24.8.

3.24.15. Nothing in this section 3.24:

(a) requires AEMO to make available DER Register Information where the collection, use or disclosure of that information by AEMO would breach applicable privacy legislation; or

(b) precludes AEMO from disclosing confidential information in the circumstances in which disclosure of confidential information is permitted under the ESM Rules, Regulations or the Electricity Industry Act.

3.24.16. No less than seven days before the day the DER Register commences, AEMO must publish notice on the WEM Website of the day the DER Register is to commence.

Technical Requirements for Standard Small User Facilities

3.25. Requirements for Standard Small User Facilities

3.25.1. A Standard Small User Facility is a Facility of the type defined in clause 2.29.1B(c) that:

(a) contains an Energy Producing System installed on or after 1 May 2026 (inclusive of alterations and modifications to an existing Energy Producing System) that comprises one or more Inverter Energy Systems;

(b) is, or is intended to be, connected to a Distribution Network with a connection voltage less than 1000 volts; and

(c) has, or is intended to have, for Inverter Energy Systems in the Energy Producing System, a maximum aggregate capacity of 30 kVA.

3.25.2. A Distribution System Operator must document in a WEM Procedure the following technical requirements to be met by the Market Participant for a Standard Small User Facility connected to the Distribution System Operator’s Distribution Network:

(a) maximum capacity limits for Inverter Energy Systems in the Facility;

(b) maximum generation limits for the Facility;

(c) requirements to comply with relevant AS/NZS 4777 standards relating to inverter requirements; and

(d) either:

i. an Injection limit of 1.5 kW for the Facility; or

ii. requirements to:

1. comply with a higher Injection limit determined by the Distribution System Operator; and

2. ensure that each Inverter Energy System in the Facility is capable of being remotely disconnected from and reconnected to the Distribution Network by the Market Participant.

3.25.3. A Distribution System Operator must consult with the Coordinator and AEMO before publishing a Procedure Change Proposal in respect of the WEM Procedure referred to in clause 3.25.2.

3A. Requirements for Transmission Connected Generating Systems

3A.1. General

3A.1.1. A Market Participant must comply with each Registered Generator Performance Standard for a Transmission Connected Generating System from the time that they:

(a) are issued an Approval to Generate Notification; or

(b) cease to be an Existing Transmission Connected Generating System as detailed in clause 1.39.13.

3A.1.2. If there is any inconsistency between the provisions of these ESM Rules (including Appendix 12) and the Technical Rules of the relevant Network Operator, the provisions of these ESM Rules prevail to the extent of the inconsistency.

3A.1.3. A Network Operator and AEMO must document a process by which they will provide each other with information, consult with each other, or reach agreement in respect of the matters in this Chapter 3A and Appendix 12 including:

(a) the requirements for, and manner in which, they will consult with each other;

(b) the format, form and manner in which any information must be provided; and

(c) where these ESM Rules do not provide a timeframe for the provision of the information, the time by which such information must be provided.

3A.1.4. Where the person who owns, controls, or operates a Facility containing an unregistered Energy Producing System supplying an Intermittent Load, that is and continues to be deemed to be an Intermittent Load under clause 1.48.2, is exempted from the requirement in clause 2.30B.8 to make a new application under clause 2.30B.5 for the Load to be treated as an Intermittent Load based on clause 2.30B.8A, the person's Intermediary is responsible for that Transmission Connected Generating System.

3A.1.5. AEMO must:

(a) in consultation with the Network Operator, prepare guidelines on how AEMO determines the maximum temperature as defined in Appendix 12; and

(b) publish those guidelines on the WEM Website.

3A.1.6. In developing, amending or replacing a guideline in accordance with clauses 3A.1.5, 3A.4.4 or 3A.13.2, AEMO or the Network Operator, as applicable, must:

(a) publish, together with the proposed guideline, or the amendment or replacement of it, as applicable, a call for submissions, and the closing date for submissions must not be less than 15 Business Days from the date the proposed or revised guideline is published; and

(b) publish, together with the final guideline, a summary of the submissions received and the response of AEMO or the Network Operator, as applicable, to the issues raised in those submissions.

3A.2. General Requirements to Provide Relevant Information

3A.2.1. A Market Participant responsible for a Transmission Connected Generating System must provide all data and information reasonably required by a Network Operator or AEMO under this Chapter 3A and relevant provisions under Appendix 12 to assess the impact of a Transmission Connected Generating System on the performance and security of the transmission system and distribution system.

3A.2.2. A Market Participant responsible for a Transmission Connected Generating System must ensure that the generation system model referred to in Appendix 12 complies with the requirements specified in the WEM Procedure of the relevant Network Operator referred to in clause 3A.4.2.

3A.2.3. Where the requirements for the generation system model are amended in the WEM Procedure referred to in clause 3A.4.2, a Market Participant responsible for a Transmission Connected Generating System must ensure that the generation system model used by the Market Participant complies with the amended requirements within the timeframes specified in the WEM Procedure for compliance with the amended requirements.

3A.3. Exempt Transmission Connected Generating Systems

3A.3.1. A Network Operator may, by written notice, exempt a Market Participant responsible for a Transmission Connected Generating System from all of the requirements of section 3A.1, section 3A.2, sections 3A.5 to 3A.12 and Appendix 12 in respect of a Transmission Connected Generating System (Exempt Transmission Connected Generating System) where the Network Operator and AEMO agree that the cost incurred by the Market Participant responsible for the Transmission Connected Generating System to comply with Chapter 3A and Appendix 12 is reasonably likely to outweigh the benefit of requiring the Market Participant to comply having regard to:

(a) the potential of the Transmission Connected Generating System to adversely affect Power System Security or Power System Reliability; and

(b) the effect the proposed exemption will, if granted, have on other Market Participants.

3A.3.2. An exemption notice issued under clause 3A.3.1 must be provided to the Market Participant responsible for a Transmission Connected Generating System and the relevant Network Operator must keep a record of each exemption notice issued.

3A.3.3. A Network Operator may revoke an exemption notice issued under clause 3A.3.1 by written notice to a Market Participant responsible for the Exempt Transmission Connected Generating System where a Relevant Generator Modification is proposed to be undertaken in respect of the Exempt Transmission Connected Generating System.

3A.3.4. Where an exemption notice issued under clause 3A.3.1 is revoked under clause 3A.3.3, section 3A.14 applies.

3A.3.5. A Network Operator must notify the Economic Regulation Authority when it issues an exemption notice under clause 3A.3.1 or revokes an exemption notice under clause 3A.3.3.

3A.3.6. The Economic Regulation Authority must publish a list of Exempt Transmission Connected Generating Systems and update that list when it is notified by a Network Operator under clause 3A.3.5.

3A.4. General Obligations of a Network Operator

3A.4.1. A Network Operator must ensure its connection process as it relates to Transmission Connected Generating Systems for which a Market Participant is responsible is consistent with this Chapter 3A.

3A.4.2. A Network Operator must develop and maintain a WEM Procedure that addresses the requirements of the generation system model referred to section 17 of Appendix 12.

3A.4.3. The WEM Procedure referred to in clause 3A.4.2, must specify the timeframes by which the Market Participant must ensure that the generation system model referred to in section 17 of Appendix 12, complies with each amended requirement of the generation system model as specified in the WEM Procedure.

3A.4.4. A Network Operator must:

(a) prepare guidelines in consultation with AEMO, to provide information to Market Participants as to how the standard or technical level of performance in respect of each Technical Requirement will be assessed, and the information that must be included in submissions for Proposed Generator Performance Standards, for each type of generating unit; and

(b) publish those guidelines on its website.

3A.5. Generator Performance Standards for Transmission Connected Generating Systems

3A.5.1. Where a Market Participant responsible for generating works intends to connect those generating works to a transmission system, the Market Participant must submit to the relevant Network Operator, Proposed Generator Performance Standards for the generating works as if the generating works were a Transmission Connected Generating System addressing each Technical Requirement.

3A.5.2. Each Proposed Generator Performance Standard submitted under clause 3A.5.1 or clause 3A.14.1(a) must meet the Common Requirements and:

(a) be equal to or better than the Ideal Generator Performance Standard; or

(b) if a Proposed Negotiated Generator Performance Standard is submitted:

i. be no less onerous than the Minimum Performance Standard;

ii. demonstrate any applicable Negotiation Criteria have been met;

iii. meet the requirements of clause 3A.5.5; and

iv. if applicable, meet the requirements of clause 3A.5.6.

3A.5.3. The Network Operator must not approve a Proposed Generator Performance Standard that does not meet or demonstrate the applicable criteria listed in clause 3A.5.2.

3A.5.4. The Network Operator is not required to consult AEMO and must approve a Proposed Generator Performance Standard that is equal to or better than the Ideal Generator Performance Standard for a Technical Requirement.

3A.5.5. A Proposed Negotiated Generator Performance Standard must be as consistent as practicable with the corresponding Ideal Generator Performance Standard for that Technical Requirement, having regard to:

(a) the need to protect the Transmission Connected Generating System from damage;

(b) power system conditions at the location of the connection or proposed connection;

(c) the commercial and technical feasibility of complying with the Ideal Generator Performance Standard; and

(d) electrical losses between a Measurement Point and Connection Point that may cause a Proposed Negotiated Generator Performance Standard to adversely impact on Power System Security or Power System Reliability.

3A.5.6. A Proposed Negotiated Generator Performance Standard may include a Trigger Event which must address:

(a) the conditions for determining whether the Trigger Event has occurred;

(b) the party responsible for determining whether the Trigger Event has occurred;

(c) the actions required to be taken and any revised standard or technical level of performance in respect of a Technical Requirement which must be achieved if the Trigger Event occurs;

(d) the maximum timeframe for compliance with any action required to be taken and each revised standard or technical level of performance in respect of a Technical Requirement following the Trigger Event;

(e) any requirements to provide information and supporting evidence required by the Network Operator or AEMO to demonstrate that, if the Trigger Event occurs, the actions required will occur and will deliver the agreed outcome and level of performance required by any revised standard or technical level of performance in respect of a Technical Requirement;

(f) any testing requirements to verify compliance with each revised standard or technical level of performance in respect of a Technical Requirement; and

(g) any requirements necessary to verify that the actions required to be taken have occurred if the Trigger Event occurs.

3A.5.7. If a Registered Generator Performance Standard includes a Trigger Event and the Trigger Event subsequently occurs, the Market Participant responsible for the Transmission Connected Generating System must comply with the requirements of the Trigger Event.

3A.5.8. A Trigger Event contained in a Registered Generator Performance Standard may be modified by written agreement between the Market Participant responsible for the Transmission Connected Generating System, AEMO and the relevant Network Operator. For the avoidance of doubt, the process that applies to a Proposed Negotiated Generator Performance Standard in this section 3A.5 does not apply to the modification of a Trigger Event contained in a Registered Generator Performance Standard under this clause 3A.5.8.

3A.5.9. If a Market Participant responsible for a Transmission Connected Generating System submits to the Network Operator a Proposed Negotiated Generator Performance Standard under clause 3A.5.1 or clause 3A.14.1(a), the Market Participant responsible for the Transmission Connected Generating System must provide to the relevant Network Operator:

(a) the reasons and supporting evidence why the Market Participant responsible for the Transmission Connected Generating System cannot meet the Ideal Generator Performance Standard; and

(b) any information and supporting evidence required by the Network Operator setting out the reasons why the Proposed Negotiated Generator Performance Standard is appropriate, including:

i. how the Proposed Negotiated Generator Performance Standard meets the applicable criteria listed in clause 3A.5.2; and

ii. how the Market Participant responsible for the Transmission Connected Generating System has taken into account each of the matters listed in clause 3A.5.5.

3A.5.10. If, following the receipt of a Proposed Negotiated Generator Performance Standard and the information and evidence referred to in clause 3A.5.9, the Network Operator reasonably considers it will approve the Proposed Negotiated Generator Performance Standard, the Network Operator, in accordance with the process agreed under clause 3A.1.3, must:

(a) provide the information received from the Market Participant responsible for the Transmission Connected Generating System under clause 3A.5.9 to AEMO; and

(b) use best endeavours to consult with AEMO within a reasonable timeframe in relation to each Proposed Negotiated Generator Performance Standard.

3A.5.11. AEMO must use best endeavours to respond in a reasonable timeframe after being consulted in accordance with clause 3A.5.10 and provide a recommendation to the Network Operator whether a Proposed Negotiated Generator Performance Standard should be approved or rejected by the Network Operator, or whether AEMO requires further information to make the recommendation in accordance with the process agreed under clause 3A.1.3.

3A.5.12. Where AEMO requires further information that it considers necessary to make the recommendation in clause 3A.5.11, the Network Operator, in accordance with the process agreed under clause 3A.1.3, must:

(a) provide the further information that is in its possession, power or control; or

(b) use reasonable endeavours to obtain that information from the Market Participant responsible for the Transmission Connected Generating System and provide that information to AEMO.

3A.5.13. In making a recommendation whether a Proposed Negotiated Generator Performance Standard should be approved or rejected in accordance with clause 3A.5.11, AEMO is not limited to considering information provided by the Network Operator and may use any other relevant information available to it.

3A.5.14. AEMO must recommend that the Network Operator reject a Proposed Negotiated Generator Performance Standard in accordance with clause 3A.5.11 if it reasonably considers that the Proposed Negotiated Generator Performance

Standard may adversely affect Power System Security or Power System Reliability.

3A.5.15. Where AEMO recommends that the Network Operator reject a Proposed Negotiated Generator Performance Standard in accordance with clause 3A.5.11, AEMO must:

(a) provide written reasons to the Network Operator; and

(b) in respect of the relevant Technical Requirement, recommend that either:

i. if applicable, an alternative Proposed Negotiated Generator Performance Standard that AEMO considers meets the requirements of clause 3A.5.2(b), which may include a Trigger Event, is adopted; or

ii. otherwise, the Ideal Generator Performance Standard is adopted.

3A.5.16. Subject to clause 3A.5.17, after a Network Operator has received the recommendation from AEMO under clause 3A.5.11, the Network Operator must determine whether to approve or reject each Proposed Negotiated Generator Performance Standard proposed by the Market Participant responsible for the Transmission Connected Generating System.

3A.5.17. A Network Operator must reject a Proposed Negotiated Generator Performance Standard in accordance with clause 3A.5.16 where:

(a) in the Network Operator's reasonable opinion:

i. one or more of the requirements in clause 3A.5.2(b); or

ii. in the case of a Relevant Generator Modification, one or more of the requirements in clause 3A.14.1,

are not met;

(b) AEMO has recommended in accordance with clause 3A.5.11 that the Network Operator reject the Proposed Negotiated Generator Performance Standard; or

(c) in the Network Operator's reasonable opinion, the Proposed Negotiated Generator Performance Standard will adversely affect:

i. Power System Security;

ii. Power System Reliability;

iii. Power Transfer Capability; or

iv. the quality of supply of electricity for other users of the Network.

3A.5.18. If a Network Operator rejects a Proposed Negotiated Generator Performance Standard in accordance with clause 3A.5.16, the Network Operator must provide

to the Market Participant responsible for the Transmission Connected Generating System:

(a) written reasons for the rejection; and

(b) if applicable, an alternative Proposed Negotiated Generator Performance Standard that the Network Operator and AEMO consider meets the requirements of clause 3A.5.2(b), which may include a Trigger Event.

3A.5.19. The Market Participant responsible for the Transmission Connected Generating System may, in relation to an alternative Proposed Negotiated Generator Performance Standard provided by the Network Operator in accordance with clause 3A.5.18(b), either:

(a) accept the alternative Proposed Negotiated Generator Performance Standard; or

(b) reject the alternative Proposed Negotiated Generator Performance Standard; and

i. propose a different alternative Proposed Negotiated Generator Performance Standard consistent with the requirements of clause 3A.5.2(b), which may include a Trigger Event, in which case the process for consideration and approval of Proposed Generator Performance Standards in this section 3A.5 applies; or

ii. elect to adopt the Ideal Generator Performance Standard for the relevant Technical Requirement.

3A.5.20. When a Proposed Generator Performance Standard is approved in accordance with clause 3A.5.4, clause 3A.5.16, or accepted by the Market Participant under clause 3A.5.19(a), it must be recorded by the relevant Network Operator on the Generator Register and it will be a Registered Generator Performance Standard for that Transmission Connected Generating System.

3A.6. Generator Monitoring Plans

3A.6.1. A Market Participant responsible for a Transmission Connected Generating System must:

(a) monitor its compliance with the Registered Generator Performance Standards for the Transmission Connected Generating System;

(b) once issued an Approval to Generate Notification, have a Generator Monitoring Plan approved by AEMO for the Transmission Connected Generating System at all times; and

(c) comply with the Generator Monitoring Plan approved by AEMO for the Transmission Connected Generating System on and from the date specified in the Generator Monitoring Plan approved by AEMO.

3A.6.2. AEMO must develop and maintain a WEM Procedure which includes:

(a) the following requirements relating to the content of a Generator Monitoring Plan ("**Generator Monitoring Plan Requirements**"):

i. how a Market Participant responsible for a Transmission Connected Generating System must monitor performance against the applicable Registered Generator Performance Standards including any testing and verification requirements;

ii. the record keeping obligations relating to monitoring compliance with Registered Generator Performance Standards; and

iii. the information and data provision obligations a Market Participant responsible for a Transmission Connected Generating System must comply with when requested by AEMO, the Network Operator or the Economic Regulation Authority, including the form by which that information and data must be provided;

(aA) the process a Market Participant responsible for a Transmission Connected Generating System must follow to submit a proposed Generator Monitoring Plan to AEMO;

(b) the assessment and approval process to be followed by AEMO for a proposed Generator Monitoring Plan submitted by a Market Participant responsible for a Transmission Connected Generating System;

(c) the process by which a Market Participant responsible for a Transmission Connected Generating System must report any alleged non-compliance or suspected non-compliance with the applicable Registered Generator Performance Standards and the applicable Generator Monitoring Plan approved by AEMO;

(d) the process by which a Market Participant responsible for a Transmission Connected Generating System must report that it has not met or complied with, or may not be able to meet or comply with an approved Rectification Plan in accordance with clause 3A.11.9; and

(e) the process by which a Market Participant responsible for a Transmission Connected Generating System must submit proposed updates and amendments to a Generator Monitoring Plan approved by AEMO and the assessment process to be followed by AEMO for such updates and amendments.

3A.6.3. Generator Monitoring Plans and information relating to Generator Monitoring Plans including outcomes, reporting data and supporting evidence relating to a Generator Monitoring Plan are all Confidential Information.

3A.6.4. A Market Participant responsible for a Transmission Connected Generating System must submit a proposed Generator Monitoring Plan to AEMO for approval

in accordance with any requirements for submission in the WEM Procedure referred to in clause 3A.6.2 for each Transmission Connected Generating System that either:

(a) meets the Generator Monitoring Plan Requirements as applicable to the Transmission Connected Generating System; or

(b) meets the Generator Monitoring Plan Requirements as applicable to the Transmission Connected Generating System, other than in respect of variations that the Market Participant reasonably considers are required on the basis that compliance is not possible, or where doing so would impose unreasonable costs on the Market Participant.

3A.6.5. AEMO must approve a proposed Generator Monitoring Plan if:

(a) it meets the Generator Monitoring Plan Requirements as applicable to the Transmission Connected Generating System; or

(b) AEMO considers any variations from the Generator Monitoring Plan Requirements as applicable to the Transmission Connected Generating System are:

i. required on the basis that compliance is not possible, or where doing so would impose unreasonable costs on the Market Participant; and

ii. not likely to endanger the safety of any person, damage equipment or breach any applicable law, or pose a threat to Power System Security or Power System Reliability.

3A.6.6. AEMO may reject a proposed Generator Monitoring Plan if AEMO reasonably considers that:

(a) the proposed Generator Monitoring Plan does not meet the requirements of clause 3A.6.5(a);

(b) the proposed Generator Monitoring Plan is likely to pose a safety risk or threat to Power System Security or Power System Reliability; or

(c) any proposed variations from the Generator Monitoring Plan Requirements as applicable to the Transmission Connected Generating System do not meet the requirements of clause 3A.6.5(b).

3A.6.7. AEMO may, but is not required to, consult the relevant Network Operator in respect of a proposed Generator Monitoring Plan submitted to AEMO for approval under clause 3A.6.4 or clause 3A.14.1(b).

3A.6.8. Where AEMO rejects a proposed Generator Monitoring Plan in accordance with clause 3A.6.6, AEMO:

(a) must provide to the Market Participant responsible for the Transmission Connected Generating System written reasons for the rejection; and

(b) may request amendments to the proposed Generator Monitoring Plan that it considers are required to meet the requirements of clause 3A.6.5(a) or clause 3A.6.5(b) as the case may be.

3A.6.9. If the Generator Monitoring Plan Requirements as applicable to a Transmission Connected Generating System is amended, the Market Participant responsible for the Transmission Connected Generating System must submit an amended proposed Generator Monitoring Plan to AEMO for approval in accordance with clause 3A.6.4 within six months of the amendment to the Generator Monitoring Plan Requirements taking effect.

3A.6.10. A Market Participant responsible for a Transmission Connected Generating System may submit an amended proposed Generator Monitoring Plan to AEMO for approval at any time in accordance with the WEM Procedure referred to in clause 3A.6.2.

3A.6.11. Where a Market Participant responsible for a Transmission Connected Generating System submits an amended proposed Generator Monitoring Plan to AEMO for approval in accordance with clause 3A.6.9 or clause 3A.6.10, then clauses 3A.6.5 to 3A.6.8 apply.

3A.6.12. Where AEMO approves a Generator Monitoring Plan, AEMO must provide:

(a) notification of its approval of a Generator Monitoring Plan to the Market Participant responsible for the Transmission Connected Generating System; and

(b) each Generator Monitoring Plan approved by AEMO to the relevant Network Operator, and the Network Operator must update the Generator Register to include the most recent Generator Monitoring Plan approved by AEMO.

3A.6.13. Subject to clause 3A.6.14 and clause 3A.6.15, the Economic Regulation Authority, AEMO or the relevant Network Operator may request that a Market Participant responsible for a Transmission Connected Generating System provide the outcomes, reporting data and supporting evidence in respect of a Generator Monitoring Plan that has been approved by AEMO.

3A.6.14. AEMO may only request the information described in clause 3A.6.13 from a Market Participant if AEMO reasonably considers that the information will assist it to meet any of its functions or discharge any of its obligations under these ESM Rules.

3A.6.15. A Network Operator may only request the information described in clause 3A.6.13 from a Market Participant if the Network Operator reasonably considers that the

information will assist it to meet any of its functions or discharge any of its obligations under these ESM Rules.

3A.6.16. A Market Participant responsible for a Transmission Connected Generating System must provide the outcomes, reporting data and supporting evidence relating to a Generator Monitoring Plan within five Business Days, or longer period if agreed, of a request by the Economic Regulation Authority, AEMO or the Network Operator made in accordance with clause 3A.6.13.

3A.6.17. Nothing in this Chapter 3A prevents AEMO, the Economic Regulation Authority or the relevant Network Operator from undertaking monitoring activities in respect of compliance with the Registered Generator Performance Standards for a Transmission Connected Generating System.

3A.7. Generator Register

3A.7.1. A Network Operator must establish and maintain a register of each Registered Generator Performance Standard for each Transmission Connected Generating System connected to its Network (Generator Register).

3A.7.2. A Market Participant must provide the relevant Network Operator any information requested and reasonably required by the Network Operator to establish and maintain a Generator Register in accordance with this section 3A.7.

3A.7.3. A Generator Register may include any information considered relevant by the Network Operator and must record, at a minimum, for each Transmission Connected Generating System other than an Exempt Transmission Connected Generating System:

(a) the status of connection of the generating works to the relevant Network;

(b) details of the Facility and the Market Participant responsible for the Transmission Connected Generating System including the registered name of the Facility and the Market Participant's registered name;

(c) full details of each Registered Generator Performance Standard for each generating unit or component of the generating works forming part of the Transmission Connected Generating System, including Trigger Events;

(d) the generation system model used and provided by the Market Participant responsible for the Transmission Connected Generating System and referred to in clause 3A.2.2; and

(e) each Generator Monitoring Plan approved by AEMO.

3A.7.4. A Network Operator must update the Generator Register:

(a) in respect of a proposed Transmission Connected Generating System after the Arrangement for Access has been executed by all relevant parties and

prior to an Interim Approval to Generate Notification being issued for the proposed Transmission Connected Generating System; and

(b) as required from time to time when the information referred to in clause 3A.7.2 is updated or otherwise to ensure it remains accurate and up to date.

3A.7.5. A Market Participant responsible for a Transmission Connected Generating System must notify the relevant Network Operator as soon as reasonably practicable of:

(a) any changes in respect of the:

i. generating works;

ii. Registered Generator Performance Standards;

iii. generation system model;

iv. Market Participant responsible for the Transmission Connected Generating System; or

(b) any other information in respect of the Transmission Connected Generating System,

that would render the information (other than the Generator Monitoring Plan approved by AEMO), recorded in the Generator Register being inaccurate or out of date.

3A.7.6. A Generator Register is Confidential Information.

3A.7.7 A Network Operator must make the Generator Register available to:

(a) AEMO in accordance with the process agreed pursuant to clause 3A.1.3;

(b) a Market Participant, but only in respect of the information that relates to a Transmission Connected Generating System the Market Participant is responsible for; and

(c) the Economic Regulation Authority.

3A.8. Commissioning, Interim Approval to Generate Notification and Approval to Generate Notification

3A.8.1. A Market Participant responsible for a Transmission Connected Generating System must not generate electricity without an approved Commissioning Test Plan unless it has a valid Interim Approval to Generate Notification (with or without conditions) or an Approval to Generate Notification.

3A.8.2. A Network Operator may only issue an Interim Approval to Generate Notification without conditions to a Market Participant responsible for a Transmission Connected Generating System, where the Network Operator and AEMO consider

the Transmission Connected Generating System has not demonstrated non-compliance based on observed performance with the applicable Registered Generator Performance Standards and there are no observed risks to Power System Security or Power System Reliability.

3A.8.3. Subject to clause 3A.8.4, a Network Operator may, in its discretion and with the approval of AEMO:

(a) issue an Interim Approval to Generate Notification with conditions to a Market Participant responsible for a Transmission Connected Generating System; or

(b) place conditions on an Interim Approval to Generate Notification issued under clause 3A.8.2.

3A.8.4. A Network Operator may only issue and place conditions on an Interim Approval to Generate Notification under clause 3A.8.3 where AEMO and the Network Operator:

(a) either:

i. do not consider the Transmission Connected Generating System is demonstrating compliance based on observed performance with the applicable Registered Generator Performance Standards; or

ii. consider that conditions are required to mitigate any observed risks to Power System Security or Power System Reliability; and

(b) consider the Transmission Connected Generating System is reasonably likely to resolve any performance issues and be compliant with the applicable Registered Generator Performance Standards in the future.

3A.8.5. Prior to being issued an Approval to Generate Notification, if a Market Participant responsible for a Transmission Connected Generating System is not meeting the applicable Registered Generator Performance Standards or complying with the applicable conditions, the Market Participant responsible for the Transmission Connected Generating System must:

(a) immediately notify AEMO and provide details of the non-compliance; and

(b) either:

i. make any modification required to comply with the conditions and meet the applicable Registered Generator Performance Standards within the timeframe specified by the Network Operator or, if a Rectification Plan is required under clause 3A.8.7, within the timeframe specified in the approved Rectification Plan; or

ii. as soon as practicable request to renegotiate any applicable Registered Generator Performance Standards it is unable to meet in which case clause 3A.8.8 applies.

3A.8.6. Where AEMO is notified under clause 3A.8.5(a), AEMO must advise the relevant Network Operator as soon as reasonably practicable.

3A.8.7. Where a Network Operator is notified under clause 3A.8.6, the Network Operator may, with the approval of AEMO, require a Market Participant responsible for the Transmission Connected Generating System to submit a Rectification Plan for approval in accordance with section 3A.11.

3A.8.8. A Network Operator may, in its discretion and with the approval of AEMO, agree to a request made under clause 3A.8.5(b)(ii) to renegotiate a Registered Generator Performance Standard for a Transmission Connected Generating System where the Network Operator and AEMO agree the Market Participant responsible for the Transmission Connected Generating System will be able to meet and comply with an alternative standard or technical level of performance in respect of the Technical Requirement that meets the applicable criteria listed in clause 3A.5.2, in which case the process for consideration and approval of Proposed Generator Performance Standards in section 3A.5 applies.

3A.8.9. If a Network Operator refuses a request made under clause 3A.8.5(b)(ii) to renegotiate a Registered Generator Performance Standard for a Transmission Connected Generating System or an alternative standard or technical level of performance in respect of the Technical Requirement cannot be agreed between the Network Operator, AEMO and the Market Participant responsible for the Transmission Connected Generating System, the Market Participant must comply with the applicable Registered Generator Performance Standards previously approved as recorded in the Generator Register within the timeframe specified by the Network Operator.

3A.8.10. A Network Operator may, with AEMO's approval, revoke an Interim Approval to Generate Notification issued under clause 3A.8.2 or clause 3A.8.3 where the Network Operator reasonably considers that:

(a) the performance of the Transmission Connected Generating System differs from the applicable Registered Generator Performance Standards; or

(b) the conditions placed on an Interim Approval to Generate Notification have not been met or complied with,

and the Market Participant responsible for the Transmission Connected Generating System has not complied with the requirements in clause 3A.8.5(b).

3A.8.11. A Network Operator must issue an Approval to Generate Notification to a Market Participant responsible for a Transmission Connected Generating System where:

(a) a Generator Monitoring Plan for the Transmission Connected Generating System has been approved by AEMO under clause 3A.6.5 and the Network Operator has included it in the Generator Register;

(b) the operational performance of the Transmission Connected Generating System is considered satisfactory to both the Network Operator and AEMO; and

(c) AEMO and the Network Operator consider the Market Participant responsible for the Transmission Connected Generating System has met the requirements of, and indicated compliance with, the applicable Registered Generator Performance Standards in accordance with the WEM Procedure referred to in clause 3A.9.1.

3A.9. Testing and Compliance

3A.9.1. AEMO must develop and maintain a WEM Procedure which sets out the testing requirements and how compliance with:

(a) Registered Generator Performance Standards will be verified, including tests required before an Interim Approval to Generate Notification and an Approval to Generate Notification is issued; and

(b) a Generator Monitoring Plan is measured and verified.

3A.9.2. Where AEMO reasonably considers a Market Participant responsible for a Transmission Connected Generating System may not be compliant with the applicable Registered Generator Performance Standards, it must notify the Market Participant and request an explanation from the Market Participant.

3A.9.3. The Market Participant must submit the explanation requested under clause 3A.9.2 within five Business Days of receiving the request unless a longer period is agreed by AEMO.

3A.9.4. AEMO must consider the explanation and, if it is not satisfied with the explanation, AEMO may require the Market Participant to undertake testing in accordance with the WEM Procedure referred to in clause 3A.9.1 to determine whether the Transmission Connected Generating System is compliant with the applicable Registered Generator Performance Standard.

3A.9.5. Where AEMO requires a Market Participant responsible for a Transmission Connected Generating System to undertake testing under clause 3A.9.4, the Market Participant must use best endeavours to agree an appropriate timeframe with AEMO for the testing to occur in accordance with the WEM Procedure referred to in clause 3A.9.1.

3A.9.6. A Market Participant responsible for a Transmission Connected Generating System must provide any information and data requested by AEMO to enable compliance monitoring and testing to be undertaken in respect of the applicable Registered Generator Performance Standards, the Generator Monitoring Plan approved by AEMO or any approved Rectification Plan for the Transmission

Connected Generating System in the format and by the time reasonably required by AEMO.

3A.9.7. Notwithstanding that a Market Participant responsible for a Transmission Connected Generating System may propose a Rectification Plan in accordance with section 3A.11, a Market Participant must seek to rectify any non-compliance with the Registered Generator Performance Standards or the Generator Monitoring Plan approved by AEMO for the Transmission Connected Generating System as soon as possible.

3A.10. Self-Reporting Regime

3A.10.1. A Market Participant responsible for a Transmission Connected Generating System, other than if the Transmission Connected Generating System is operating under an Interim Approval to Generate Notification must, acting in good faith, notify AEMO:

(a) immediately after becoming aware of a non-compliance or suspected non-compliance with:

i. an applicable Registered Generator Performance Standard; or

ii. the Generator Monitoring Plan approved by AEMO for the Transmission Connected Generating System; and

(b) as soon as practicable whether or not it intends to propose a Rectification Plan in accordance with clause 3A.11.1 in respect of a non-compliance or suspected non-compliance with:

i. an applicable Registered Generator Performance Standard; or

ii. the Generator Monitoring Plan approved by AEMO for the Transmission Connected Generating System.

3A.10.2. A Market Participant responsible for a Transmission Connected Generating System must, acting in good faith, notify AEMO as soon as practicable:

(a) where it is aware that the Transmission Connected Generating System will be unable to respond or provide the full range of response in accordance with its Registered Generator Performance Standards; or

(b) where it is aware that it is likely to become non-compliant with the Generator Monitoring Plan approved by AEMO for the Transmission Connected Generating System.

3A.10.3. If a Network Operator reasonably considers a Market Participant responsible for a Transmission Connected Generating System may not have been, or may not be, compliant with any applicable Registered Generator Performance Standard it must notify AEMO, who must consider whether the Market Participant responsible for

the Transmission Connected Generating System may not have been, or may not be, compliant with the applicable Registered Generator Performance Standard.

3A.10.4. Other than where AEMO is notified in accordance with clause 3A.10.1, where AEMO reasonably considers that a Market Participant responsible for a Transmission Connected Generating System may not have been, or may not be, compliant with the applicable Registered Generator Performance Standards or Generator Monitoring Plan, AEMO must notify the Market Participant before notifying any other party in accordance with clause 3A.10.6.

3A.10.5. Where a Market Participant responsible for a Transmission Connected Generating System is notified by AEMO under clause 3A.10.4, it must, as soon as practicable, notify AEMO whether it intends to propose a Rectification Plan in respect of the non-compliance or suspected non-compliance.

3A.10.6. Subject to clause 3A.10.4, AEMO must, other than if the Transmission Connected Generating System is operating under an Interim Approval to Generate Notification, as soon as practicable, notify the Economic Regulation Authority and the relevant Network Operator of:

(a) any instances where AEMO reasonably considers that a Market Participant responsible for a Transmission Connected Generating System, may not have been, or may not be, compliant with the Registered Generator Performance Standards or Generator Monitoring Plan approved by AEMO for the Transmission Connected Generating System; and

(b) whether the Market Participant responsible for the Transmission Connected Generating System has indicated an intention to propose a Rectification Plan in respect of the non-compliance or suspected non-compliance in accordance with clause 3A.10.5 or clause 3A.11.1.

To avoid doubt, AEMO may notify the Economic Regulation Authority and the relevant Network Operator of each of the matters in this clause 3A.10.6 separately.

3A.11. Rectification Plans

3A.11.1. A Market Participant responsible for a Transmission Connected Generating System, may submit a proposed Rectification Plan for consideration by AEMO within 10 Business Days, unless a longer period is otherwise agreed between the parties, after becoming aware of a non-compliance or suspected non-compliance with the Registered Generator Performance Standards or the Generator Monitoring Plan approved by AEMO for the Transmission Connected Generating System.

3A.11.2. A proposed Rectification Plan must at a minimum include:

(a) the nature of the non-compliance or suspected non-compliance to be addressed by the proposed Rectification Plan;

(b) the time by which the Market Participant responsible for the Transmission Connected Generating System expects to become compliant with the applicable Registered Generator Performance Standards or the Generator Monitoring Plan approved by AEMO, as applicable;

(c) the actions that the Market Participant responsible for the Transmission Connected Generating System must take to become compliant with the applicable Registered Generator Performance Standards or the Generator Monitoring Plan approved by AEMO, as applicable; and

(d) what testing will be undertaken to establish compliance with the applicable Registered Generator Performance Standards or alternative means of monitoring that may be undertaken to address the non-compliance or suspected non-compliance with the Generator Monitoring Plan approved by AEMO, as applicable.

3A.11.3. AEMO must use best endeavours to respond to a Market Participant within 10 Business Days in respect of a proposed Rectification Plan submitted under clause 3A.11.1:

(a) approving the proposed Rectification Plan;

(b) rejecting the proposed Rectification Plan and providing the reason for rejection, including, if applicable, any reasons provided by the relevant Network Operator in accordance with clause 3A.11.7;

(c) seeking further information necessary for AEMO to assess the suitability of the proposed Rectification Plan; or

(d) proposing an alternative Rectification Plan if AEMO and the Network Operator consider an alternative Rectification Plan would be acceptable.

3A.11.4. A Rectification Plan will only be binding on a Market Participant responsible for the Transmission Connected Generating System where AEMO has approved the proposed Rectification Plan or, in the case of an alternative Rectification Plan proposed by AEMO, that Rectification Plan has been accepted by the Market Participant.

3A.11.5. Before AEMO may approve a proposed Rectification Plan that relates to a non-compliance or suspected non-compliance with the applicable Registered Generator Performance Standards, AEMO must consult with the relevant Network Operator on the proposed Rectification Plan.

3A.11.6. A Network Operator must use best endeavours to respond to AEMO, when consulted in accordance with clause 3A.11.5, within five Business Days recommending whether to approve or reject the proposed Rectification Plan.

3A.11.7. If a Network Operator recommends the proposed Rectification Plan is rejected under clause 3A.11.6, the Network Operator must provide reasons to AEMO for the rejection and AEMO must reject the proposed Rectification Plan in accordance with clause 3A.11.3.

3A.11.8. AEMO must notify and provide the Economic Regulation Authority with a copy of any Rectification Plan approved by AEMO, other than where a Rectification Plan is required under clause 3A.8.7, as soon as practicable after the Rectification Plan is approved.

3A.11.9. If a Market Participant responsible for a Transmission Connected Generating System has not complied, or reasonably considers that it is unable to meet or comply with the requirements of an approved Rectification Plan it must notify AEMO as soon as reasonably practicable and may propose an amendment to the approved Rectification Plan.

3A.11.10. Where a Market Participant responsible for a Transmission Connected Generating System considers that compliance with an approved Rectification Plan will endanger the safety of any person, damage equipment or breach any applicable law or threaten Power System Security or Power System Reliability, it must immediately notify AEMO and provide:

(a) details of the actions required by the Rectification Plan that pose the safety risk or threat to Power System Security or Power System Reliability; and

(b) propose amendments to the Rectification Plan to address the safety risk or threat to Power System Security or Power System Reliability.

3A.11.11. If a Market Participant responsible for a Transmission Connected Generating System proposes an amendment to an approved Rectification Plan, AEMO may:

(a) subject to clause 3A.11.13, approve the proposed amendment to the Rectification Plan; or

(b) reject the proposed amendment to the Rectification Plan and, at AEMO's discretion, propose an alternative amendment to the Rectification Plan if it considers a suitable alternative is available, which must be accepted or rejected by the Market Participant within five Business Days or such longer period agreed by AEMO, and

notify the Market Participant as soon as practicable of its decision under this clause 3A.11.11.

3A.11.12. If a proposed amendment to an approved Rectification Plan is rejected by AEMO and an alternative amendment to the Rectification Plan is proposed by AEMO in accordance with clause 3A.11.11(b), it will be deemed to be rejected by the Market Participant if the Market Participant does not notify AEMO that it accepts or rejects the alternative amendment proposed by AEMO within the required timeframe.

3A.11.13. Before AEMO may approve a proposed amendment to an approved Rectification Plan that relates to a non-compliance or suspected non-compliance with the applicable Registered Generator Performance Standards under clause 3A.11.11(a), AEMO must use best endeavours to consult with, and obtain approval from, the relevant Network Operator regarding the proposed amendment within 10 Business Days.

3A.11.14. A Network Operator must use best endeavours to respond to AEMO, when consulted in accordance with clause 3A.11.13, within five Business Days recommending the proposed amendment to the Rectification Plan is either approved or rejected.

3A.11.15. Where a Market Participant responsible for a Transmission Connected Generating System proposes an amendment to an approved Rectification Plan under clause 3A.11.9, the Market Participant must continue to comply with the requirements of the approved Rectification Plan until such time as any amendment is approved by AEMO, the Rectification Plan has been completed or AEMO advises that the Market Participant can suspend compliance while the proposed amendment is considered.

3A.11.16. Where a Market Participant responsible for a Transmission Connected Generating System proposes an amendment to an approved Rectification Plan under clause 3A.11.10(b), the Market Participant is only required to comply with the requirements of the approved Rectification Plan that do not pose a safety risk or threat to Power System Security or Power System Reliability unless AEMO advises that the Market Participant can suspend compliance while the proposed amendment is considered.

3A.11.17. Other than where a Rectification Plan is required under clause 3A.8.7, AEMO must notify and provide the Economic Regulation Authority with the detail of any approved amendment to a Rectification Plan as soon as practicable after the amendment is approved.

3A.11.18. A Market Participant responsible for a Transmission Connected Generating System must comply with an approved Rectification Plan. For the avoidance of doubt, references to an approved Rectification Plan are taken to include any amendments approved by AEMO to the Rectification Plan.

3A.11.19. Subject to clause 3A.11.20, if AEMO reasonably considers a Market Participant responsible for a Transmission Connected Generating System has not complied, or is not complying, with the requirements of an approved Rectification Plan, AEMO may cancel the Rectification Plan by written notice to that Market Participant.

3A.11.20. Before AEMO may cancel an approved Rectification Plan that relates to a non-compliance or suspected non-compliance with the applicable Registered

Generator Performance Standards in accordance with clause 3A.11.19, AEMO must consult with, and obtain approval from, the relevant Network Operator.

3A.11.21. AEMO must, other than where a Rectification Plan is required under clause 3A.8.7, notify the Economic Regulation Authority as soon as practicable if:

(a) a Market Participant responsible for a Transmission Connected Generating System does not propose a Rectification Plan within the timeframe in clause 3A.11.1;

(b) AEMO rejects a proposed Rectification Plan in accordance with clause 3A.11.3(b) and does not consider an alternative Rectification Plan would be acceptable or such alternative Rectification Plan has not been accepted by the Market Participant responsible for the Transmission Connected Generating System;

(c) AEMO cancels a Rectification Plan in accordance with clause 3A.11.19; or

(d) AEMO considers a Market Participant responsible for a Transmission Connected Generating System has complied with, and completed, an approved Rectification Plan and is compliant with:

i. the applicable Registered Generator Performance Standards, where the Rectification Plan relates to the applicable Registered Generator Performance Standards; or

ii. the Generator Monitoring Plan approved by AEMO, where the Rectification Plan relates to a Generator Monitoring Plan.

3A.12. Effect of a Rectification Plan

3A.12.1. Notwithstanding the requirements of this Chapter 3A and Appendix 12, and subject to clause 3A.12.3, a Market Participant responsible for a Transmission Connected Generating System will not breach these ESM Rules in respect of a non-compliance or suspected non-compliance with the Registered Generator Performance Standards or a Generator Monitoring Plan approved by AEMO for the Transmission Connected Generating System where a Rectification Plan in respect of the non-compliance or suspected non-compliance:

(a) has been submitted and approved by AEMO in accordance with section 3A.11 and the Market Participant is complying with the requirements of the approved Rectification Plan;

(b) has been submitted and approved by AEMO in accordance with section 3A.11 and the Market Participant has complied with, and completed, the approved Rectification Plan and is compliant with:

i. the applicable Registered Generator Performance Standards, where the Rectification Plan relates to the applicable Registered Generator Performance Standards; or

ii. the Generator Monitoring Plan approved by AEMO, where the Rectification Plan relates to a Generator Monitoring Plan;

(c) is being developed by the Market Participant in accordance with clause 3A.11.1 and the Market Participant has advised AEMO that it intends to submit a Rectification Plan; or

(d) has been submitted by the Market Participant in accordance with clause 3A.11.1 and is being considered by AEMO in accordance with section 3A.11.

3A.12.2. AEMO must notify the Economic Regulation Authority of an alleged non-compliance or suspected non-compliance with a Registered Generator Performance Standard or Generator Monitoring Plan approved by AEMO for which a Rectification Plan has been submitted, other than where a Rectification Plan is required under clause 3A.8.7, as soon as practicable if AEMO considers the alleged non-compliance or suspected non-compliance threatens Power System Security or Power System Reliability.

3A.12.3. The immunity in clause 3A.12.1 will not apply and the Economic Regulation Authority must investigate an alleged non-compliance or suspected non-compliance of the Registered Generator Performance Standards or the Generator Monitoring Plan approved by AEMO for the Transmission Connected Generating System as a breach of clause 3A.1.1 or clause 3A.6.1 in accordance with clause 2.13.27 where:

(a) the Economic Regulation Authority has been notified by AEMO in accordance with clause 3A.12.2;

(b) the Market Participant has repeatedly failed to comply with the same Registered Generator Performance Standard or another applicable Registered Generator Performance Standard; or

(c) the Market Participant has repeatedly failed to comply with the Generator Monitoring Plan approved by AEMO for the Transmission Connected Generating System.

3A.13. Potential Relevant Generator Modifications

3A.13.1. Potential Relevant Generator Modification means for the purposes of Chapter 3A, a modification to a generating unit or generating works that are part of a Transmission Connected Generating System or Exempt Transmission Connected Generating System that:

(a) has the potential to materially impact or change any of the characteristics, performance or capacity of the generating unit or generating works in respect of a Technical Requirement;

(b) has the potential to alter the capacity of the Transmission Connected Generating System or Exempt Transmission Connect Generating System

in respect of any Technical Requirement for which the Ideal Generator Performance Standard has been amended since the applicable Registered Generator Performance Standard was approved;

(c) is reasonably considered to require an amendment to the Arrangement for Access for the Transmission Connected Generating System or Exempt Transmission Connected Generating System; or

(d) requires submission of a connection application in accordance with a Network Operator's policy for access to its Network.

3A.13.2. A Network Operator, in consultation with AEMO, must develop, maintain and publish guidelines to inform Market Participants and provide examples of:

(a) Potential Relevant Generator Modifications;

(b) circumstances and situations in which the replacement of equipment, where the characteristics, performance or capacity of the Transmission Connected Generating System remain unchanged, will not be or may not be declared a Relevant Generator Modification;

(c) circumstances and situations in which a Potential Relevant Generator Modification will be or may be declared a Relevant Generator Modification;

(d) the processes that a Market Participant must follow to notify the relevant Network Operator prior to undertaking a Potential Relevant Generator Modification; and

(e) the processes that a Network Operator must follow in making a determination about a Potential Relevant Generator Modification and in notifying the Market Participant of the outcome of its determination,

for the purposes of Chapter 3A and Appendix 12.

3A.13.2A. A Network Operator must develop and publish the initial guidelines referred to in clause 3A.13.2 by 1 July 2022.

3A.13.3. A Market Participant responsible for a Transmission Connected Generating System or an Exempt Transmission Connected Generating System must notify the relevant Network Operator prior to undertaking a Potential Relevant Generator Modification in accordance with the processes described in the guidelines published under clause 3A.13.2.

3A.13.4. Subject to clause 3A.13.5 and clause 3A.13.6, a Network Operator may declare a Potential Relevant Generator Modification to be a Relevant Generator Modification in accordance with the processes described in the guidelines published under clause 3A.13.2.

3A.13.5. Where a Network Operator is notified of a Potential Relevant Generator Modification in accordance with clause 3A.13.3, it must:

(a) consult with AEMO before making a decision whether or not to declare the Potential Relevant Generator Modification a Relevant Generator Modification under clause 3A.13.4; and

(b) make the decision whether or not to declare the Potential Relevant Generator Modification a Relevant Generator Modification as soon as practicable.

3A.13.6. A Network Operator must declare a Potential Relevant Generator Modification to be a Relevant Generator Modification where AEMO advises the Network Operator under clause 3A.13.5 that the Potential Relevant Generator Modification should be declared a Relevant Generator Modification.

3A.13.7. If a Network Operator declares a Potential Relevant Generator Modification to be a Relevant Generator Modification in accordance with clause 3A.13.4, the Network Operator must notify the Market Participant responsible for the Transmission Connected Generating System or Exempt Transmission Connected Generating System.

3A.13.8. If, following consultation with AEMO in accordance with clause 3A.13.5, a Network Operator does not intend to declare the Potential Relevant Generator Modification to be a Relevant Generator Modification:

(a) the Network Operator must notify the Market Participant responsible for the Transmission Connected Generating System or Exempt Transmission Connected Generating System; and

(b) the Market Participant may undertake the Potential Relevant Generator Modification as notified by the Network Operator subject to any other requirements or obligations that apply to the Market Participant under its Arrangement for Access, the Access Code, the Technical Rules applicable to the Network, these ESM Rules or any applicable law.

3A.14. Relevant Generator Modifications

3A.14.1. If a Network Operator declares a Potential Relevant Generator Modification to be a Relevant Generator Modification in accordance with clause 3A.13.4 the Market Participant responsible for the Transmission Connected Generating System or Exempt Transmission Connected Generating System must submit:

(a) Proposed Generator Performance Standards, or revised Proposed Generator Performance Standards, addressing each Technical Requirement affected by the Relevant Generator Modification in accordance with clause 3A.5.2 prior to undertaking the Relevant Generator Modification; and

(b) a proposed Generator Monitoring Plan, or revised proposed Generator Monitoring Plan, to AEMO for approval by the timeframe notified by the Network Operator that meets the requirements in clause 3A.6.4,

for the Transmission Connected Generating System or Exempt Transmission Connected Generating System.

3A.14.2. Where a Market Participant submits Proposed Generator Performance Standards or revised Proposed Generator Performance Standards under clause 3A.14.1(a), the process for consideration and approval of Proposed Generator Performance Standards in section 3A.5 applies.

3A.14.3. Where a Market Participant submits a proposed Generator Monitoring Plan or a revised Generator Monitoring Plan in accordance with clause 3A.14.1(b), the process for consideration and approval of a proposed Generator Monitoring Plan in section 3A.6 applies.

3A.14.4. Where the Network Operator has declared a Relevant Generator Modification, the Network Operator may:

(a) on and from the date that works in respect of the Relevant Generator Modification are scheduled to be undertaken or commence, revoke the Transmission Connected Generating System's Approval to Generate Notification; or

(b) require the Transmission Connected Generating System to conduct Commissioning Tests and, if the Network Operator is not satisfied with the results of the Commissioning Tests, revoke the Transmission Connected Generating System's Approval to Generate Notification,

and require the Market Participant to obtain an Interim Approval to Generate Notification (with or without conditions) or an Approval to Generate Notification, and the process in section 3A.8, as relevant, applies.

3B. Frequency Operating Standards

3B.1. Frequency Operating Standard responsibility

3B.1.1. Notwithstanding section 3B.3, AEMO must use reasonable endeavours to:

(a) ensure the SWIS is operated with a SWIS Frequency of 50 Hz except under Controlled Circumstances; and

(b) achieve the Frequency Operating Standards set out in this Chapter 3B.

3B.1.2. The Frequency Operating Standards set out in this Chapter 3B only apply to Embedded Systems and Disconnected Microgrids when they are connected to the SWIS.

3B.2. Frequency Bands

3B.2.1. The Normal Operating Frequency Band is the normal frequency operating range set out in Table 1, Appendix 13 for the SWIS and Table 2, Appendix 13 for an Island.

3B.2.2. The Normal Operating Frequency Excursion Band is an allowable frequency operating range where no action or response is required by AEMO for infrequent or momentary excursions outside of the Normal Operating Frequency Band. The frequency operating range and duration are set out in Table 1, Appendix 13 for the SWIS.

3B.2.3. The Credible Contingency Event Frequency Band is the allowable frequency operating range where there has been a Credible Contingency Event on the SWIS. The frequency operating range and duration are set out in Table 1, Appendix 13 for the SWIS and Table 2, Appendix 13 for an Island.

3B.2.4. The Island Separation Frequency Band is the allowable frequency operating range immediately following a Separation Event on the SWIS which creates one or more Islands. The frequency operating range and duration are set out in Table 1, Appendix 13 for the SWIS and Table 2, Appendix 13 for an Island.

3B.2.5. The Extreme Frequency Tolerance Band represents the frequency operating range that applies to the SWIS Frequency in respect of clause 3B.3.11. The frequency operating range and target timeframes to Stabilise and Recover are set out in Table 1, Appendix 13 for the SWIS and Table 2, Appendix 13 for an Island.

3B.3. Required SWIS Frequency outcomes

3B.3.1. Other than for an Island, while in an Emergency Operating State or during a system restart, the Accumulated Time Error must be less than 10 seconds for 99% of the time over any rolling 30-day period in the SWIS.

3B.3.2. Subject to clause 3B.3.3, the SWIS Frequency must not exceed the Normal Operating Frequency Band in accordance with the relevant requirements set out in Table 1, Appendix 13 for the SWIS and Table 2, Appendix 13 for an Island.

3B.3.3. The SWIS Frequency may exceed the relevant Normal Operating Frequency Band following the occurrence of a Contingency Event.

3B.3.4. Subject to clause 3B.3.8, the SWIS Frequency must not exceed the Normal Operating Frequency Excursion Band, and must Stabilise, in accordance with the relevant requirements set out in Table 1, Appendix 13 for the SWIS and Table 2, Appendix 13 for an Island.

3B.3.5. Subject to clause 3B.3.6, for any Credible Contingency Event, the SWIS Frequency must not exceed the relevant rate of change requirements set out in Table 1, Appendix 13 for the SWIS and Table 2, Appendix 13 for an Island.

3B.3.6. Clause 3B.3.5 does not apply to the initial formation of an Island following a Separation Event.

3B.3.7. Subject to clause 3B.3.8, the SWIS Frequency must not exceed the Credible Contingency Event Frequency Band, and must Stabilise and Recover, in accordance with the relevant requirements set out in Table 1, Appendix 13 for the SWIS and Table 2, Appendix 13 for an Island.

3B.3.8. For the avoidance of doubt, the requirements in clause 3B.3.4 and clause 3B.3.7 do not apply where a Multiple Contingency Event occurs.

3B.3.9. Following a Separation Event, an Island is permitted to be temporarily de-energised with frequency subsequently required to be restored to the relevant requirements set out in Table 2, Appendix 13 for an Island as soon as practicable.

3B.3.10. Subject to clause 3B.3.9, if there is a Separation Event, SWIS Frequency must not exceed the Island Separation Frequency Band, and must Stabilise and Recover, in accordance with the relevant requirements set out in Table 1, Appendix 13 for the SWIS and Table 2, Appendix 13 for an Island.

3B.3.11. For a Non-Credible Contingency Event or Multiple Contingency Event, reasonable endeavours must be taken to maintain the SWIS Frequency in accordance with the Extreme Frequency Tolerance Band, and to Stabilise and Recover the SWIS Frequency in accordance with the relevant requirements set out in Table 1, Appendix 13 for the SWIS and Table 2, Appendix 13 for an Island. For the avoidance of doubt, the use of load shedding is acceptable in order to meet the requirements of this clause 3B.3.11.

3B.3.12. Based on the readings recorded in AEMO’s SCADA system, a Contingency Event, including a Credible Contingency Event, Separation Event, commences at the time SWIS Frequency exceeds the frequencies in the Normal Operating

Frequency Excursion Band set out in Table 1, Appendix 13 for the SWIS and Table 2, Appendix 13 for an Island, and ends at the time at which SWIS Frequency Recovers.

3B.3.13. For the avoidance of doubt, reasonable endeavours in this section 3B.3 includes allowance for avoiding pre-contingent load shedding, or to prioritise restoration of load, over meeting the Frequency Operating Standards in an Island.

4 Reserve Capacity Rules

The Reserve Capacity Cycle

4.1. The Reserve Capacity Cycle

4.1.1. This section 4.1 sets out the timetable by which the key events described in this Chapter in respect of each Reserve Capacity Cycle must occur. The events described below comprise a single Reserve Capacity Cycle, except where otherwise indicated. The Reserve Capacity Cycle will be repeated for each Capacity Year.

4.1.1A. Section 4.28C takes precedence over this section 4.1 and events described in section 4.28C are not required to comply with the timetable in this section 4.1 except where specified in section 4.28C.

4.1.1B. The description of an event in this section 4.1 is for the purpose of identifying where it fits into the Reserve Capacity Cycle, and does not affect the interpretation of the relevant provisions of this Chapter 4.

4.1.1C. AEMO may modify or extend a date or time set under this section 4.1 and section 4.4B. If AEMO extends a date or time under this clause 4.1.1C, then it must publish notice of the modified or extended date or time on the WEM Website and the modified or extended date or time takes effect for the purposes of these ESM Rules.

4.1.2. [Blank]

4.1.3. Each Reserve Capacity Cycle:

(a) occurs over four successive calendar years (Year 1 to Year 4);

(b) is identified by reference to the calendar year in which Year 1 of the Reserve Capacity Cycle falls; and

(c) relates to the Reserve Capacity required for the period between 8:00 AM on 1 October of Year 3 and 8:00 AM on 1 October of Year 4 of the Reserve Capacity Cycle.

4.1.4. In respect of each Reserve Capacity Cycle, AEMO must advertise a Request for Expressions of Interest in accordance with clause 4.2.4 by 5:00 PM on or before 15 January of Year 1 of the Reserve Capacity Cycle.

4.1.5. AEMO must allow potential Reserve Capacity providers to respond to the Request for Expressions of Interest in accordance with section 4.2 until 5:00 PM on the first Business Day falling on or following 1 March of Year 1 of a Reserve Capacity Cycle.

4.1.6. AEMO must publish a summary of the responses to its Request for Expressions of Interest in accordance with clause 4.2.7 by 5:00 PM on the first Business Day falling on or following 1 April of Year 1 of a Reserve Capacity Cycle.

4.1.7. AEMO must accept lodgement of applications for certification of Reserve Capacity for a Reserve Capacity Cycle in accordance with clause 4.9.1 from 9:00 AM on the first Business Day falling on or following 14 April of Year 1 of a Reserve Capacity Cycle.

4.1.8. AEMO must publish a Statement of Opportunities Report produced in accordance with the Long Term PASA process described in clause 4.5.11 by 5:00 PM on the first Business Day falling on or following 10 June of Year 1 of a Reserve Capacity Cycle.

4.1.9. AEMO must publish certain input data to be used in the Relevant Level Method in accordance with step B.9.1 of Appendix 9 by 5:00 PM on the first Business Day falling on or following 10 June of Year 1 of a Reserve Capacity Cycle.

4.1.10. AEMO must publish on the WEM Website the Reserve Capacity Information Pack in accordance with clause 4.7.2 by 5:00 PM on the first Business Day falling on or following 10 June of Year 1 of a Reserve Capacity Cycle.

4.1.11. AEMO must cease to accept lodgement of applications for certification of Reserve Capacity for a Reserve Capacity Cycle in accordance with clause 4.9.1 from 5:00 PM on the last Business Day falling on or before 24 June of Year 1 of a Reserve Capacity Cycle.

4.1.12. AEMO must notify each applicant for certification of Reserve Capacity, including applicants for Early Certified Reserve Capacity under clause 4.28C.7, of the Certified Reserve Capacity to be assigned by 5:00 PM on the last Business Day on or before 12 August of Year 1 of a Reserve Capacity Cycle.

4.1.13. Each Market Participant must provide to AEMO any Reserve Capacity Security required in accordance with clause 4.13.1 and any DSP Reserve Capacity Security required in accordance with clause 4.13A.1 not later than 5:00 PM on the last Business Day falling on or before 25 August of Year 1 of a Reserve Capacity Cycle.

4.1.14. Each Market Participant holding Certified Reserve Capacity for a Reserve Capacity Cycle must provide to AEMO notification in accordance with clause 4.14.1 as to how its Certified Reserve Capacity will be dealt with not later than 5:00 PM on the last Business Day falling on or before 25 August of Year 1 of a Reserve Capacity Cycle.

4.1.15. By 5:00 PM on the first Business Day following the notification deadline specified in clause 4.1.14, AEMO must confirm to each Market Participant in accordance with clause 4.14.9 the quantity of Certified Reserve Capacity that can be traded bilaterally from its Facilities.

4.1.15A. AEMO must publish the Certified Reserve Capacity for each Facility in accordance with clause 4.9.9A by 5:00 PM on the first Business Day following the confirmation deadline specified in clause 4.1.15.

4.1.16. AEMO must publish the information set out in step B.9.2 of Appendix 9 by the time specified in clause 4.1.15A.

4.1.16A. By 5:00 PM on the last Business Day falling on or before 30 September of Year 1 of a Reserve Capacity Cycle, AEMO must:

(a) assign Capacity Credits in accordance with clause 4.20.5A(a);

(b) publish the information required to be published under clause 4.20.5A(b);

(c) notify each Market Participant of the Network Access Quantity determined for each of its Facilities in accordance with clause 4.15.11; and

(d) publish the information required to be published under clause 4.15.16.

4.1.17. [Blank]

4.1.18. [Blank]

4.1.19. The Coordinator must determine and publish a Peak Benchmark Reserve Capacity Price and a Flexible Benchmark Reserve Capacity Price for a Reserve Capacity Cycle in accordance with section 4.16 prior to:

(a) 16 March of Year 1 of the Reserve Capacity Cycle, if the Coordinator has determined new Benchmark Technologies under clause 4.16.11(b) in the immediately prior year; or

(b) otherwise, the date and time specified in clause 4.1.4.

4.1.20. [Blank]

4.1.21. A Market Participant may apply to AEMO:

(a) under clause 4.13.2A for a recalculation of the amount of Reserve Capacity Security required to be held by AEMO for a Facility in accordance with clause 4.13.2(b); or

(b) under clause 4.13A.8 for a recalculation of the amount of DSP Reserve Capacity Security required to be held by AEMO for a Demand Side Programme in accordance with clauses 4.13A.1 or 4.13A.4, as applicable,

after 5:00 PM on the last Business Day falling on or before 1 October of Year 1 of a Reserve Capacity Cycle.

4.1.21A. By 5:00 PM on the last Business Day falling on or before 30 October of Year 1 of a Reserve Capacity Cycle, each relevant Market Participant must notify AEMO of the number of Capacity Credits that are to be associated with each component of their Facility for the Capacity Year in accordance with clause 4.20.16.

4.1.21B. If required under clause 4.20.8, AEMO must issue a Notice of Intention to Cancel Capacity Credits by 5:00 PM on the last Business Day falling on or before 15 August of Year 3 of a Reserve Capacity Cycle, where the notice relates to the Capacity Year that commences on 1 October of Year 3 of that Reserve Capacity Cycle.

4.1.22. Within five Business Days after the notification deadline specified in clause 4.1.21A, AEMO must:

(a) set the number of Capacity Credits to be associated with each component of a Facility in accordance with clauses 4.20.17 and 4.20.17A;

(b) publish the information determined in clause 4.1.22(a) on the WEM Website;

(c) publish the summary of information described in clause 4.20.5AA on the WEM Website; and

(d) publish AEMO's determination under clause 4.20.17B(a) on the WEM Website.

4.1.23. Each Market Participant must provide to AEMO the information described in clause 4.28.8 by 5:00 PM on the last Business Day falling on or before 20 August of Year 3 of a Reserve Capacity Cycle.

4.1.23A. For each Hot Season, AEMO must determine and publish the Peak IRCR Intervals in accordance with clause 4.28.5B~~12 Peak SWIS Trading Intervals~~ within five Business Days after the Interval Meter Deadline for the Trading Week containing the last Trading Day of the last Trading Month in the relevant Hot Season. For the avoidance of doubt, AEMO must not revise the Peak IRCR Intervals~~12 Peak SWIS Trading Intervals~~ after their publication.

4.1.23AA. For each Capacity Year, AEMO must determine and publish the Flexible IRCR Intervals in accordance with clause 4.28.5C within five Business Days after the last Trading Day of the relevant Capacity Year. For the avoidance of doubt, AEMO must not revise the Flexible IRCR Intervals after their publication.

4.1.23B. For each Trading Month, AEMO must determine and publish the 4 Peak SWIS Trading Intervals within five Business Days after the Interval Meter Deadline for the Trading Week containing the last Trading Day of the relevant Trading Month. For the avoidance of doubt, AEMO must not revise the 4 Peak SWIS Trading Intervals after their publication.

4.1.23BA. For each Trading Month, AEMO must determine and publish:

(a) the 3 High-Ramp Trading Days; and

(b) for each of those Trading Days, the Trading Interval with the highest Four-Hour Demand Increase,

within five Business Days after the last Trading Day of the relevant Trading Month. For the avoidance of doubt, AEMO must not revise the 3 High-Ramp Trading Days after their publication.

4.1.23C. For each Trading Month, AEMO must determine and provide to each Market Participant that Market Participant's:

(a) Indicative Peak Individual Reserve Capacity Requirement in accordance with clause 4.28.6; and

(b) Indicative Flexible Individual Reserve Capacity Requirement in accordance with clause 4.28.6A,

by 5:00 PM on the Business Day that is 10 Business Days prior to the start of the relevant Trading Month.

~~4.1.23C. For each Trading Month, AEMO must determine and provide to each Market Participant that Market Participant's Indicative Individual Reserve Capacity Requirement in accordance with clause 4.28.6 by 5:00 PM on the Business Day that is 10 Business Days prior to the start of the relevant Trading Month.~~

4.1.24. For each Trading Month, AEMO must determine and provide to each Market Participant that Market Participant's:

(a) Peak Individual Reserve Capacity Requirement in accordance with clause 4.28.7; and

(b) Flexible Individual Reserve Capacity Requirement in accordance with clause 4.28.7A,

by 5:00 PM on the Settlement Statement Date for the Trading Week containing the first Trading Day in the relevant Trading Month.

~~4.1.24. For each Trading Month, AEMO must determine and provide to each Market Participant that Market Participant's Individual Reserve Capacity Requirement in accordance with clause 4.28.7 by 5:00 PM on the Settlement Statement Date for the Trading Week containing the first Trading Day in the relevant Trading Month.~~

4.1.25. [Blank]

4.1.26. Reserve Capacity Obligations apply:

(a) [Blank]

(b) [Blank]

(c) for the 2021 Reserve Capacity Cycle, from the Trading Day commencing on 1 October of Year 3 of the Reserve Capacity Cycle;

(d) for the 2022 Reserve Capacity Cycle and 2023 Reserve Capacity Cycle, from the Trading Day commencing:

i. on 1 October of Year 3 of the Reserve Capacity Cycle, for Facilities that were commissioned as at 16 September 2019 or for Facilities which have provided Capacity Credits in one or both of the two previous Reserve Capacity Cycles;

ii. on 1 June of Year 3 of the Reserve Capacity Cycle, for Facilities or Facility upgrades commissioned between 16 September 2019 and 1 June of Year 3 of the Reserve Capacity Cycle;

iii. on the scheduled date of commissioning, as specified in accordance with clause 4.10.1(c)(iii)(7), or as revised in accordance with clause 4.27.11A, for Facilities or Facility upgrades commissioned between 1 June of Year 3 of the Reserve Capacity Cycle and 1 October of Year 3 of the Reserve Capacity Cycle; or

iv. on 1 October of Year 3 of the Reserve Capacity Cycle, for new Energy Producing Systems or upgrades to Energy Producing Systems undertaking Commissioning Tests after 1 October of Year 3 of the Reserve Capacity Cycle; and

(e) from the 2024 Reserve Capacity Cycle:

i. from the Trading Day commencing 1 October of Year 3 of the Reserve Capacity Cycle, where AEMO has determined in accordance with clause 4.20.17B(a) that the Peak Reserve Capacity Requirement has been met or exceeded with the Peak Capacity Credits assigned for Year 3 of the Reserve Capacity Cycle:

1. to Facilities or parts of Facilities to which section 4.13 applies, for which no Reserve Capacity Security was required to be provided under section 4.13; or

2. to Demand Side Programmes determined by AEMO to be in Commercial Operation, and

ii. if AEMO has determined in accordance with clause 4.20.17B(a) that the Peak Reserve Capacity Requirement has not been met with the Peak Capacity Credits assigned for Year 3 of the Reserve Capacity Cycle:

1. to Facilities or parts of Facilities to which section 4.13 applies, for which no Reserve Capacity Security was required to be provided under section 4.13; or

2. to Demand Side Programmes determined by AEMO to be in Commercial Operation,

from the Trading Day commencing:

3. on 1 October of Year 3 of the Reserve Capacity Cycle, for Facilities that were commissioned as at 16 September 2019 or for Facilities which have provided Peak Capacity Credits in one or both of the two previous Reserve Capacity Cycles;

4. on 1 June of Year 3 of the Reserve Capacity Cycle, for Facilities or Facility upgrades commissioned between 16 September 2019 and 1 June of Year 3 of the Reserve Capacity Cycle;

5. on the scheduled date of commissioning, as specified in accordance with clause 4.10.1(c)(iii)(7), or as revised in

accordance with clause 4.27.11A, for Facilities or Facility upgrades commissioned between 1 June of Year 3 of the Reserve Capacity Cycle and 1 October of Year 3 of the Reserve Capacity Cycle; or

6. on 1 October of Year 3 of the Reserve Capacity Cycle, for new Energy Producing Systems or upgrades to Energy Producing Systems undertaking Commissioning Tests after 1 October of Year 3 of the Reserve Capacity Cycle.

4.1.27. For a Reserve Capacity Cycle from the 2026 Reserve Capacity Cycle onwards, if the Flexible Reserve Capacity Price is less than or equal to the Peak Reserve Capacity Price then in respect of the relevant Capacity Year:

(a) Market Participants are not required to fulfil any further obligations relating to Flexible Capacity Credits;

(b) AEMO must not procure supplementary Flexible Capacity under section 4.24;

(c) AEMO must not procure Non-Co-optimised Essential System Services relating to Flexible Capacity;

(d) AEMO must not consider Flexible Capacity Outage Capabilities or the availability of Flexible Capacity when conducting Outage Evaluations under section 3.18E;

(e) subject to clause 4.1.27(g), AEMO is not required to determine or publish:

i. Flexible Capacity Outage Quantities, Flexible Capacity Adjusted Forced Outage Quantities, and Flexible Capacity Adjusted Planned Outage Quantities under section 3.21;

ii. Flexible IRCR Intervals under clause 4.1.23AA;

iii. the 3 High-Ramp Trading Days under clause 4.1.23BA;

iv. Entity Daily Flexible Reserve Capacity Prices under clause 4.29.1E and the Floating Daily Flexible Reserve Capacity Price under clause 4.29.1F;

v. Indicative Flexible Individual Reserve Capacity Requirements under clause 4.1.23C(b);

vi. Flexible Individual Reserve Capacity Requirements under clauses 4.1.24(b) or 4.28.11B;

vii. Flexible Reserve Capacity Obligation Quantities under clauses 4.12.7, 4.12.8 and 4.12.9 and Flexible Reserve Capacity Obligation Quantity estimates under clause 6.3A.3(h);

viii. the Transitional Daily Flexible Reserve Capacity Price under clause 4.29.1G and Fixed Daily Flexible Reserve Capacity Prices under clause 4.29.1H;

ix. the values described in clauses 4.20.5A(b)(iiiA) and 4.20.5A(b)(v);

x. the Flexible Facility Reserve Capacity Deficit Refund under clause 4.26.4;

xi. the Flexible Targeted Reserve Capacity Cost or Flexible Shared Reserve Capacity Cost under clause 4.28.1A; and

xii. the Flexible Capacity Provider Payment or Flexible Capacity Purchaser Payment under clause 9.8.2;

~~(e) subject to clause 4.1.27(g), AEMO is not required to determine or publish:~~

~~i. [Blank]~~

~~ii. [Blank]~~

~~iii. [Blank]~~

~~iv. Entity Daily Flexible Reserve Capacity Prices under clause 4.29.1E and the Floating Daily Flexible Reserve Capacity Price under clause 4.29.1F;~~

~~v. [Blank]~~

~~vi. [Blank]~~

~~vii. [Blank]~~

~~viii. the Transitional Daily Flexible Reserve Capacity Price under clause 4.29.1G and Fixed Daily Flexible Reserve Capacity Prices under clause 4.29.1H; and~~

~~ix. the values described in clauses 4.20.5A(b)(iiiA) and 4.20.5A(b)(v);~~

(f) a standard form Supplementary Capacity Contract is not required to specify aspects relating to supplementary Flexible Capacity outlined under clauses 4.24.13(g) and 4.24.13(h)(i)(2); ~~and~~

(g) AEMO must determine and publish:

i. the forecast highest Four-Hour Demand Increase as required by sections 7.3 and 3.16; and

~~i. [Blank]~~

ii. the Flexible Reserve Capacity Price under clause 4.29.1(b)(ii); ~~.~~

(h) AEMO must not conduct Reserve Capacity Tests under clauses 4.25.1B or 4.25.2BA;

(i) Market Participants must not apply to AEMO for a reduction in Flexible Capacity Credits under clause 4.25.4A;

(j) Market Participants must not submit Capacity Credit Allocation Submissions in respect of Flexible Capacity Credits; and

(k) AEMO must not issue Dispatch Instructions under 7.6.11(b)(ii).

4.1.28. [Blank]

4.1.29. The Peak Reserve Capacity Price, the Flexible Reserve Capacity Price, each Entity Daily Peak Reserve Capacity Price, and each Entity Daily Flexible Reserve Capacity Price for a Reserve Capacity Cycle apply from the start of the Trading Day commencing on 1 October of Year 3 of the Reserve Capacity Cycle to the end of the Trading Day ending on 1 October of Year 4 of the Reserve Capacity Cycle.

~~4.1.29. The Peak Reserve Capacity Price, the Flexible Reserve Capacity Price, and each Entity Daily Peak Reserve Capacity Price for a Reserve Capacity Cycle apply from the start of the Trading Day commencing on 1 October of Year 3 of the Reserve Capacity Cycle to the end of the Trading Day ending on 1 October of Year 4 of the Reserve Capacity Cycle.~~

4.1.30. The Reserve Capacity Obligations for a Facility arising through holding Capacity Credits for a Reserve Capacity Cycle cease to apply from:

(a) subject to clause 4.1.30(b), the completion of the Trading Day ending on 1 October of Year 4 of the Reserve Capacity Cycle; and

(b) the completion of the Trading Day ending on the scheduled date of decommissioning, as specified in accordance with clause 4.10.1(d), for Facilities decommissioned between 1 August of Year 4 of the Reserve Capacity Cycle and 1 October of Year 4 of the Reserve Capacity Cycle.

The Reserve Capacity Expression of Interest

4.2. The Reserve Capacity Expression of Interest Process

4.2.1. The purpose of the Reserve Capacity Expression of Interest is for a person to notify AEMO of the amount of new Energy Producing System and Demand Side Programme capacity they intend to make available as Peak Capacity and Flexible Capacity in the Capacity Year to which the Expression of Interest relates.

4.2.2. AEMO must prepare a Request for Expressions of Interest which includes the information described in clause 4.3.1.

4.2.3. The Request for Expression of Interest is to be made available:

(a) on the WEM Website; and

(b) to any person on application to AEMO.

4.2.4. By the date and time specified in clause 4.1.4, AEMO must have advertised the Request for Expression of Interest, including how to obtain the Request for Expression of Interest:

(a) on the WEM Website; and

(b) on at least one major tender portal.

4.2.5. At its discretion, AEMO may continue to advertise and promote the Request for Expression of Interest until the deadline for submissions of Expression of Interest specified in clause 4.2.6.

4.2.6. Expressions of Interest must be provided to AEMO by the time and date specified in clause 4.1.5 and must contain the information described in clause 4.4.1.

4.2.7. By the date and time specified in clause 4.1.6, AEMO must publish the following information:

(a) the total number of Expressions of Interest received;

(aA) the number of Expressions of Interest received, excluding Expressions of Interest for EOI Facility Variants that have not been nominated under clause 4.4.2;

(b) based on the Expressions of Interest referred to in clause 4.2.7(aA), the additional Reserve Capacity potentially available, categorised as Peak Capacity and Flexible Capacity from:

i. capacity associated with Facilities that are committed; and

ii. capacity associated with Facilities that are not yet committed, where this capacity is to be further categorised between new Facilities for which:

1. an offer by the relevant Network Operator to enter into an Arrangement for Access ("**Access Proposal**") has been made and all necessary Environmental Approvals granted;

2. applications for both Access Proposals and Environmental Approvals have been made and one or both are being processed;

3. no Access Proposal has been applied for or some or all Environmental Approvals have not been applied for;

(c) based on the Expressions of Interest, the additional Peak Capacity and Flexible Capacity potentially available by:

i. Facility Technology Types, including:

1. Intermittent Generating Systems;

2. Non-Intermittent Generating Systems; and

3. Electric Storage Resources;

ii. Demand Side Programmes; and

iii Small Aggregation.

(cA) for each Facility that contains an Energy Producing System, the additional Peak Capacity and Flexible Capacity potentially available from each technology;

(cB) whether more than one technology is proposed for the Facility or location;

(d) based on the Expressions of Interest, the additional Peak Capacity and Flexible Capacity potentially available categorised based on fuel type and back-up fuel options;

(e) AEMO's estimate of the existing capacity eligible to be assigned Certified Reserve Capacity in the SWIS; and

(f) the preliminary Reserve Capacity Requirement for the Reserve Capacity Cycle to which the Expression of Interest relates that was included in the Request for Expression of Interest.

4.3. Information to be Included in a Request for Expression of Interest

4.3.1. A Request for Expression of Interest for a Reserve Capacity Cycle must include the following information:

(a) a request for a response by interested parties not later than the relevant time specified in clause 4.1.5;

(b) the preliminary Reserve Capacity Requirements for the Reserve Capacity Cycle determined in accordance with section 4.6;

(c) for each of the three previous Reserve Capacity Cycles (if applicable):

i. the Reserve Capacity Requirements determined in accordance with clauses 4.6.1 and clause 4.6.1A;

ii. the Availability Curve referred to in clause 4.5.10(e) applicable to that Reserve Capacity Cycle;

iii. each Entity Daily Flexible Reserve Capacity Price that applied to a Facility or Separately Certified Component;

iv. the number of Peak Capacity Credits and Flexible Capacity Credits acquired by AEMO;

v. the Benchmark Reserve Capacity Prices;

vi. the Reserve Capacity Prices;

vii. each Entity Daily Peak Reserve Capacity Price that applied to a Facility; and

viii. the aggregate quantity of MW of Peak Capacity Credits and Flexible Capacity Credits assigned to Facilities or Separately Certified Components at each of the prices referred to in clauses 4.3.1(c)(iii), 4.3.1(c)(vi) and 4.3.1(c)(vii);

(d) the number of Peak Capacity Credits and Flexible Capacity Credits which AEMO expects to be traded bilaterally in accordance with clause 4.14.1(a) and clause 4.14.1(c);

(e) the amount of Peak Capacity and Flexible Capacity expected to be required from new Facilities, where these figures are based on the difference between the values as determined in accordance with clause 4.6.3 and the latest information available to AEMO as to the aggregate available Peak Capacity and Flexible Capacity for the SWIS during the period to which the Reserve Capacity Requirements relate;

(f) the Benchmark Reserve Capacity Prices applicable to the relevant Reserve Capacity Cycle, if published on the Coordinator's Website;

(g) a brief summary of the eligibility requirements for Reserve Capacity to be certified under section 4.11;

(h) information on how to obtain an electronic version of the ESM Rules;

(i) the following information on timetables and processing times for the Reserve Capacity Cycle:

i. the date and time from which the lodgement of applications for certification of Reserve Capacity will be allowed;

ii. the date and time by which applications for certification of Reserve Capacity must be lodged;

iii. the date and time that applicants for Certified Reserve Capacity will be notified of the Certified Reserve Capacity assigned; and

iv. the date and time by which a Market Participant which holds Certified Reserve Capacity must notify AEMO in accordance with clause 4.14.1 as to how its Reserve Capacity will be dealt with;

(j) the information required to be included in an Expression of Interest and the format in which that information is to be presented;

(k) the closing date and time for submission of Expressions of Interest;

(l) who to contact with questions and responses to the Expression of Interest, including that person's contact details;

(m) the information specified in clause 4.4A.2 in respect of any Facility where the expected closure date of the Facility has not yet occurred; and

(n) the list of Transmission Nodes determined in accordance with clause 4.15.16A at which Market Participants seeking certification of Demand Side Programmes subject to clause 4.10.1B in Year 1 of the Reserve Capacity Cycle will not be allowed to locate Associated Loads during the relevant Capacity Year.

4.4. Information to be Included in an Expression of Interest

4.4.1. An Expression of Interest for a Reserve Capacity Cycle must include the following information:

(a) the identity of the person proposing to provide Reserve Capacity and contact details;

(b) subject to clause 4.10.1B, for each Facility covered by the Expression of Interest, its name and location and whether it contains:

i. an Intermittent Generating System;

ii. a Non-Intermittent Generating System;

iii. an Electric Storage Resource;

iv. a Demand Side Programme; and

v. a Small Aggregation;

(bA) if the Facility contains an Energy Producing System and is not a Demand Side Programme:

i. the expected nameplate capacity for each technology; and

ii. the maximum Peak Capacity and Flexible Capacity anticipated to be available from each technology;

(bAA) if the Facility contains an Energy Producing System and is a Demand Side Programme, whether or not the relevant Market Participant intends to Inject and/or Withdraw when subject to a Dispatch Instruction under clause 7.6.5A;

(bB) whether more than one technology is proposed for the Facility or location;

(bC) whether the Expression of Interest is for an EOI Facility Variant and, if so, whether the Expression of Interest is nominated under clause 4.4.2;

(c) the maximum Peak Capacity and Flexible Capacity anticipated to be available from each Facility;

(d) for each Facility:

i. the expected earliest date that the Facility will be able to be fully operational;

ii. the status of any applications for Access Proposals in respect of that Facility;

iii. the status of any applications for Environmental Approvals required in respect of that Facility;

iv. details of the type and quantity of fuel expected to be available to that Facility;

v. the hours during a typical week when the Facility will not be available to be dispatched due to staffing restrictions or other factors;

vi. whether the Facility is expected to be nominated to be classified as a Network Augmentation Funding Facility;

vii. whether the Facility has entered into or is expected to enter into an NCESS Contract;

viii. if an application under clause 4.4.1(d)(ii) has been submitted, the application reference number provided by the Network Operator; and

ix. if an application under clause 4.4.1(d)(ii) has been submitted, the date the application was submitted to the Network Operator; and

(e) any other information specified by AEMO in the Request for Expression of Interest under clause 4.3.1(j).

4.4.2. A person who submits two or more Expressions of Interest for EOI Facility Variants must nominate one Expression of Interest to be used by AEMO for the purposes of clause 4.2.7(b).

4.4.3. If:

(a) a person submits two or more Expressions of Interest and does not specify that any of the Expressions of Interest is for an EOI Facility Variant under clause 4.4.1(bC); and

(b) AEMO reasonably considers that two or more of the Expressions of Interest are for EOI Facility Variants,

AEMO may (after using reasonable endeavours to consult with the person) select one Expression of Interest to use for the purposes of clause 4.2.7(b). The Expression of Interest selected by AEMO is deemed to be the Expression of Interest nominated by the person under clause 4.4.2.

4.4A. Notification of Facility Ceasing Operation

4.4A.1. If a Facility, other than a Demand Side Programme or a Non-Scheduled Facility, is to cease operation permanently, the Market Participant to whom that Facility is registered must:

(a) notify AEMO of the expected closure date of the Facility in accordance with this section 4.4A; and

(b) subject to clause 4.4A.5, specify an expected closure date of not less than three years from the date the notice is given to AEMO.

4.4A.1A. If a Market Participant holding Capacity Credits associated with a Demand Side Programme does not intend to apply for any Capacity Credits in a future Reserve Capacity Cycle, the Market Participant must:

(a) notify AEMO of the date at which it expects its Reserve Capacity Obligations to cease; and

(b) subject to clause 4.4A.5, ensure that the date given under clause 4.4A.1A(a) is not less than three years from the date the notice is given to AEMO.

4.4A.2. AEMO must within five Business Days after receiving a notice under clause 4.4A.1 or clause 4.4A.1A, publish the following information on the WEM Website, as applicable:

(a) the name of the Market Participant that provided the notice;

(b) the name of the Facility specified in the notice;

(bA) the Transmission Node Identifier for the Facility;

(bB) the geographical location for the Facility;

(c) the Peak Capacity Credits and Flexible Capacity Credits, in MW, assigned to the Facility at the time of the notice and for any subsequent Reserve Capacity Cycle;

(d) the Standing Data nameplate capacity of the Facility, expressed in MW;

(e) the expected closure date of the Facility or the date that Reserve Capacity Obligations will cease; and

(f) the Network Access Quantity assigned to the Facility at the time of the notice and for any subsequent Reserve Capacity Cycle.

4.4A.3. A Market Participant must, as soon as practicable, notify AEMO of any changes to the expected closure date of a Facility or the date that Reserve Capacity Obligations will cease by amending the notice given under clause 4.4A.1 or clause 4.4A.1A.

4.4A.4. AEMO must within five Business Days after receiving notification under clause 4.4A.3, publish the revised expected closure date of the Facility or the revised date that Reserve Capacity Obligations will cease on the WEM Website.

4.4A.5. A notice under clause 4.4A.1 or clause 4.4A.1A, as may be amended in accordance with clause 4.4A.3, may specify an expected closure date or date that the Reserve Capacity Obligations will cease less than three years from the date the notice is given to AEMO if:

(a) the Market Participant becomes insolvent within the meaning of clause 9.19.2;

(b) the Facility specified in the notice has suffered an unexpected catastrophic event; or

(c) the Market Participant forms the view, in good faith, that the Facility specified in the notice is now no longer commercially viable due to reasons beyond its control that were not reasonably foreseeable,

and as a result the Facility is to cease operation permanently, or the Market Participant does not intend to apply for any Capacity Credits in relation to the Facility in a future Reserve Capacity Cycle.

4.4A.6. A Market Participant may, by notice in writing to AEMO, withdraw a notice given under clause 4.4A.1 or clause 4.4A.1A if the withdrawal is made in good faith.

4.4A.7. AEMO must within five Business Days after receiving a notice under clause 4.4A.6, publish notification of the withdrawal of a notice under clause 4.4A.1 or clause 4.4A.1A on the WEM Website.

4.4A.8. If a Market Participant applies for Capacity Credits for a Demand Side Programme for a time after the expected closure date of the Facility or the date that the Reserve Capacity Obligations will cease, published by AEMO under clauses 4.4A.2(e) or 4.4A.4, the Market Participant is deemed to have provided a notice under clause 4.4A.6.

4.4B. RCM Limit Advice and RCM Constraint Equations

4.4B.1. Each Network Operator must provide RCM Limit Advice to AEMO in respect to its Network in accordance with this section 4.4B and section 2.27A.

4.4B.2. By 5:00 PM on the last Business Day falling on or before 8 May in Year 1 of a Reserve Capacity Cycle, AEMO must provide each Network Operator, in respect of its Network for the Reserve Capacity Cycle:

(a) details of each Facility specified in an Expression of Interest submitted under clause 4.2.6 for the Reserve Capacity Cycle, including the information in clause 4.4.1;

(b) details of each Facility for which AEMO has received a notice under clause 4.4A.1 or clause 4.4A.1A where the intention is for the Facility to cease operation permanently by 1 October of Year 3 of the Reserve Capacity Cycle;

(c) details of each Facility for which AEMO has received an Early Certified Reserve Capacity application and whether the Facility has nominated to be classified as a Network Augmentation Funding Facility;

(d) details of any NCESS Contracts procured by AEMO which are expected to be in service by 1 October of Year 3 of the Reserve Capacity Cycle, and is expected to impact information provided by a Network Operator under clause 4.4B.5; and

(e) preliminary forecasts of peak demand determined under clause 4.5.10(a)(iv) for the third Capacity Year of the Long Term PASA Study Horizon.

4.4B.3. By 5:00 PM on the last Business Day falling on or before 12 June in Year 1 of a Reserve Capacity Cycle, each Network Operator must, in respect of its Network, reasonably estimate the configuration at peak demand, and associated Thermal Network Limits of its Network:

(a) by:

i. assuming an ambient temperature of 41 degrees Celsius;

ii. taking into account:

1. all new Network augmentations that will be in-service, including separate Thermal Network Limits for Facilities nominated to be classified as Network Augmentation Funding Facilities;

2. all transmission Network assets scheduled to be retired; and

3. all NCESS Contracts expected to be in-service,

as at 1 October of Year 3 of the Reserve Capacity Cycle;

iii. including the connection of new Facilities notified by AEMO under clauses 4.4B.2(a) and 4.4B.2(c); and

iv. including the impact of any Facilities notified by AEMO under clause 4.4B.2(b); and

(b) in accordance with the WEM Procedure referred to in clause 2.27A.11(b)(i).

4.4B.4. AEMO must formulate RCM Constraint Equations in accordance with this section 4.4B. In formulating RCM Constraint Equations, AEMO must:

(a) use RCM Limit Advice and Limit Advice available in relation to Non-Thermal Network Limits to develop RCM Constraint Equations; and

(b) if a Network Operator has not been able to provide Non-Thermal Network Limits for Facilities that are not yet in-service or Facilities subject to an NCESS Contract in accordance with clause 2.27A.6 at the time specified in clause 4.4B.5, use Non-Thermal Network Limits which, in its reasonable opinion, most closely represent the expected Non-Thermal Network Limit for the Facility.

4.4B.5. By 5:00 PM on the last Business Day falling on or before 12 June in Year 1 of a Reserve Capacity Cycle, each Network Operator must provide the following information in respect of its Network to AEMO:

(a) the estimated proportion of the peak demand of its Network as at 1 October of Year 3 of the Reserve Capacity Cycle determined under clause 4.4B.3 at each Electrical Location on its Network;

(b) its preliminary estimate of the Thermal Network Limits of its Network taking into account all new Network augmentations that will be in-service by the relevant Capacity Year specified in applications for Early Certified Reserve Capacity under section 4.28C, including separate Thermal Network Limits for Facilities nominated to be classified as Network Augmentation Funding Facilities;

(c) the Electrical Location and identity of any new load, or increase of an existing load, equal to or greater than 10 MW that the relevant Network Operator expects to be connected to its Network and in-service by 1 October of Year 3 of the Reserve Capacity Cycle;

(d) in the form of RCM Limit Advice, its preliminary estimate of the configuration and associated Thermal Network Limits of its Network as at 1 October of Year 3 of the current Reserve Capacity Cycle determined under clause 4.4B.3; and

(e) an explanation for any changes to the RCM Limit Advice provided to AEMO for the Reserve Capacity Cycle under clause 4.4B.5(d) from the RCM Limit Advice provided to AEMO for a previous Reserve Capacity Cycle.

4.4B.6. By 5:00 PM on the last Business Day falling on or before 19 June in Year 1 of the Reserve Capacity Cycle, AEMO must publish the information provided by each Network Operator under clause 4.4B.5 in the Constraints Library for the Reserve Capacity Cycle.

4.4B.7. By 5:00 PM on the fifth Business Day after the date specified in clause 4.1.11, AEMO must provide each Network Operator, in respect of its Network for the Reserve Capacity Cycle:

(a) details of each Facility specified in an application for Certified Reserve Capacity submitted under clause 4.9.1 for the Reserve Capacity Cycle, including the information in clause 4.4.1;

(b) details of each Facility for which AEMO has received a notice under clause 4.4A.1 where the intention is for the Facility to cease operation permanently by 1 October of Year 3 of the Reserve Capacity Cycle;

(c) details of each Facility for which AEMO has received an Early Certified Reserve Capacity application and whether the Facility has nominated to be classified as a Network Augmentation Funding Facility;

(d) details of any NCESS Contracts procured by AEMO which are expected to be in service by 1 October of Year 3 of the Reserve Capacity Cycle, and is expected to impact information provided by a Network Operator under clause 4.4B.9; and

(e) forecasts of peak demand determined under clause 4.5.10(a)(iv) for the third Capacity Year of the Long Term PASA Study Horizon, as published in the Electricity Statement of Opportunities.

4.4B.8. By 5:00 PM on the 25th Business Day after the date specified in clause 4.1.11, each Network Operator must, in respect of its Network, reasonably estimate the configuration at peak demand, and associated Thermal Network Limits of its Network:

(a) by:

i. assuming an ambient temperature of 41 degrees Celsius;

ii. taking into account:

1. all new Network augmentations that will be in-service, including separate Thermal Network Limits for Facilities nominated to be classified as Network Augmentation Funding Facilities;

2. all transmission Network assets scheduled to be retired; and

3. all NCESS Contracts expected to be in-service,

as at 1 October of Year 3 of the Reserve Capacity Cycle;

iii. including the connection of new Facilities notified by AEMO under clauses 4.4B.7(a) and 4.4B.7(b); and

iv. including the impact of any Facilities notified by AEMO under clause 4.4B.7(b); and

(b) in accordance with the WEM Procedure referred to in clause 2.27A.11(b)(i).

4.4B.9. By 5:00 PM on the 25th Business Day after the date specified in clause 4.1.11, each Network Operator must provide the following information in respect of its Network to AEMO:

(a) the estimated proportion of the peak demand of its Network as at 1 October of Year 3 of the Reserve Capacity Cycle determined under clause 4.4B.8 at each Electrical Location on its Network;

(b) its estimate of the Thermal Network Limits of its Network taking into account all new Network augmentations that will be in-service by the relevant Capacity Year specified in applications for Early Certified Reserve Capacity under section 4.28C, including separate Thermal Network Limits for Facilities nominated to be classified as Network Augmentation Funding Facilities;

(c) the Electrical Location and identity of any new load, or increase of an existing load, equal to or greater than 10 MW that the relevant Network Operator expects to be connected to its Network and in-service by 1 October of Year 3 of the Reserve Capacity Cycle;

(d) in the form of RCM Limit Advice, its estimate of the configuration and associated Thermal Network Limits of its Network as at 1 October of Year 3 of the current Reserve Capacity Cycle determined under clause 4.4B.8;

(e) an explanation for any changes to the RCM Limit Advice provided to AEMO for the Reserve Capacity Cycle under clause 4.4B.9(d) from the RCM Limit Advice provided to AEMO for a previous Reserve Capacity Cycle; and

(f) the list of substation names as used in RCM Limit Advice, and all associated Transmission Node Identifiers, that are expected to be in service on 1 October of Year 3 of the current Reserve Capacity Cycle.

4.4B.10. By 5:00 PM on the 30th Business Day after the date specified in clause 4.1.11, AEMO must publish the information provided by each Network Operator under clause 4.4B.9 in the Constraints Library.

The Long Term SWIS Capacity Requirements

4.5. Long Term Projected Assessment of System Adequacy

4.5.1. The Long Term PASA must be performed annually by AEMO and must address each of the years in the Long Term PASA Study Horizon.

4.5.2. The Long Term PASA must take into account:

(a) demand growth scenarios, including peak and annual energy requirements;

(b) expected Demand Side Programme capabilities;

(c) generation capacity expected to be available, including details of any Early Certified Reserve Capacity, seasonal capacities, Essential System Service capabilities, long duration outages, and production profiles for Intermittent Generating Systems;

(d) expected transmission network capabilities allowing for expansion plans, losses and constraints;

(e) the capacity described in clause 4.5.2A;

(f) expected Electric Storage Resource capabilities; and

(g) expected Constrained Access Loads according to the information received under clause 4.5.4.

4.5.2A. AEMO must determine an estimate of the Peak Capacity required to cover the forecast cumulative needs of Intermittent Loads such that:

(a) this Peak Capacity estimate is in addition to the Peak Capacity required to satisfy the requirements specified in clauses 4.5.9(a) and 4.5.9(b) in the situation where there were no Intermittent Loads; and

(b) this Peak Capacity estimate must be set by AEMO to equal the sum over all expected Intermittent Loads of their forecast maximum possible Intermittent Load levels multiplied by:

i. the ratio of:

1. the Peak Reserve Capacity Target for the relevant Capacity Year as described in clause 4.5.10(b)(i); and

2. the expected peak demand for the relevant Capacity Year as described in clause 4.5.10(b)(ii);

ii. minus one.

4.5.3. AEMO must notify Rule Participants of the information that it requires from them in the areas described in clause 4.5.2, in respect of each year of the Long Term PASA Study Horizon, no later than 1 April of Year 1 of the relevant Reserve Capacity Cycle.

4.5.3A. The information requested by AEMO under clause 4.5.3 must include a request for Market Participants to provide to AEMO, for Intermittent Loads and Loads that are expected to be operating as Intermittent Loads during the second Capacity Year commencing during the Long Term PASA Study Horizon, the amount of capacity required to serve the Load in the event of a failure of on-site generation where this amount of capacity cannot exceed the greater of:

(a) the maximum allowed level of Intermittent Load specified in Standing Data for that Intermittent Load at the time of providing the data; and

(b) the Contract Maximum Demand associated with that Intermittent Load to apply during the Capacity Year to which the nomination relates. The Market

Participant must provide evidence to AEMO of this Contract Maximum Demand level unless AEMO has previously been provided with that evidence.

4.5.4. Rule Participants must provide the data requested by AEMO in accordance with clause 4.5.3 within 15 Business Days from the date of that request.

4.5.5. AEMO may request from persons who are not Rule Participants information in the areas described in clause 4.5.2 in respect of each year of the Long Term PASA Study Horizon.

4.5.6. AEMO must review the information provided to it in accordance with clause 4.5.4 and as a result of a request under clause 4.5.5, and if necessary, seek clarifications.

4.5.7. AEMO must treat all information provided to it in accordance with clauses 4.5.4, 4.5.5 and 4.5.6 as confidential except where the provider has granted permission for its release or as otherwise provided under these ESM Rules. However, AEMO may release any such information as part of an unidentifiable component of an aggregate number in a Statement of Opportunities Report.

4.5.8. If information provided to AEMO in accordance with clauses 4.5.4, 4.5.5 and 4.5.6 is not adequate or is insufficient for the purpose for which it is required, AEMO may make its own estimate and use that estimate in place of information provided in accordance with clauses 4.5.4, 4.5.5 and 4.5.6.

4.5.9. The Planning Criterion to be used by AEMO in undertaking a Long Term PASA study is that there should be sufficient available capacity in each Capacity Year during the Long Term PASA Study Horizon to:

(a) meet the forecast peak demand (including transmission losses and allowing for Intermittent Loads) supplied through the SWIS plus:

i. a reserve margin equal to the greater of:

1. the forecast peak demand (including transmission losses and allowing for Intermittent Loads) multiplied by the proportion of Capacity Credits expected to be unavailable at the time of peak demand due to Forced Outages based on Forced Outage rates calculated in accordance with the WEM Procedure specified in clause 4.9.10, excluding Forced Outages of Facilities to which clause 4.11.1A applies; and

2. the size, in MW, of the largest contingency relating to loss of supply (related to any Facility, including a Network) expected at the time of forecast peak demand (including transmission losses and allowing for Intermittent Loads), and

ii. the ESR Duration Requirement Uplift calculated in Part C of Appendix 11,

while maintaining the SWIS frequency in accordance with the Normal Operating Frequency Band and the Normal Operating Frequency Excursion Band. The forecast peak demand should be calculated to a probability level that the forecast would not be expected to be exceeded in more than one year out of ten;

(b) limit expected energy shortfalls to 0.0002% of annual energy consumption (including transmission losses); and

(c) meet the highest forecast Four-Hour Demand Increase, plus a reserve margin equal to:

i. the highest forecast Four-Hour Demand Increase; multiplied by

ii. the proportion of Flexible Capacity expected to be unavailable at the time of the highest forecast Four-Hour Demand Increase due to Forced Outages based on Forced Outage rates calculated in accordance with the WEM Procedure specified in clause 4.9.10, excluding Forced Outages of Facilities to which clause 4.11.1A applies. If AEMO is unable to calculate an expected Forced Outage rate for Flexible Capacity, AEMO must use the equivalent expected Forced Outage rate for Peak Capacity.

4.5.10. AEMO must use the information assembled under clauses 4.5.2, 4.5.2A, 4.5.4, 4.5.5, 4.5.6 and 4.5.8 to:

(a) forecast the peak demand, annual energy, and demand in each Trading Interval in each relevant year in the Long Term PASA Study Horizon, for each of the following scenarios:

i. median peak demand assuming low demand growth;

ii. one in ten year peak demand assuming low demand growth;

iii. median peak demand assuming expected demand growth;

iv. one in ten year peak demand assuming expected demand growth;

v. median peak demand assuming high demand growth;

vi. one in ten year peak demand assuming high demand growth,

where the low, expected, and high demand growth cases reflect demand changes stemming from different levels of economic growth, with these being temperature adjusted to produce the one in ten year peak demand cases;

(aA) assess the extent to which the anticipated installed capacity of the Energy Producing Systems and Demand Side Programmes is capable of satisfying the Planning Criterion (taking into account network congestion), identifying any shortfalls in Peak Capacity or Flexible Capacity in each relevant year in the Long Term PASA Study Horizon, for the scenario described in clause 4.5.10(a)(iv);

(b) forecast the expected peak demand and the corresponding Peak Reserve Capacity Target for each Capacity Year during the Long Term PASA Study Horizon, where:

i. the Peak Reserve Capacity Target for a Capacity Year is the Peak Capacity required to meet the requirements specified in clauses 4.5.9(a) and 4.5.9(b) assuming no network congestion in that year under the scenario described in clause 4.5.10(a)(iv); and

ii. the expected peak demand in that year is the peak demand under the scenario described in clause 4.5.10(a)(iv);

(bA) forecast the expected highest Four-Hour Demand Increase and the corresponding Flexible Reserve Capacity Target for each Capacity Year during the Long Term PASA Study Horizon, where:

i. the Flexible Reserve Capacity Target for a Capacity Year is the greater of:

1. the Flexible Capacity required to meet the requirements specified in clause 4.5.9(c) in that year under the scenario described in clause 4.5.10(a)(iii); and

2. the Flexible Capacity required to meet clause 4.5.9(c) in that year under the scenario described in clause 4.5.10(a)(iv);

ii. the expected highest Four-Hour Demand Increase in that year is the greater of:

1. the highest Four-Hour Demand Increase under the scenario described in clause 4.5.10(a)(iii); and

2. the highest Four-Hour Demand Increase under the scenario described in clause 4.5.10(a)(iv);

(bB) [Blank]

(bC) forecast the expected ESR Duration Requirement for each Capacity Year during the Long Term PASA Study Horizon;

(c) identify and assess any potential capacity shortfalls isolated to a sub-region of the SWIS resulting from expected restrictions on transmission capability or other factors and which cannot be addressed by additional Peak Capacity outside that sub-region;

(d) identify any potential transmission, generation, storage or demand side capacity augmentation options to alleviate capacity shortfalls identified in clauses 4.5.10(aA) and 4.5.10(c); and

(e) develop a two dimensional duration curve of the forecast minimum Peak Capacity requirements over the Capacity Year (“Availability Curve”) for each of the second and third Capacity Years of the Long Term PASA Study Horizon. The forecast minimum Peak Capacity requirement for each Trading Interval in the Capacity Year must be determined as the sum of:

i. the forecast demand (including transmission losses and allowing for Intermittent Loads) for that Trading Interval under the scenario described in clause 4.5.10(a)(iv); and

ii. the difference between the Peak Reserve Capacity Target for the Capacity Year and the maximum of the quantities determined under clause 4.5.10(e)(i) for the Trading Intervals in the Capacity Year.

4.5.11. AEMO must publish the Statement of Opportunities Report for a Reserve Capacity Cycle by the date specified in clause 4.1.8.

4.5.12. For the third Capacity Year of the Long Term PASA Study Horizon, AEMO must determine the following information:

(a) [Blank]

(b) [Blank]

(c) [Blank]

(d) the ESR Duration Requirement, which is the Availability Duration Gap for the relevant Capacity Year plus the ESR Duration Requirement for the previous Reserve Capacity Cycle;

(e) the Availability Duration Gap and ESR Duration Requirement Uplift as calculated in accordance with Appendix 11;

(f) the MW peak demand in the load scenario described in clause 4.5.10(a)(iii) less the number of Peak Capacity Credits issued to Demand Side Programmes in the Reserve Capacity Cycle immediately prior to this Reserve Capacity Cycle ("**Indicative Demand Side Programme Dispatch Threshold**");

(g) the Peak Demand Side Programme Dispatch Requirement, which is:

i. the number of Trading Intervals in the reference demand profile determined under step B.2.5 of Appendix 9 in which the MW demand exceeds the Indicative Demand Side Programme Dispatch Threshold rounded up to the nearest whole number of Trading Intervals; divided by

ii. the number of Capacity Years in the reference demand profile;

(h) the Flexible Demand Side Programme Dispatch Requirement, which is the minimum number of Trading Intervals in the applicable Capacity Year in which a Demand Side Programme with Flexible Capacity Credits can be dispatched in addition to its Peak Demand Side Programme Dispatch Requirement and is the greater of eight and the Peak Demand Side Programme Dispatch Requirement; and

(i) if anticipated installed capacity does not satisfy clause 4.5.9(b) under the load scenario described in clause 4.5.10(a)(iv), the minimum additional capacity required to be provided by Capability Class 1 and Capability Class 3 capacity

if clause 4.5.9(b) is to be satisfied, using an appropriate mix of Capability Class 1 and Capability Class 3 capacity.

4.5.12A. If AEMO has determined under clause 4.5.12(i) that additional Capability Class 1 and Capability Class 3 capacity would be required to satisfy clause 4.5.9(b), any Capability Class 1 and Capability Class 3 Facility that has not been assigned a Network Access Quantity in any previous Reserve Capacity Cycle is to be deemed to be a Network Augmentation Funding Facility for the purposes of Appendix 3.

4.5.13. The Statement of Opportunities Report must include:

(a) the input information assembled by AEMO in performing the Long Term PASA study including, for each Capacity Year of the Long Term PASA Study Horizon:

i. the demand growth scenarios used;

ii. the capacities of each energy producing Registered Facility to provide Peak Capacity and Flexible Capacity;

iii. the generation capacities of each committed energy producing project to provide Peak Capacity and Flexible Capacity;

iv. the generation capacities of each probable energy producing project to provide Peak Capacity and Flexible Capacity;

v. the Demand Side Programme capability and availability to provide Peak Capacity and Flexible Capacity;

vA. the amount of Peak Capacity forecast to be required to serve the aggregate Intermittent Load;

vi. the assumptions about transmission network capacity, losses and network and security constraints that impact on study results; and

viA. the number and size of Constrained Access Loads and the typical conditions under which the Withdrawal of these Constrained Access Loads will be constrained; and

vii. a summary of the method used in determining the values and assumptions specified in clauses 4.5.13(a)(i) to 4.5.13(viA), including methodological changes relative to previous Statement of Opportunities Reports;

(b) the Peak Reserve Capacity Target and the Flexible Reserve Capacity Target for each Capacity Year of the Long Term PASA Study Horizon;

(c) the amount by which the installed Energy Producing System capacity plus the Demand Side Programme capability available exceeds or falls short of the Peak Reserve Capacity Target for each Capacity Year and each demand growth scenario considered in the study;

(cA) the amount by which the installed Energy Producing System Flexible Capacity plus the Demand Side Programme Flexible Capacity available exceeds or falls short of the Flexible Reserve Capacity Target for each Capacity Year and each demand growth scenario considered in the study;

(d) the sub-regions of the SWIS in which AEMO has identified capacity shortfalls under clause 4.5.10(c), the size of those shortfalls, and the expected energy not served in each sub-region for each Capacity Year and each demand growth scenario considered in the study;

(e) a statement of potential Energy Producing System, Demand Side Programme and transmission options that would alleviate capacity shortfalls relative to the Reserve Capacity Target and to capacity requirements in Electrical Locations of the SWIS;

(eA) information used by AEMO to apportion peak demand under clause 4.5.10(a)(iv) across Electrical Locations reflecting information provided under clause 4.4B.5;

(eB) for each Capacity Year of the Long Term PASA Study Horizon:

i. any planned changes (other than augmentations covered by clause 4.5.13(eB)(ii)) that are expected to impact Network limits or constraints;

ii. any planned augmentations to the SWIS, including augmentations to be paid for by an applicant seeking access, or increase to an Arrangement for Access, to the transmission system that is publicly available information and of which AEMO is aware;

iii. any Network limitations identified in the Network Access Quantity Model outputs in the immediately preceding Reserve Capacity Cycle; and

iv. details of each Facility for which AEMO has received a notice under clause 4.4A.1 where the intention is for the Facility to cease operation permanently;

(eC) for each Capacity Year of the Long Term PASA Study Horizon, the following information determined by AEMO:

i. [Blank]

ii. [Blank]

iii. the Availability Duration Gap calculated in accordance with Appendix 11; and

iv. the expected forecast ESR Duration Requirement, which for the third Capacity Year of the Long Term PASA Study Horizon must be consistent with the information determined under clause 4.5.12(d);

(f) the Availability Curve for the second and third Capacity Years of the Long Term PASA Study Horizon; and

(g) the quantities determined under clause 4.5.12 for the third Capacity Year of the Long Term PASA Study Horizon.

4.5.14. AEMO must document the procedure it follows in conducting the Long Term PASA in a WEM Procedure.

4.5.15. From time to time, and at least once in every five year period starting from 1 July 2021 the Coordinator, with the assistance of AEMO, must conduct a review of the Planning Criterion and the process in the WEM Procedure specified in clause 4.5.14 by which AEMO forecasts SWIS peak demand. This review must include:

(a) a review of the technical analysis; and

(b) a cost-benefit study on the effects on stakeholders of a variety of levels of generation adequacy.

4.5.15A. To the extent practicable, the Coordinator must coordinate the reviews under clause 4.5.15 and clause 4.16.11, so they are conducted at the same time.

4.5.16. In conducting a review under clause 4.5.15, the Coordinator must invite submissions from Rule Participants on the performance of the Planning Criterion and the process by which AEMO forecasts SWIS peak demand and expected system-wide ramp rates, and must specify a reasonable time by which submissions must be lodged. The Coordinator must take into account in the review any submissions received within the time specified, and may take into account any late submission.

4.5.17. The Coordinator must make available a draft of the report described in clause 4.5.18 to Rule Participants for comment and invite submissions on the draft report. The Coordinator must specify a reasonable time by which submissions must be lodged, and must take into account any submissions received within the time specified, and may take into account any late submission.

4.5.18. After concluding the review described in clause 4.5.15, the Coordinator must publish a final report containing:

(a) issues identified by the Coordinator;

(b) assumptions made by the Coordinator in undertaking the review;

(c) submissions received by the Coordinator from Rule Participants in accordance with clause 4.5.16;

(d) the Coordinator's responses to the issues raised in those submissions;

(e) the results of the technical and cost-benefit studies;

(f) the submissions on the draft report received by the Coordinator from Rule Participants in accordance with clause 4.5.17;

(g) the Coordinator's responses to the issues raised in those submissions; and

(h) any recommended changes to the Planning Criterion.

4.5.19. If the Coordinator finds that a change to the process by which AEMO forecasts SWIS peak demand would be beneficial in light of the State Electricity Objective, it must:

(a) make a Rule Change Proposal to implement the change; and/or

(b) make a Procedure Change Proposal to implement the change.

4.5.20. If the Coordinator contracts with a third party to conduct any analysis required under this section 4.5, then:

(a) the Coordinator must ensure that the third party is familiar with the method employed in conducting the analysis required under this section 4.5 in previous years; and

(b) the Coordinator must approve any variations in the process to be used by that third party and variations may only be accepted if not inconsistent with the requirements specified in the ESM Rules or a WEM Procedure.

4.5A. Whole of System Plan

4.5A.1. The Coordinator must prepare and publish on the Coordinator's Website a Whole of System Plan in accordance with this section 4.5A.

4.5A.2. The Coordinator must prepare and publish a Whole of System Plan by 30 September 2027 and then at least once every five years thereafter.

4.5A.3. If, after a Whole of System Plan is published, new information becomes available that, in the Coordinator's opinion, may materially affect one or more of the outcomes specified in the current Whole of System Plan, the Coordinator may update that Whole of System Plan.

4.5A.4. A Whole of System Plan remains in effect until:

(a) a subsequent Whole of System Plan is published pursuant to clause 4.5A.2; or

(b) in respect to a part of the Whole of System Plan, an update to that part of the Whole of System Plan is published in accordance with clause 4.5A.3.

4.5A.5. The purposes of a Whole of System Plan are to:

(a) plan for the efficient development of the SWIS to meet the power system needs of the SWIS including with respect to Power System Security and Power System Reliability for a planning horizon of at least 20 years;

(b) assist in the transition to a lower-emissions power system by guiding the efficient integration of renewable generation and identifying opportunities for new technologies, such as energy storage;

(c) identify requirements for network investment and inform the regulatory test for network projects;

(d) inform industry's decisions regarding efficient power system investment opportunities in the SWIS; and

(e) inform policy makers on the future needs of the power system.

4.5A.6. A Whole of System Plan must:

(a) identify options for the development of the SWIS to maintain Power System Security and Power System Reliability at the lowest sustainable cost across demand growth scenarios, including peak and annual energy requirements;

(b) test alternative scenarios through the use of modelling and sensitivities, including the assessment of the impact on the power system and its various components across the different scenarios;

(c) identify investment options that would minimise costs to consumers; and

(d) test alternative network investment options and identify optimal network investment options.

4.5A.7. In preparing a Whole of System Plan, the Coordinator must develop an approach to:

(a) determining the scenarios to be modelled;

(b) the modelling method to apply; and

(c) the method for selecting optimal network investment options.

4.5A.8. The Coordinator must publish on the Coordinator's Website:

(a) the Coordinator's approach to each of the matters referred to in clause 4.5A.7; and

(b) guidance on the information and assistance to be provided by AEMO, Western Power and other Rule Participants in accordance with clause 4.5A.11,

prior to developing the Whole of System Plan that is required to be developed by the Coordinator under clause 4.5A.2 by 30 September 2025.

4.5A.9. The Coordinator may from time to time amend the Coordinator's approach to any of the matters referred to in clause 4.5A.7 by publishing the updated approach on the WEM Website.

4.5A.10. The Coordinator must collaborate with AEMO and Western Power in preparing the Whole of System Plan.

4.5A.11. At the request of the Coordinator, AEMO, Western Power and other Rule Participants must provide information and assistance, which is, in the Coordinator's opinion, necessary or desirable to enable the Coordinator to effectively prepare a Whole of System Plan.

4.5A.12. In preparing a Whole of System Plan, the Coordinator may, in addition to the matters referred to in this section 4.5A, consider any other matters and information the Coordinator considers relevant.

4.5A.13. Before publishing a Whole of System Plan under clause 4.5A.1, the Coordinator must:

(a) publish a draft Whole of System Plan; and

(b) invite Rule Participants and other interested persons, including proponents of non-network options, to make submissions on the draft Whole of System Plan by no later than a specified date (with the date to be specified by the Coordinator to be no earlier than 20 Business Days after the date on which the draft Whole of System Plan is published).

4.5A.14. A draft Whole of System Plan must:

(a) identify a range of scenarios;

(b) for each identified scenario, identify development options and potential projects;

(c) describe how each identified scenario performs under any reasonable sensitivities;

(d) assess the impact of each identified scenario on the power system and its various components;

(e) include the results of the assessment for each identified scenario, together with an explanatory statement regarding the results;

(f) include relevant information about network constraints, development opportunities across both the transmission and the distribution systems;

(g) identify any Priority Project that Western Power is able to progress in accordance with the relevant provisions of the Electricity Network Access Code; and

(h) provide an initial assessment, developed in consultation with each Network Operator, of whether non-network options are reasonably likely to meet a relevant identified network need.

4.5A.15. The Coordinator must provide a copy of a Whole of System Plan to the Minister before publishing it in accordance with clause 4.5A.1.

4.5A.16. The Whole of System Plan to be published by the Coordinator under clause 4.5A.1 must include:

(a) all relevant matters referred to in clauses 4.5A.6 and 4.5A.14;

(b) a summary of each submission received on the draft Whole of System Plan and the Coordinator's response to it; and

(c) any other matters the Coordinator considers relevant to the Whole of System Plan.

4.5B. Transmission System Plan

4.5B.1. A Network Operator must develop a Transmission System Plan, and publish it on the Network Operator's website, in accordance with this section 4.5B.

4.5B.2. A Network Operator must publish a Transmission System Plan by no later than 1 October each year, in conjunction with its Network Opportunity Map.

4.5B.3. A Transmission System Plan must:

(a) establish a plan for the efficient development of a transmission system for a planning horizon of at least 10 years;

(b) meet the Power System Security and Power System Reliability requirements; and

(c) be in the long-term interests of consumers.

4.5B.4. A Transmission System Plan must include:

(a) a summary of any significant costs to the Wholesale Electricity Market that have arisen, or may potentially arise, due to the condition of the transmission network, including:

i. binding Network Constraints, and the estimated market costs of those binding Network Constraints; and

ii. the frequency and magnitude of Energy Uplift Payments, including for Facilities subject to Network Constraints;

(b) a set of investment options for developing the transmission system over the relevant planning horizon, which must consider network and non-network solutions to address the matters identified under clause 4.5B.4(a);

(c) analysis of market related data and an assessment of the costs and benefits, including to the Wholesale Electricity Market, of the investment options identified under clause 4.5B.4(b);

(d) a recommended development path for the transmission system that would maximise net benefits and seek to minimise the long-term costs of electricity supplied to consumers; and

(e) a high-level assessment of how the recommended development path referred to in clause 4.5B.4(d) will meet the long-term interests of consumers.

4.5B.5. In developing a Transmission System Plan a Network Operator must take into account:

(a) the WEM Technical Standards under clause 2.8.14;

(b) power system security and reliability standards and requirements under the ESM Rules and the Technical Rules;

(c) any Priority Project identified in the Whole of System Plan or major augmentation that Western Power is able to progress in accordance with the Access Code;

(d) the Network Quality and Reliability of Supply Code;

(e) any government policy specified in the Whole of System Plan that the Coordinator considers may impact on the development of the Transmission System Plan, as may be advised by the Coordinator pursuant to the consultation process referred to in clause 4.5B.6 or specified in the Whole of System Plan published by the Coordinator under section 4.5A; and

(f) any other matters that the Network Operator considers relevant to the Transmission System Plan.

4.5B.6. A Network Operator must consult with AEMO and the Coordinator on the assumptions, inputs and scenarios the Network Operator must use in developing and updating a Transmission System Plan, including:

(a) forecasted demand growth or reduction scenarios, including from the Long Term PASA and Whole of System Plan;

(b) scheduled connection of new loads or generators;

(c) expected Network modifications, augmentations, or retirement of existing Facilities or Network assets that impact costs in the Wholesale Electricity Market;

(d) the Credible Contingency Events and other commonly occurring credible contingencies that may significantly impact the SWIS;

(e) a range of facility dispatch scenarios or credible dispatch patterns;

(f) data, modelling and results from the testing of scenarios in the Whole of System Plan, to the extent they are relevant as inputs to the Transmission System Plan;

(g) relevant information from the Short Term PASA, Medium Term PASA and Long Term PASA studies conducted by AEMO under these ESM Rules; and

(h) other Market Information that the Network Operator, AEMO or the Coordinator considers relevant to meeting the requirements for developing the Transmission System Plan in this section 4.5B.

4.5B.7. If, in the Network Operator's opinion, new information becomes available that should be used in place of the inputs from the Whole of System Plan specified in clause 4.5B.6(f), the Network Operator must consult with AEMO and the Coordinator on the accuracy and relevance of the new information for use in developing and updating the Transmission System Plan.

4.5B.8. A Network Operator may review the Transmission System Plan, or a part of it, in consultation with AEMO and the Coordinator, if there is a material change in any of the assumptions, inputs or scenarios under clause 4.5B.6 or to a WEM Technical Standard.

4.5B.9. Before publishing a Transmission System Plan under clause 4.5B.1, a Network Operator must:

(a) publish a draft Transmission System Plan;

(b) invite users of the Network, other Rule Participants, electricity consumers and other interested persons to make submissions on the draft Transmission System Plan by no later than a specified date (with the date to be specified by the Network Operator to be no earlier than 20 Business Days after the date on which the draft Transmission System Plan is published).

4.5B.10. A Network Operator must:

(a) take into account any submissions received on the draft Transmission System Plan; and

(b) publish on the Network Operator's website a summary of each submission received on the draft Transmission System Plan and the Network Operator's response to it, redacting any commercially sensitive or other confidential information.

4.6. Reserve Capacity Requirements

4.6.1. The Peak Reserve Capacity Requirement for a Reserve Capacity Cycle is the Peak Reserve Capacity Target for the Capacity Year commencing on 1 October of Year 3 of a Reserve Capacity Cycle as reported in the Statement of Opportunities Report for that Reserve Capacity Cycle.

4.6.1A. The Flexible Reserve Capacity Requirement for a Reserve Capacity Cycle is the Flexible Reserve Capacity Target for the Capacity Year commencing on 1 October of Year 3 of a Reserve Capacity Cycle as reported in the Statement of Opportunities Report for that Reserve Capacity Cycle.

4.6.2. The expected peak demand corresponding to the Peak Reserve Capacity Requirement is the forecasted value determined in accordance with clause 4.5.10(b)(ii) for the Capacity Year commencing on 1 October of Year 3 of a Reserve Capacity Cycle.

4.6.2A. The expected highest Four-Hour Demand Increase corresponding to the Flexible Reserve Capacity Requirement is the forecasted value determined in accordance with clause 4.5.10(bA)(ii) for the Capacity Year commencing on 1 October of Year 3 of a Reserve Capacity Cycle.

4.6.3. The preliminary Reserve Capacity Requirements for a Reserve Capacity Cycle to be included in the relevant Request for Expression of Interest are the Reserve Capacity Targets for the Capacity Year commencing on 1 October of Year 3 of the Reserve Capacity Cycle as reported in the Statement of Opportunities Report for the preceding Reserve Capacity Cycle.

Certification of Reserve Capacity and Reserve Capacity Security

4.7. The Reserve Capacity Information Pack

4.7.1. [Blank]

4.7.2. By the time specified in clause 4.1.10, AEMO must publish the Reserve Capacity Information Pack for a Reserve Capacity Cycle on the WEM Website.

4.7.3. The Reserve Capacity Information Pack for a Reserve Capacity Cycle must include the following information:

(a) the Reserve Capacity Requirements for the Reserve Capacity Cycle, as determined in accordance with clause 4.6.1 or clause 4.6.1A; and

(b) instructions as to how to obtain from the WEM Website a copy of:

i. the Request for Expression of Interest; and

ii. the report described in clause 4.2.7,

for the Reserve Capacity Cycle.

4.8. Who Can Apply for Certification of Reserve Capacity

4.8.1. A Market Participant may apply for certification of the amount of Reserve Capacity which can be provided by a Facility or component of a Facility if:

(a) the Facility or component of a Facility is a Registered Facility other than a Network or Interruptible Load; or

(b) the Facility or component of a Facility is not a Registered Facility but the Market Participant intends to have the relevant Facility registered as a Registered Facility other than a Network or Interruptible Load by the commencement date of the Reserve Capacity Obligations for the relevant Reserve Capacity Cycle as specified in clause 4.1.26.

4.8A. Indicative Facility Class and Indicative Facility Technology Type

4.8A.1. If AEMO receives an Expression of Interest in relation to a new Facility or Facility upgrade in accordance with clause 4.2.6, by the date and time specified in clause 4.1.7, AEMO must:

(a) assign an indicative Facility Class and one or more indicative Facility Technology Types, if relevant, to the new Facility or Facility upgrade in accordance with the WEM Procedure referred to in clause 4.8A.7; and

(b) notify the person who submitted the Expression of Interest of the indicative Facility Class and indicative Facility Technology Types assigned to the new Facility or Facility upgrade.

4.8A.2. AEMO may, if it reasonably considers it is required to enable it to carry out its obligations under clause 4.8A.1, request clarification or further information from the person who submitted the relevant Expression of Interest and that person must comply with the request by the time specified in the request.

4.8A.3. A person that has not submitted an Expression of Interest under clause 4.2.6, and intends to apply for:

(a) Early Certified Reserve Capacity under section 4.28C for a new Facility or Facility upgrade; or

(b) Conditional Peak Certified Reserve Capacity under clause 4.9.1(b) for a new Facility; or

(c) Certified Reserve Capacity under clause 4.9.1(a) for a new Facility or Facility upgrade,

must, prior to submitting the application, apply to AEMO for an indicative Facility Class and one or more indicative Facility Technology Types to be assigned to the Facility or Facility upgrade.

4.8A.4. An application under clause 4.8A.3:

(a) must include the information required under clause 4.4.1; and

(b) must be submitted at least 25 Business Days prior to the date and time specified in clause 4.1.11.

4.8A.5. If AEMO receives an application under clause 4.8A.3, AEMO must:

(a) assign an indicative Facility Class and one or more indicative Facility Technology Types to the new Facility or Facility upgrade in accordance with the WEM Procedure referred to in clause 4.8A.7; and

(b) notify the applicant of the indicative Facility Class and indicative Facility Technology Types assigned to the new Facility or Facility upgrade; or

(c) request the applicant provide clarification or further information.

4.8A.6. AEMO must notify the applicant of the indicative Facility Class and indicative Facility Technology Types assigned to the new Facility or Facility upgrade under clause 4.8A.5(b) within 10 Business Days of the later of:

(a) receipt of the application under clause 4.8A.3; and

(b) receipt of any clarification or further information requested from the applicant under clause 4.8A.5(c) in relation to the application.

4.8A.7. AEMO must document the following in a WEM Procedure:

(a) the processes to be followed by AEMO in determining and assigning an indicative Facility Class and an indicative Facility Technology Type to a new Facility or Facility upgrade under this section 4.8A;

(b) [Blank]

(c) the information required to be provided in support of an application under clause 4.8A.3;

(d) the processes to be followed by an applicant in relation to making an application under clause 4.8A.3; and

(e) any other matters AEMO considers relevant.

4.9. Process for Applying for Certification of Reserve Capacity

4.9.1. Applications for certification of Reserve Capacity:

(a) for the current Reserve Capacity Cycle may be lodged with AEMO from the date and time specified in clause 4.1.7 and until the time specified in clause 4.1.11; and

(b) for a future Reserve Capacity Cycle may be lodged with AEMO at any time prior to the date and time specified in clause 4.1.11 for the Reserve Capacity Cycle to which the application relates. To avoid doubt, an application for Early Certified Reserve Capacity must be made under and in accordance with section 4.28C.

4.9.2. Only the Market Participant which has registered a Facility, or which intends to register a Facility, may apply for certification of Reserve Capacity in respect of that Facility or component of that Facility.

4.9.2A. A Market Participant must not apply for the certification of Reserve Capacity in respect of multiple Facilities, or components of a Facility, that cannot exist at the same time.

4.9.3. A Market Participant applying for certification of Reserve Capacity must provide to AEMO:

(a) the data specified in clause 4.10.1, in the format specified in the WEM Procedure referred to in clause 4.9.10;

(b) in the case of an application for certification of Reserve Capacity for a Non-Scheduled Facility (excluding where clause 4.11.1(bD)(ii) applies) or an Intermittent Generating System or component of that Facility that is yet to enter service, the report described in clause 4.10.3;

(bA) in the case of an application for certification of Reserve Capacity for a Facility or component of that Facility containing an Intermittent Generating System which has installed Facility Sub-Metering in accordance with clause 2.29.12, the data from the Facility Sub-Metering for the RLM Reference Period for the current Reserve Capacity Cycle; and

(c) in the case of an application for conditional certification for a future Reserve Capacity Cycle, or a subsequent application for Early Certified Reserve Capacity for a Facility for the same Reserve Capacity Cycle, an Application Fee to cover the cost of processing the application.

4.9.4. Applications for certification of Reserve Capacity must be made in the form prescribed by AEMO.

4.9.5. If AEMO assigns Peak Certified Reserve Capacity to a Facility for a future Reserve Capacity Cycle under section 4.11 ("**Conditional Peak Certified Reserve Capacity**"):

(a) the Conditional Peak Certified Reserve Capacity is conditional upon the information included in the application for Peak Certified Reserve Capacity remaining correct as at the date and time specified in clause 4.1.11 for that future Reserve Capacity Cycle;

(b) the Market Participant holding the Conditional Peak Certified Reserve Capacity must, in accordance with clauses 4.9.1 and 4.9.3, re-lodge an application for Peak Certified Reserve Capacity with AEMO between the date and time specified in clause 4.1.7 and the time specified in clause 4.1.11 for that future Reserve Capacity Cycle;

(c) if AEMO is satisfied that the application re-lodged in accordance with clause 4.9.5(b) is consistent with the information upon which the Conditional Peak Certified Reserve Capacity was assigned and is correct, then AEMO must confirm:

i. the Peak Certified Reserve Capacity;

ii. [Blank]; and

iii. the Reserve Capacity Security or DSP Reserve Capacity Security levels,

that were previously conditionally assigned, set or determined by AEMO, except that the Peak Certified Reserve Capacity for a Non-Scheduled Facility (excluding where clause 4.11.1(bD)(ii) applies) or an Intermittent Generating System must be redetermined and assigned in accordance with the Relevant Level Method for the current Reserve Capacity Cycle; and

(d) if the application re-lodged in accordance with clause 4.9.5(b) is found by AEMO to be inaccurate or is not consistent with the information upon which the Conditional Peak Certified Reserve Capacity was assigned, then AEMO

must process the application without regard for the Conditional Peak Certified Reserve Capacity.

4.9.6. AEMO must notify an applicant for certification of Reserve Capacity of receipt of the application within one Business Day of receipt.

4.9.7. If a Market Participant fails to receive notification of receipt from AEMO in accordance with clause 4.9.6, then it must contact AEMO and arrange for re-submission of the information prior to the time and date specified in clause 4.1.11.

4.9.7A. If AEMO has received an application for certification of Peak Capacity under clause 4.9.1 for a future Reserve Capacity Cycle, AEMO must process the application at the time AEMO next processes applications for Peak Certified Reserve Capacity for a Reserve Capacity Cycle in accordance with section 4.11.

4.9.8. AEMO must notify applicants for certification of Reserve Capacity for:

(a) the current Reserve Capacity Cycle, of the quantity of Peak Certified Reserve Capacity and Flexible Certified Reserve Capacity assigned to each Facility covered by the application, by the date and time specified in clause 4.1.12;

(b) a future Reserve Capacity Cycle, of the quantity of Conditional Peak Certified Reserve Capacity assigned to each Facility covered by that application by the date and time specified in clause 4.1.12 in the Reserve Capacity Cycle when AEMO next processes applications for Peak Certified Reserve Capacity in accordance with section 4.11.

4.9.9. AEMO must decide whether or not to assign Certified Reserve Capacity to a Facility in respect of a Reserve Capacity Cycle, and if so, the quantity to be assigned. If AEMO decides to assign Certified Reserve Capacity to a Facility in respect of a Reserve Capacity Cycle, AEMO must advise the applicant:

(a) of the quantity of Peak Certified Reserve Capacity and Flexible Certified Reserve Capacity assigned to the Facility in respect of the Reserve Capacity Cycle, as determined in accordance with section 4.11 or clause 4.9.5(c) (as applicable);

(b) for each Energy Producing System for which evidence has been provided in accordance with clause 4.10.1(e)(v)(3)(i), clause 4.10.1(e)(v)(3)(ii), clause 4.10.1(fA)(vi)(1) or clause 4.10.1(fA)(vi)(2), whether AEMO considers that:

i. the Energy Producing System will only be fuelled by Eligible Renewable Energy Sources in the relevant Capacity Year; and

ii. that all fuels used in the previous Capacity Year by the Energy Producing System were from Eligible Renewable Energy Sources;

(c) of any Reserve Capacity Security or DSP Reserve Capacity Security required as a condition of a Market Participant holding the Certified Reserve Capacity,

as determined in accordance with clauses 4.13.2, 4.13A.1, 4.13A.4 or 4.9.5(c) (as applicable);

(d) in the case of Conditional Peak Certified Reserve Capacity, that the certification is subject to the conditions in clauses 4.9.5(a) and 4.9.5(b);

(e) upon the request of the applicant, of the calculations upon which AEMO's determinations are based; and

(f) whether AEMO accepted or rejected a proposed alternative value to be used in the calculation of the Required Level for a Facility assessed under the Relevant Level Method in its application for certification of Reserve Capacity, as determined in accordance with clause 4.11.2A, if applicable.

4.9.9A. AEMO must publish, by the date and time specified in clause 4.1.15A, the quantity of Peak Certified Reserve Capacity and Flexible Certified Reserve Capacity assigned to each Facility and each component of a Facility.

4.9.10. AEMO must document the following in a WEM Procedure:

(a) the procedures that Market Participants must follow when applying for Certified Reserve Capacity;

(b) the method that AEMO uses for determining Planned Outage rates and Forced Outage rates, which must treat Charge Level shortfalls for Electric Storage Resources, as calculated under clause 4.26.1E, as Forced Outages; and

(c) the procedures AEMO must follow when processing applications for Certified Reserve Capacity, including:

i. how Certified Reserve Capacity is assigned; and

ii. how AEMO will account for any degradation of an Electric Storage Resource, based on:

1. the performance standards and specifications for the Electric Storage Resource provided by the relevant manufacturer; and

2. the performance of the Electric Storage Resource in the Capacity Year at the time the application for certification of Reserve Capacity is required to be processed, if available; and

iii. how AEMO will assess whether a Facility Technology Type within a Facility is fuelled by Eligible Renewable Energy Sources based on:

1. fuel supply contracts, if the Market Participant proposes to purchase renewable fuel for use in a Non-Intermittent Generator it owns, controls or operates;

2. historical Intermittent Generator Output, if the Market Participant proposes to store renewable electricity generated by

a Facility it owns, controls or operates in an Electric Storage Resource that it also owns, controls or operates;

3. energy supply contracts, if the Market Participant proposes to purchase renewable electricity from another Market Participant for use in an Electric Storage Resource it owns, controls or operates;

4. energy supply contracts, if the Market Participant is selling renewable energy to another Market Participant, so that it is not available for storage in an Electric Storage Resource that it owns, controls or operates; and

5. historical dispatch levels for an Energy Producing System.

4.10. Information Required for the Certification of Reserve Capacity

4.10.1. Each Market Participant must ensure that information submitted to AEMO with an application for certification of Reserve Capacity pertains to the Reserve Capacity Cycle to which the certification relates, and is supported by documented evidence and includes, if applicable, except to the extent that it is already accurately provided in Standing Data:

(a) the identity of the Facility;

(b) the Reserve Capacity Cycle to which the application relates;

(bA) with the exception of applications for Conditional Peak Certified Reserve Capacity, or if the Facility is a Demand Side Programme, the following:

i. evidence of an Arrangement for Access or evidence that the Market Participant has accepted an Access Proposal from the relevant Network Operator made in respect of the Facility or other evidence from the Network Operator that the Facility will have an Arrangement for Access;

ii. evidence that the Facility will be entitled to have access from a specified date occurring prior to the date specified in clause 4.10.1(c)(iii)(7); and

iii. the Declared Sent Out Capacity for the Facility at the relevant connection point;

(c) if the Facility, or part of the Facility, is yet to enter service:

i. [Blank]

ii. with the exception of applications for Conditional Peak Certified Reserve Capacity, evidence that any necessary Environmental Approvals have been granted or evidence supporting the Market Participant's expectation that any necessary Environmental Approvals will be granted in time to have the Facility meet its Reserve Capacity Obligations by the date specified in clause 4.10.1(c)(iii)(7); and

iii. the Key Project Dates occurring after the date the request is submitted, including, if applicable, but not limited to:

1. when all approvals will be finalised or, in the case of Demand Side Programmes, when all required contracts will be in place;
2. when financing will be finalised;
3. when site preparation will begin;
4. when construction will commence;
5. when generating equipment will be installed or, in the case of Demand Side Programmes, when all required control equipment will be in place;
6. when the Facility, or part of the Facility, will be ready to undertake Commissioning Tests; and
7. when the Facility, or part of the Facility, will have completed all Commissioning Tests and be capable of meeting Reserve Capacity Obligations in full;

(d) if the Facility is a Registered Facility that will be decommissioned prior to the date specified in clause 4.1.30(a) for the Reserve Capacity Cycle to which the application relates, the planned decommissioning date;

(dA) except if the Facility is a Demand Side Programme, a description and a configuration of the main components of the Facility including the nameplate capacity of each component, expressed in MW;

(dB) for a Semi-Scheduled Facility or Scheduled Facility, the minimum stable loading level of the Facility expressed in MW;

(e) for a Non-Intermittent Generating System:

i. the capacity of the Non-Intermittent Generating System and the temperature dependence of that capacity;

ii. the maximum sent out capacity, net of Loads, that can be guaranteed to be available for supply to the relevant Network from the Non-Intermittent Generating System when it is operated normally at an ambient temperature of 41 degrees Celsius;

iii. [Blank]

iv. at the option of the applicant, the method to be used to measure the ambient temperature at the site of the Non-Intermittent Generating System for the purpose of determining Reserve Capacity Obligations, where the method specified may be either:

1. a publicly available daily maximum temperature at a location representative of the conditions at the site of the Facility as reported daily by a meteorological service; or

2. a daily maximum temperature measured at the site of the Facility by the SCADA system operated by AEMO or the relevant Network Operator (as applicable).

If no method is specified, AEMO must use a temperature of 41 degrees Celsius;

v. details of primary and any alternative fuels, including:

1. if the Non-Intermittent Generating System has primary and alternative fuels:

i. the process for changing from one fuel to another; and

ii. the fuel or fuels which the Non-Intermittent Generating System is to use in respect of the application for Certified Reserve Capacity;

2. details acceptable to AEMO together with supporting evidence of both firm and any non-firm fuel supplies and the factors that determine restrictions on fuel availability that could prevent the Non-Intermittent Generating System operating at its full capacity during Capability Class 1 Availability Assessment Intervals on Business Days; and

3. optionally, evidence to show:

i. that all fuels to be used in the Non-Intermittent Generating System in the relevant Capacity Year will be from Eligible Renewable Energy Sources; and

ii. if the Non-Intermittent Generating System was a Fixed Price Component under clause 4.14.1CB(a)(ii)(1) in the previous Capacity Year, that all fuels used in the previous Capacity Year by the Non-Intermittent Generating System were from Eligible Renewable Energy Sources; and

vi. the expected Forced Outage rate based on manufacturer data;

vii. [Blank]

(f) for Demand Side Programmes:

i. if the Demand Side Programme has, or is expected to have, a single Associated Load:

1. the quantity of Peak Capacity the Market Participant expects to make available from the Facility; and

2. the expected Minimum Consumption of the Non-Dispatchable Load in units of MW;

iA. if the Demand Side Programme has, or is expected to have more than one Associated Load, the quantity of Peak Capacity that the Market Participant nominates to apply for the Demand Side Programme;

iB. if the Demand Side Programme has, or is expected to have, a single Associated Load, the quantity of Flexible Capacity the Market Participant expects to make available from the Facility;

iC. if the Demand Side Programme has, or is expected to have more than one Associated Load, the quantity of Flexible Capacity that the Market Participant nominates to apply for the Demand Side Programme;

ii. if the application relates to Peak Capacity, the maximum number of Trading Intervals that the Demand Side Programme will be available to provide Peak Capacity during a Capacity Year, which must be at least the Peak Demand Side Programme Dispatch Requirement for that Reserve Capacity Cycle;

iiA. if the application includes Flexible Capacity, the maximum number of Trading Intervals, in addition to the number of Trading Intervals specified under clause 4.10.1(f)(ii), that the Demand Side Programme will be available to provide Reserve Capacity during a Capacity Year if it provides both Peak Capacity and Flexible Capacity, which must be at least the Flexible Demand Side Programme Dispatch Requirement for that Reserve Capacity Cycle;

iii. the maximum number of Trading Intervals per Trading Day that the Facility will be available to provide Peak Capacity if issued a Dispatch Instruction, where this must be at least twenty four Trading Intervals;

iv. if the application includes Flexible Capacity, the maximum number of Trading Intervals per Trading Day that the Facility will be available to provide Flexible Capacity if issued a Dispatch Instruction, where this must be at least eight Trading Intervals;

ivA. if the application includes Flexible Capacity, how the Demand Side Programme plans to meet its Reserve Capacity Obligations for Flexible Capacity, including the technologies it plans to use;

v. the minimum notice period required for dispatch under clause 7.6.15 of the Facility, which must be no more than:

1. if the application is only for Peak Capacity, two hours; and

2. if the application includes both Peak Capacity and Flexible Capacity, five minutes;

vi. the periods when the Facility can be dispatched, which must include the period between 8:00 AM and 8:00 PM on all Business Days; and

vii. [Blank]

viii. the single Transmission Node Identifier for the Facility;

(fA) for an Electric Storage Resource, except if clause 4.10.1(fD) applies:

i. the nameplate capacity and maximum and minimum Charge Level capabilities of the Electric Storage Resource and the temperature dependence of that capacity;

ii. the maximum sent out capacity, net of Loads, that can be guaranteed to be available for supply to the relevant Network from the Electric Storage Resource when it is operated normally at an ambient temperature of 41 degrees Celsius;

iii. the sent-out capacity, net of Loads that can be guaranteed to be available for supply across the Peak Electric Storage Resource Obligation Duration, to the relevant Network from the Electric Storage Resource when it is operated normally at an ambient temperature of 41 degrees Celsius for each year of the expected life of the Electric Storage Resource, which must be supported by manufacturer data and where available, operational performance data;

iv. manufacturer nameplate capacity and maximum Charge Level capability and minimum Charge Level capability data of the Electric Storage Resource for each year of its expected remaining life;

v. the expected Forced Outage rate of the Electric Storage Resource taking into account the Peak Electric Storage Resource Obligation Duration based on manufacturer data, and where available, operational performance data; and

vi. optionally, evidence to show:

1. that the Market Participant can supply sufficient energy from Eligible Renewable Energy Sources for the Electric Storage Resource to discharge at its Peak Certified Reserve Capacity for the ESR Duration Requirement in each Trading Day of the applicable Capacity Year; or

2. if the Electric Storage Resource was a Fixed Price Component under clause 4.14.1CB(a)(ii)(2) in the previous Capacity Year, that the Market Participant supplied sufficient energy from Eligible Renewable Energy Sources to account for the energy supplied to the Electric Storage Resource during the previous Capacity Year;

(fB) [Blank]

(fC) [Blank]

(fD) in addition to any other requirements in this clause 4.10.1 for a Non-Scheduled Facility, for a Non-Scheduled Facility comprising only an Electric Storage Resource, including a Small Aggregation comprising aggregated Electric Storage Resources:

i. the location of the single Transmission Node Identifier behind which the aggregated Electric Storage Resources will be connected;

ii. the nameplate capacity and minimum and maximum Charge Level capabilities of each Electric Storage Resource and the temperature dependence of that capacity;

iii. the sent-out capacity, net of Loads that can be guaranteed to be available for supply across the Peak Electric Storage Resource Obligation Duration, to the relevant Network from each Electric Storage Resource when it is operated normally at an ambient temperature of 41 degrees Celsius for each year of the expected life of the Electric Storage Resource, supported by manufacturer data; and

iv. evidence that demonstrates the Electric Storage Resources are expected to discharge during their Peak Electric Storage Resource Obligation Intervals;

(fE) if the application relates to Flexible Capacity then, as applicable:

i. the amount of Flexible Capacity the Market Participant expects to make available from the Facility or each component of the Facility;

ii. the maximum ramp up rate of the Facility or each component of the Facility, expressed in MW per minute;

iii. the maximum ramp down rate of the Facility or each component of the Facility, expressed in MW per minute;

iv. the minimum ramp up rate of the Facility or each component of the Facility, expressed in MW per minute;

v. the minimum ramp down rate of the Facility or each component of the Facility, expressed in MW per minute;

vi. the minimum required running time of the Facility or each component of the Facility, expressed in minutes;

vii. the minimum stable loading level of the Facility or, where relevant, each component of the Facility;

viii. if the Facility is a Demand Side Programme, the minimum time (in minutes) required for the Facility between receiving a Dispatch Instruction and changing consumption level, otherwise for the Facility or each component of the Facility, the minimum time required between receiving a Dispatch Instruction in a cold state and operating at the minimum stable loading level for the Facility or each component of the Facility;

ix. the minimum time (in minutes) required for the Facility or each component of the Facility, after receiving a Dispatch Instruction to ramp down from the minimum stable loading level to zero output;

x. the minimum time (in minutes) before each component in the Facility, excluding Loads, can be restarted after it is shut down;

xi. the minimum time (in seconds) required for each Electric Storage Resource in the Facility to switching from discharging to charging and from charging to discharging; and

xii. which, if any, Frequency Co-optimised Essential System Services the Facility expects to be capable of providing in the relevant Capacity Year;

(g) for all Facilities:

i. any restrictions on the availability of the Facility due to staffing constraints; and

ii. any other restrictions on the availability of the Facility;

(h) whether the application relates to confirmation of Conditional Peak Certified Reserve Capacity;

(i) [Blank];

(j) evidence of whether the Facility will be subject to an NCESS Contract;

(k) if a Facility, or component of a Facility, is being assigned Certified Reserve Capacity or Conditional Peak Certified Reserve Capacity using the Relevant Level Method and the Facility or relevant component of the Facility is already in full operation under the configuration for which certification is being sought (as specified for the Facility or component under clause 4.10.1(dA)), the date on which the Facility or component of the Facility became fully operational under this configuration, unless this date has already been provided to AEMO in a previous application for certification of Reserve Capacity;

(l) evidence as appropriate for the Facility Class of the extent to which the Facility will be able to receive, confirm, and implement Dispatch Instructions from AEMO in accordance with the WEM Procedures referred to in clauses 2.35.4 and 7.6.18; and

(m) subject to clauses 4.10A.2 and 4.10A.3, a Market Participant that wishes to nominate that its Facility or an upgrade of its Facility, be classified as a Network Augmentation Funding Facility, must provide to AEMO:

i. a notice in writing from the Market Participant nominating that the Facility or an upgrade of the Facility, as applicable, be classified as a Network Augmentation Funding Facility; and

ii. the information specified in clause 4.10A.6.

4.10.1A. AEMO must:

(a) determine in Year 1 of a Reserve Capacity Cycle the minimum eligibility requirements for receiving Flexible Certified Reserve Capacity which are:

i. for a Non-Intermittent Generating System:

1. the maximum allowed minimum stable loading level of the Non-Intermittent Generating System expressed as a percentage of nameplate capacity;
2. the minimum allowed ramp up rate expressed as a percentage of nameplate capacity per minute;
3. the minimum allowed ramp down rate expressed as a percentage of nameplate capacity per minute;
4. the maximum time (in minutes) allowed between receiving a Dispatch Instruction when in a cold state and operating at the minimum stable loading level; and
5. if the Non-Intermittent Generating System is part of a Scheduled Facility or Semi-Scheduled Facility, that Facility is a Fast Start Facility;

ii. for an Intermittent Generating System:

1. the maximum allowed minimum stable loading level of the Intermittent Generating System expressed as a percentage of nameplate capacity;
2. the minimum allowed ramp up rate expressed as a percentage of nameplate capacity per minute;
3. the minimum allowed ramp down rate expressed as a percentage of nameplate capacity per minute; and
4. the maximum time (in minutes) allowed between receiving a Dispatch Instruction when fully curtailed and operating at the minimum stable loading level;

iii. for an Electric Storage Resource:

1. that the Electric Storage Resource is capable of switching from charging to discharging within a single Dispatch Interval;
2. that the Electric Storage Resource is capable of switching from discharging to charging within a single Dispatch Interval;
3. the minimum allowed ramp up rate expressed as a percentage of nameplate capacity per minute; and
4. the minimum allowed ramp down rate expressed as a percentage of nameplate capacity per minute; and

iv. for a Demand Side Programme:

1. the minimum allowed ramp up rate expressed as a percentage of Certified Reserve Capacity per minute;

2. the minimum allowed ramp down rate expressed as a percentage of Certified Reserve Capacity per minute; and

3. the maximum time (in minutes) allowed between receiving a Dispatch Instruction and beginning to change output, which must be no more than five minutes;

(b) determine the minimum eligibility requirements taking into account the technical parameters of the Benchmark Technology determined under clause 4.16.12(b) for Flexible Capacity, such that each Facility holding Flexible Certified Reserve Capacity will be capable of providing all of its capacity promptly and flexibly in the four-hour period ending in the Trading Interval used to determine the expected highest forecast Four-Hour Demand Increase under clause 4.5.10(bA)(ii), and so as to minimise costs while maintaining Power System Security and Power System Reliability;

(c) consult with Market Participants on the proposed minimum eligibility requirements for receiving Flexible Certified Reserve Capacity before publishing them, except if AEMO does not propose changes to the eligibility requirements last published under clause 4.10.1A(d). AEMO's consultation must include a statement of how the minimum eligibility requirements meet the State Electricity Objective;

(d) publish the minimum eligibility requirements for receiving Flexible Certified Reserve Capacity on the WEM Website by the date specified in clause 4.1.4;

(e) document the following in a WEM Procedure:

i. the processes to be followed by AEMO for determining the minimum eligibility requirements for receiving Flexible Certified Reserve Capacity under clause 4.10.1A(a);

ii. the processes to be followed by AEMO to comply with its obligation to consult with Market Participants in accordance with this clause 4.10.1A; and

iii. the processes to be followed by AEMO for publishing the minimum eligibility requirements for receiving Flexible Certified Reserve Capacity.

4.10.1B. A Market Participant applying for certification of Reserve Capacity for a Reserve Capacity Cycle, for a Demand Side Programme for which it intends to have more than one Associated Load, is exempt from the requirement in clause 4.10.1(f)(viii) if the expected quantity of Peak Capacity for each Associated Load associated with the Demand Side Programme is less than 5 MW.

4.10.2. The types of Facilities eligible to use the Relevant Level Method, for the purpose of assigning Certified Reserve Capacity or Conditional Peak Certified Reserve Capacity to the Facility are:

(a) components of Semi-Scheduled Facilities and Scheduled Facilities that are Intermittent Generating Systems;

(b) Non-Scheduled Facilities, except Non-Scheduled Facilities comprising only Electric Storage Resources that have not been in operation for the full RLM Reference Period for the current Reserve Capacity Cycle; and

(c) Non-Scheduled Facilities comprising only Electric Storage Resources that have been in operation for the full RLM Reference Period for the current Reserve Capacity Cycle.

4.10.3. A person who intends to apply for Certified Reserve Capacity under clause 4.9.1(a) for a Facility, or component of a Facility, that is to be assessed using the Relevant Level Method for a Facility, or relevant component of a Facility, that:

(a) is yet to enter service;

(b) is to re-enter service after significant maintenance;

(c) is to re-enter service after having been upgraded; or

(d) has not operated with the configuration specified for the Facility or component (as applicable) under clause 4.10.1(dA) for the full RLM Reference Period for the current Reserve Capacity Cycle,

must include a report prepared by an expert accredited by AEMO in accordance with clause 4.11.6. AEMO will use the report to assign Peak Certified Reserve Capacity for the Facility, or the relevant component of the Facility, that is to be assessed using the Relevant Level Method and to determine the Required Level for that Facility.

4.10.3A. A report provided under clause 4.10.3 must include:

(a) for each Trading Interval during the RLM Reference Period for the current Reserve Capacity Cycle, a reasonable estimate of the expected energy that would have been sent out by the Facility or the component of the Facility assessed using the Relevant Level Method had it been in operation;

(b) a value, expressed in MW as a sent out value, which equals the 5 percent probability of exceedance of expected generation output for the Facility, or component of the Facility, for all the Trading Intervals that occurred within the last three years up to, and including, the last Hot Season, where this value is to be used in the calculation of the Required Level;

(c) a proposed alternative value to that specified in clause 4.10.3A(b), expressed in MW as a sent out value, to apply for the purposes of the Required Level, if in the opinion of the expert the value provided under clause 4.10.3A(b) would not be a reasonable representation of the Facility's, or component of the Facility's, 5 percent probability of exceedance of expected generation output during its first year of operation; and

(d) the reasons for any proposed alternative value provided under clause 4.10.3A(c).

4.10.4 If a Market Participant becomes aware of any changes to the details it provided to AEMO in accordance with this section 4.10 for a Facility yet to commence operation or a Facility that is undergoing significant maintenance, then the Market Participant must advise AEMO of the revised details for the Facility as soon as practicable.

4.10.5. AEMO may seek independent review of the estimates in a report provided under clause 4.10.3 if AEMO has reason to believe that the report may overstate the expected output of the relevant Facility or component of the Facility.

4.10.6. A review conducted under clause 4.10.5 must consider the expected output of the Facility or component under the operating conditions that prevailed during the RLM Reference Period for the relevant Reserve Capacity Cycle.

4.10.7. AEMO may reject a report provided under clause 4.10.3 if the independent review conducted under clause 4.10.5 concludes that the report overstates the expected output of the relevant Facility or component of the Facility.

4.10.8. If AEMO rejects a report under clause 4.10.7, the Market Participant must reimburse AEMO for the cost of the independent review, otherwise AEMO must recover the cost of the independent review as part of its Allowable Revenue.

4.10.9. If AEMO rejects a report under clause 4.10.7, the relevant Market Participant must provide a revised report to AEMO within ten Business Days of receiving notice of the rejection.

4.10A. Network Augmentation Funding Facility

4.10A.1. A reference to a Facility in this section 4.10A includes an upgrade of a Facility for which the Market Participant has nominated to be classified as a Network Augmentation Funding Facility under clause 4.10.1(m).

4.10A.2. For the purposes of clause 4.10.1(m), a Facility may only be nominated to be classified as a Network Augmentation Funding Facility in respect of a Reserve Capacity Cycle if:

(a) the Facility is an Energy Producing System;

(b) the Market Participant for the Facility has committed to funding Network Augmentation Works;

(c) the Network Augmentation Works are expected to be in-service (which includes having completed all required commissioning tests) by 1 October of Year 3 of the Reserve Capacity Cycle to which the application for certification of Reserve Capacity for the Facility relates; and

(d) the Expression of Interest for the Facility specified that the Facility was expected to be nominated to be classified as a Network Augmentation Funding Facility in accordance with clause 4.4.1(d)(vi).

4.10A.3. Subject to clause 4.10A.4, a Market Participant may only nominate a Facility to be classified as a Network Augmentation Funding Facility in the Reserve Capacity Cycle for which the Network Augmentation Works are expected to be in-service at the start of the Capacity Year for that Reserve Capacity Cycle.

4.10A.4. A Facility that is classified as a Network Augmentation Funding Facility in accordance with this section 4.10A, will be classified as a Network Augmentation Funding Facility for a single Reserve Capacity Cycle with respect to the relevant Network Augmentation Works, except if the Facility was assigned Early Certified Reserve Capacity in accordance with section 4.28C, in which case the Facility will be treated in accordance with Appendix 3 in any earlier Reserve Capacity Cycle.

4.10A.5. A Facility or upgrade to a Facility will be classified as a Network Augmentation Funding Facility, in respect of the Reserve Capacity Cycle to which the application for Certified Reserve Capacity for the Facility submitted under clause 4.9.1 relates, if:

(a) the Market Participant has nominated that the Facility be classified as a Network Augmentation Funding Facility in its application for certification of Reserve Capacity in respect of the Facility under clause 4.10.1(m);

(b) the Network Operator has verified the information specified in a request by AEMO under clause 4.10A.7 in accordance with clause 4.10A.8(a); and

(c) AEMO has assigned Certified Reserve Capacity to the Facility under clause 4.9.9.

4.10A.6. If a Market Participant has nominated that its Facility be classified as a Network Augmentation Funding Facility under clause 4.10.1(m), without limiting any other information the Market Participant may be required to provide to AEMO under clause 4.10.1, the Market Participant must provide the following information to AEMO by the date and time specified in clause 4.1.11:

(a) evidence that the Market Participant has committed to funding the Network Augmentation Works associated with the relevant Facility;

(b) evidence confirming that the Network Augmentation Works are expected to be in-service by 1 October of Year 3 of the Reserve Capacity Cycle to which the application for Certified Reserve Capacity relates; and

(c) any other information specified in the WEM Procedure referred to in clause 4.10A.11.

4.10A.7. Within 5 Business Days of receiving the information provided by a Market Participant in accordance with clause 4.10A.6, AEMO must request the relevant Network Operator to verify the information.

4.10A.8. Within ten Business Days of receiving a request from AEMO under clause 4.10A.7, the Network Operator must notify AEMO:

(a) that it verifies the information specified in the request; or

(b) that it does not agree with the information specified in the request and the reasons for its decision.

4.10A.9. If the conditions specified in clause 4.10A.5 are met, AEMO must:

(a) classify the Facility to which the information relates as a Network Augmentation Funding Facility; and

(b) notify the Market Participant that the Facility to which the information relates is classified as a Network Augmentation Funding Facility at the same time AEMO notifies the Market Participant of the Certified Reserve Capacity for the Facility under clause 4.1.12.

4.10A.10. If the Network Operator does not agree with the information specified in a request in accordance with clause 4.10A.8(b), AEMO must, within one Business Day of receiving the notification from the Network Operator:

(a) notify the Market Participant that the Facility to which the information relates will not be classified as a Network Augmentation Funding Facility; and

(b) provide the Market Participant with the reasons provided by the Network Operator.

4.10A.11. AEMO must document in a WEM Procedure the information required to be provided by a Market Participant under clause 4.10A.6 in support of its nomination that a Facility be classified as a Network Augmentation Funding Facility.

4.10A.12. AEMO must publish the information provided to it under clause 4.10A.6 with respect to a Market Participant nominating that a Facility be classified as a Network Augmentation Funding Facility, excluding any Confidential Information.

4.11. Setting Certified Reserve Capacity

4.11.1. Subject to clauses 4.11.1A and 4.11.12, AEMO must apply the following principles in assigning a quantity of Certified Reserve Capacity to a Facility or relevant component of a Facility for the Reserve Capacity Cycle for which an application for Certified Reserve Capacity has been submitted in accordance with section 4.10:

(a) the Peak Certified Reserve Capacity for a Non-Intermittent Generating System for a Reserve Capacity Cycle must not exceed AEMO's reasonable expectation of the quantity of capacity likely to be available, after netting off capacity required to serve Loads, during Capability Class 1 Availability Assessment Intervals on Business Days from the start of the Trading Day starting on 1 October of Year 3 of the Reserve Capacity Cycle to the end of the Trading Day starting on 31 July of Year 4 of the Reserve Capacity Cycle, assuming an ambient temperature of 41 degrees Celsius;

(aA) the Peak Certified Reserve Capacity for a Non-Intermittent Generating System for a Reserve Capacity Cycle must not exceed the quantity of capacity calculated under clause 4.11.2C;

(b) the Peak Certified Reserve Capacity for a Non-Intermittent Generating System must not exceed the capacity specified in clause 4.10.1(e)(ii);

(bA) if the Facility contains an Energy Producing System, the Peak Certified Reserve Capacity must not exceed the Declared Sent Out Capacity for the Facility notified to AEMO under clause 4.10.1(bA)(iii);

(bB) if two or more Facilities share a Declared Sent Out Capacity, the total quantity of Peak Certified Reserve Capacity assigned to those Facilities must not exceed the Declared Sent Out Capacity;

(bC) for a Scheduled Facility containing an Electric Storage Resource or Semi-Scheduled Facility containing an Electric Storage Resource, the total quantity of Peak Certified Reserve Capacity determined for the Electric Storage Resource must be determined by AEMO in accordance with clause 4.11.3;

(bD) for a Non-Scheduled Facility comprising only an Electric Storage Resource, including Small Aggregation of aggregated Electric Storage Resources, the total quantity of Peak Certified Reserve Capacity must be:

i. determined in accordance with the Relevant Level Method; or

ii. if the Electric Storage Resource has not been in operation for the full RLM Reference Period for the current Reserve Capacity Cycle, determined in accordance with clause 4.11.3;

(bE) for a Non-Scheduled Facility, excluding Non-Scheduled Facilities under clause 4.11.1(bD)(ii), the total quantity of Peak Certified Reserve Capacity assigned to the Facility must be determined in accordance with the Relevant Level Method, determined in accordance with clause 4.11.2;

(bF) the Flexible Certified Reserve Capacity for a Facility or component for a Reserve Capacity Cycle must not exceed:

i. the Peak Certified Reserve Capacity for that Facility or component for that Reserve Capacity Cycle; or

ii. for a Facility that is not a Demand Side Programme, the maximum output in MW that the Facility could reach four hours after receiving a Dispatch Instruction in a cold state;

(bG) AEMO must not assign Flexible Certified Reserve Capacity to a Facility or component of a Facility if the parameters submitted under clause 4.10.1(fE) do not meet the minimum requirements determined in accordance with clause 4.10.1A;

(bH) AEMO must not assign Flexible Certified Reserve Capacity to a Non-Scheduled Facility;

(bI) AEMO must not assign Flexible Certified Reserve Capacity to a Facility that was assigned Flexible Certified Reserve Capacity in a previous Reserve Capacity Cycle and has entered Commercial Operation, but has not yet complied with clause 4.12.2;

(c) AEMO must not assign Certified Reserve Capacity to a Facility for a Reserve Capacity Cycle if:

i. [Blank]

ii. the Facility is not operational or is not scheduled to commence operation for the first time so as to meet its Reserve Capacity Obligations by 1 October of Year 3 of the Reserve Capacity Cycle;

iii. the Facility will cease operation permanently, and hence cease to meet Reserve Capacity Obligations, from a time earlier than 1 August of Year 4 of the Reserve Capacity Cycle;

iv. the Facility already has Early Certified Reserve Capacity assigned to it under clause 4.28C for the Reserve Capacity Cycle;

v. during any of the previous three Capacity Years, a Market Participant held Capacity Credits for that Facility, and did not comply with clause 7.10.6B in respect of the Facility; or

vi. the Facility is a Demand Side Programme and it has submitted under clause 4.10.1(f)(v) a minimum notice period for dispatch under clause 7.6.15 of more than two hours.

(d) [Blank]

(e) [Blank]

(f) AEMO must not assign Certified Reserve Capacity to a Facility that is not expected to be a Registered Facility by the time its Reserve Capacity Obligations for the Reserve Capacity Cycle would take effect;

(g) [Blank]

(h) [Blank]

(i) the Certified Reserve Capacity assigned to a Facility or Separately Certified Component is to be expressed to a precision of 0.001 MW;

(j) the Peak Certified Reserve Capacity for a Demand Side Programme for a Reserve Capacity Cycle must equal:

i. if the Demand Side Programme has more than one Associated Load, or has a single Associated Load and no Peak Individual Reserve Capacity Requirement Contribution has been calculated for the Associated Load, the quantity nominated for the Demand Side Programme under clause 4.10.1(f)(iA); and

ii. otherwise, the Peak Individual Reserve Capacity Requirement Contribution of the Associated Load as determined for the first Trading Month of the current Capacity Year less the expected Minimum Consumption provided under clause 4.10.1(f)(i)(2);

(jA) the Flexible Certified Reserve Capacity for a Demand Side Programme for a Reserve Capacity Cycle must equal:

i. if the Demand Side Programme has more than one Associated Load, or has a single Associated Load and no Peak Individual Reserve Capacity Requirement Contribution has been calculated for the Associated Load, the quantity nominated for the Demand Side Programme under clause 4.10.1(f)(iC); and

ii. otherwise, the Peak Individual Reserve Capacity Requirement Contribution of the Associated Load as determined for the first Trading Month of the current Capacity Year less the expected Minimum Consumption provided under clause 2.29.5B(c);

(k) the Peak Certified Reserve Capacity assigned to a Facility is to be, if relevant, the sum of the Peak Certified Reserve Capacity assigned to each relevant component of a Facility; and

(l) the Flexible Certified Reserve Capacity assigned to a Facility is to be, if relevant, the sum of the Flexible Certified Reserve Capacity assigned to each relevant component of a Facility.

4.11.1A. Subject to clauses 4.11.1B and 4.11.1C, if a Facility or Separately Certified Component has been in Commercial Operation for at least 12 months and has had a Forced Outage rate greater than the Forced Outage Threshold over the preceding 36 months (or fewer, if it was not in operation for all 36 months), then unless the Facility has, within the previous 12 months, re-entered service after significant maintenance or an upgrade, AEMO must assign a quantity of Peak Certified Reserve Capacity no greater than:

(a) the quantity of Peak Certified Reserve Capacity that AEMO would otherwise have assigned to the Facility under clause 4.11.1; multiplied by

(b) 1 minus the Forced Outage rate of the Facility or Separately Certified Component during the preceding 36 months (or fewer, if it was not in operation for all 36 months),

where the Forced Outage rate for a Facility or Separately Certified Component for a period is calculated in accordance with the WEM Procedure specified in clause 4.9.10, and AEMO must publish the reasons for its decision on the WEM Website with any confidential information redacted.

4.11.1B. In making a decision under clause 4.11.1A, and without limiting the ways in which AEMO may inform itself, AEMO may:

(a) seek such additional information from the Market Participant that AEMO considers is required to determine whether the Facility was subject to significant maintenance or an upgrade;

(b) use information provided in reports related to the Facility submitted by:

i. the Market Participant specified under clause 4.27.3; and

ii. any other person under clause 4.27.6; and

(c) consult with any person AEMO considers suitably qualified to provide an opinion or information on issues relevant to the exercise of AEMO's discretion.

4.11.1C. In making a decision under clause 4.11.1A, AEMO must be satisfied that its decision under clause 4.11.1A would not, on balance, be contrary to the State Electricity Objective.

4.11.2. If an applicant submits an application for Peak Certified Reserve Capacity, in accordance with section 4.10, and AEMO is required to use the Relevant Level Method to apply to an Intermittent Generating System or a Non-Scheduled Facility (excluding if clause 4.11.1(bD)(ii) applies), AEMO:

(a) [Blank];

(aA) [Blank]; and

(b) subject to clause 4.11.12, must assign a quantity of Peak Certified Reserve Capacity to the relevant Facility or relevant component of a Facility for the Reserve Capacity Cycle equal to the Relevant Level as determined in accordance with the Relevant Level Method, but subject to clauses 4.11.1(bA), 4.11.1(bB), 4.11.1(c), 4.11.1(f) and 4.11.1A.

4.11.2A. If an applicant nominates under clause 4.10.3A(c) to have AEMO use an alternative value to that specified in clause 4.10.3A(b) AEMO:

(a) may reject the proposed alternative value if it does not consider the reasons provided in accordance with clause 4.10.3A(d) provide sufficient evidence that an alternative value is required; and

(b) must use the alternative value in the calculation of the Required Level if it does not reject the proposed alternative value under clause 4.11.2A(a).

4.11.2B. AEMO must document in a WEM Procedure the assumptions and process for the Relevant Level Method, including how it determines:

(a) the DER adjusted demand profile under step B.2.2 of Appendix 9;

(b) the reference demand profile under step B.2.5 of Appendix 9;

(c) non-candidate availability scenarios under step B.3.4 of Appendix 9; and

(d) any other aspect of the Relevant Level Method AEMO considers appropriate.

4.11.2C. The quantity of Peak Certified Reserve Capacity to be assigned to a Non-Intermittent Generating System for a Reserve Capacity Cycle must not exceed:

(a) AEMO's reasonable expectation of the maximum quantity of capacity likely to be available, net of embedded and Parasitic Loads, during the Capability Class 1 Availability Assessment Intervals on each Business Day from the start of the Trading Day starting on 1 October of Year 3 of the Reserve Capacity Cycle to the end of the Trading Day starting on 31 July of Year 4 of the

Reserve Capacity Cycle, assuming an ambient temperature of 41 degrees Celsius; multiplied by

(b) the lesser of the Capability Class 1 Availability Assessment Duration and AEMO's reasonable expectation, based on the restrictions specified under clauses 4.10.1(e)(v)(2) or 4.10.1(g), of the number of complete Trading Intervals that the quantity of capacity in clause 4.11.2C(a) could be continuously delivered for; divided by

(c) the Capability Class 1 Availability Assessment Duration.

4.11.3. The quantity of Peak Certified Reserve Capacity to be assigned to an Electric Storage Resource for the Reserve Capacity Cycle under clause 4.11.1, except if clause 4.11.1(bD)(i) or clause 4.11.1(bE) applies, is AEMO's reasonable expectation of the Linearly Derating Capacity that each Electric Storage Resource can sustain over the Peak Electric Storage Resource Obligation Duration after netting off capacity required to serve Loads associated with the Electric Storage Resource, from 1 October of Year 3 of the Reserve Capacity Cycle, assuming an ambient temperature of 41 degrees Celsius, based on the information provided in the application for Certified Reserve Capacity and the observed performance of the Electric Storage Resource in accordance with clause 4.25.1.

4.11.3A. AEMO must:

(a) determine in Year 1 of a Reserve Capacity Cycle the Trading Interval in each Trading Day that is classified as the Mid Peak Electric Storage Resource Obligation Interval from 1 October of Year 3 of the Reserve Capacity Cycle, and publish the Mid Peak Electric Storage Resource Obligation Interval on the WEM Website (which may be published in the Statement of Opportunities Report) by the date specified in clause 4.1.8;

(aA) determine in Year 1 of a Reserve Capacity Cycle the Trading Intervals in each Trading Day that are classified as Flexible Electric Storage Resource Obligation Intervals from 1 October of Year 3 of the Reserve Capacity Cycle, where the Flexible Electric Storage Resource Obligation Intervals are:

i. the Trading Interval in each Trading Day outside the Hot Season in which the highest Four-Hour Demand Increase is expected to occur in the scenario used to forecast the Flexible Reserve Capacity Target under clause 4.5.10(bA);

ii. the contiguous Trading Intervals immediately preceding the Trading Interval identified in clause 4.11.3A(aA)(i),

where the number of Trading Intervals identified is equal to the Flexible Capacity Obligation Duration;

(aB) publish the Flexible Electric Storage Resource Obligation Intervals determined under clause 4.11.3A(aA) on the WEM Website (which may be published in the Statement of Opportunities Report) by the date specified in clause 4.1.8;

(b) in Years 2 and 3 of a Reserve Capacity Cycle, determine whether the Trading Interval classified as the Mid Peak Electric Storage Resource Obligation Interval and the Trading Intervals classified as Flexible Electric Storage Resource Obligation Intervals remain appropriate for the relevant Capacity Year, and if not, publish the revised Mid Peak Electric Storage Resource Obligation Interval and Flexible Electric Storage Resource Obligation Intervals on the WEM Website by the date specified in clause 4.1.8 for the relevant Reserve Capacity Cycle;

(c) document the following in a WEM Procedure:

i. the processes to be followed by AEMO for determining changes to the Trading Intervals that will be classified as Mid Peak Electric Storage Resource Obligation Intervals and Flexible Electric Storage Resource Obligation Intervals under clauses 4.11.3A(a), 4.11.3A(aA), 4.11.3A(aB), and 4.11.3A(b); and

ii. the processes to be followed by AEMO for publishing the Trading Intervals classified as Mid Peak Electric Storage Resource Obligation Intervals and Flexible Electric Storage Resource Obligation Intervals in accordance with clauses 4.11.3A(a), 4.11.3A(aB), and 4.11.3A(b) on the WEM Website.

4.11.3B. The Required Level for a Scheduled Facility or Semi-Scheduled Facility is the sum of the Required Levels for each Separately Certified Component determined under clause 4.11.3BA, unless that sum exceeds the Facility's Declared Sent Out Capacity then the Required Level will be the Declared Sent Out Capacity of the Facility.

4.11.3BA. The Required Level for a Separately Certified Component of a Scheduled Facility or Semi-Scheduled Facility is:

(a) for a Non-Intermittent Generating System assigned Certified Reserve Capacity under clause 4.11.1(a) or clause 4.11.1(aA), calculated by AEMO using the Capacity Credits associated with the Non-Intermittent Generating System and temperature dependence information submitted to AEMO under clause 4.10.1(e)(i) or provided in Standing Data (if available) and converted to a sent out basis to 41 degrees Celsius;

(b) for an Intermittent Generating System assigned Certified Reserve Capacity using the Relevant Level Method, either:

i. the value, expressed in MW as a sent out value, that equals the five percent probability of exceedance of expected generation output for the component of the Facility that is an Intermittent Generating System, submitted to AEMO in the report described in clause 4.10.3A(b);or

ii. the proposed alternative value for the component of the Facility that is an Intermittent Generating System, expressed in MW as a sent out

value, provided in the report described in clause 4.10.3A(c), if AEMO has accepted the proposed alternative value under clause 4.11.2A,

and adjusted for Capacity Credits associated with the Intermittent Generating System; and

(c) for an Electric Storage Resource assigned Certified Reserve Capacity under clause 4.11.3 calculated by AEMO using the Capacity Credits associated with the Electric Storage Resource and temperature dependence information submitted to AEMO under clause 4.10.1(fA) or provided in Standing Data (if available) and converted to a sent out basis to 41 degrees Celsius.

4.11.3BB. The Required Level for a Demand Side Programme in a Trading Interval is calculated by AEMO using the Relevant Demand for the Facility in that Trading Interval minus the Peak Capacity Credits assigned to the Facility.

4.11.3BC. Except if clause 4.11.3BD applies to the Facility, the Required Level for a Non-Scheduled Facility assigned Certified Reserve Capacity using the Relevant Level Method is either:

(a) the value, expressed in MW as a sent out value, that equals the five percent probability of exceedance of expected generation output for the Facility, specified in the report described in clause 4.10.3A(b);or

(b) the proposed alternative value for the Facility, expressed in MW as a sent out value, specified in the report described in clause 4.10.3A(c), where AEMO must use the proposed alternative value in accordance with clause 4.11.2A,

and adjusted for Peak Capacity Credits assigned to the Facility.

4.11.3BD. The Required Level for a Non-Scheduled Facility, assigned Certified Reserve Capacity under 4.11.1(bD), is calculated by AEMO using the Peak Capacity Credits assigned to the Facility and temperature dependence information submitted to AEMO under clauses 4.10.1(fD) or provided in Standing Data (if available) and converted to a sent out basis to 41 degrees Celsius.

4.11.3C. For each five year period, beginning with the period commencing on 1 January 2031, the Economic Regulation Authority must, by 1 April of the first year of that period, conduct a review of the Relevant Level Method. In conducting the review, the Economic Regulation Authority must examine the effectiveness of the Relevant Level Method in meeting the State Electricity Objective, and may examine any other matters that the Economic Regulation Authority considers to be relevant.

4.11.3D. In conducting a review under clause 4.11.3C, the Economic Regulation Authority must publish a draft report and invite submissions from Rule Participants and any other stakeholders the Economic Regulation Authority considers should be consulted.

4.11.3E. At the conclusion of a review under clause 4.11.3C, the Economic Regulation Authority must publish a final report containing:

(a) details of the Economic Regulation Authority's review of the Relevant Level Method;

(b) a summary of the submissions received during the consultation period;

(c) the Economic Regulation Authority's response to any issues raised in those submissions; and

(d) any recommended amendments to the Relevant Level Method which the Economic Regulation Authority intends to progress as a Rule Change Proposal.

4.11.4. Subject to clauses 4.11.4A and 4.11.12, when assigning Peak Certified Reserve Capacity, AEMO must assign a Capability Class to apply to the relevant Facility or component of a Facility as follows:

(a) Capability Class 1 if:

i. the Peak Certified Reserve Capacity is not associated with a Facility which is registered as, or is expected to be registered as a Non-Scheduled Facility; and

ii. AEMO reasonably expects the Facility or component of a Facility to be available to be dispatched for the MW quantity of its Peak Certified Reserve Capacity for all Trading Intervals in a Capacity Year, allowing for Outages; or

(b) Capability Class 2 if the Peak Certified Reserve Capacity:

i. is not associated with a Facility which is registered as, or is expected to be registered as, a Non-Scheduled Facility; and

ii. is:

1. associated with a Demand Side Programme or Electric Storage Resource; or

2. has energy or availability limitations such that AEMO does not expect it to be available to be dispatched for the MW quantity of its Peak Certified Reserve Capacity in all Trading Intervals in a Capacity Year but, allowing for Outages, AEMO reasonably expects it to be available to be dispatched for the MW quantity of its Peak Certified Reserve Capacity during all Default Peak Electric Storage Resource Obligation Intervals on each Business Day; and

(c) otherwise; Capability Class 3.

4.11.4A. When AEMO assigns a Capability Class to apply to the relevant Facility, if a Facility comprises Facility Technology Types with different Capability Classes, then the Capability Class of the Facility is:

(a) Capability Class 3, if the Facility has a Facility Technology Type assigned to Capability Class 3 with the highest, or equal highest, Peak Certified Reserve Capacity within the Facility;

(b) Capability Class 1, if clause 4.11.4A(a) does not apply and the Facility has a Facility Technology Type assigned to Capability Class 1 with the highest, or equal highest, Peak Certified Reserve Capacity within the Facility; or

(c) Capability Class 2, if clauses 4.11.4A(a) and 4.11.4A(b) do not apply.

4.11.5. In assigning Certified Reserve Capacity to a Facility, AEMO may:

(a) require Network Operators to confirm that the data and information related to clause 4.10.1(bA) provided to AEMO by or on behalf of an applicant for Certified Reserve Capacity is complete, accurate and up to date; and

(b) request that a Network Operator assess the data and information related to clause 4.10.1(bA) provided to AEMO by or on behalf of an applicant for Certified Reserve Capacity and provide its opinion, acting reasonably, of whether the Facility will be entitled to have network access before the date specified in clause 4.10.1(c)(iii)(7),

and Network Operators must use their best endeavours to cooperate with such requests and provide the information requested within the timeframe specified by AEMO in the request.

4.11.6. AEMO must accredit not less than two independent experts at any time to prepare reports on the estimated Reserve Capacity of an Intermittent Generating System or a Non-Scheduled Facility (excluding if clause 4.11.1(bD)(ii) applies) that are yet to commence operation, at the expense of the applicant. AEMO:

(a) must publish the contact details of these accredited independent experts on the WEM Website;

(b) must ensure that any expert it accredits is familiar with the meaning of the value to be estimated; and

(c) may remove accreditation of an expert at any time, but must allow the expert to complete any work in progress as an accredited expert at the time accreditation is removed.

4.11.7. If a report provided by a Market Participant under clause 4.10.3 is used to determine the Certified Reserve Capacity of a Facility or a component of a Facility, then once the Facility is fully operational, AEMO must conduct a review to compare:

(a) the estimates in the report of expected sent out energy in historical Trading Intervals; and

(b) the actual energy sent out by the Facility or the component of the Facility,

under similar operating conditions, including temperature, insolation, and wind speed.

4.11.8. AEMO must conduct at least two reviews under clause 4.11.7 for each Facility for which a report is provided under clause 4.10.3:

(a) one review, one year after AEMO determines that the Facility is fully operational;

(b) one review, between four and five years after AEMO determines that the Facility is in Commercial Operation; and

(c) up to two additional reviews between one and four years after AEMO determines that the Facility is fully operational.

4.11.9. If a review under clause 4.11.7 concludes that, based on the performance of the relevant Facility since it has been in Commercial Operation, the estimates in the report provided under clause 4.10.3 were unreasonably high, AEMO may remove accreditation of the relevant expert under clause 4.11.6(c).

4.11.10. Upon the receipt of advice provided in accordance with clause 4.10.4 for a Facility that has already been assigned Capacity Credits for the relevant Capacity Year, AEMO must review the information provided and decide whether it is necessary for AEMO to reassess the assignment of Certified Reserve Capacity to the Facility.

4.11.10A. If AEMO decides under clause 4.11.10 that it is necessary for AEMO to reassess the assignment of Certified Reserve Capacity to a Facility because the level assigned may have been too high, AEMO must:

(a) if information provided to AEMO under clause 4.10.4 would have resulted in AEMO assigning a lower, non-zero level of Certified Reserve Capacity to the Facility:

i. reduce the Capacity Credits assigned to that Facility accordingly; and

ii. advise the Market Participant within 90 days of receiving the submission under clause 4.10.4; or

(b) otherwise, do nothing.

4.11.11. If AEMO reassesses the amount of Certified Reserve Capacity assigned to a Facility under clauses 4.11.10 and 4.11.10A based on information provided to AEMO under clause 4.10.4 the Market Participant will pay a Reassessment Fee to cover the cost of processing the reassessment.

4.11.12. AEMO must not assign Certified Reserve Capacity to a Scheduled Facility, Semi-Scheduled Facility or Demand Side Programme unless AEMO is satisfied the Facility is likely to be able to receive, confirm, and implement Dispatch Instructions from AEMO in accordance with the WEM Procedures referred to in clauses 2.35.4 and 7.6.18.

4.12. Setting Reserve Capacity Obligations

4.12.1. The Reserve Capacity Obligations for each Market Participant holding Capacity Credits are as follows:

(a) a Market Participant must ensure that for each Trading Interval, the MW quantity of capacity provided through the Bilateral Submission and STEM Submission processes, as determined for the Market Participant under clause 4.26.2AE, is greater than or equal to the MW quantity determined for the Market Participant under clause 4.26.2AB; and

(b) a Market Participant must make the capacity associated with the Capacity Credits which are assigned to its Registered Facility for each Dispatch Interval available for dispatch by AEMO in accordance with Chapter 7, up to the Peak Reserve Capacity Obligation Quantity for the Registered Facility for the relevant Dispatch Interval.

4.12.2. A Market Participant holding Capacity Credits must also comply with the following obligations:

(a) the Market Participant must comply with the Outage planning obligations specified in sections 3.18 to 3.21;

(b) the Market Participant must submit to tests of availability of capacity conducted in accordance with section 4.25;

(c) the Market Participant must comply with Reserve Capacity performance monitoring obligations in accordance with section 4.27; and

(d) the Market Participant must, at least three months before the start of the first Capacity Year for which it holds Flexible Capacity Credits in relation to a Facility, apply for Frequency Co-optimised Essential System Services accreditation under clause 2.34A.2 for that Facility for any Frequency Co-optimised Essential System Services the Facility is capable of providing in a Capacity Year.

4.12.3. If a Facility assigned Capacity Credits is not a Registered Facility for any time period during which Reserve Capacity Obligations apply for the Facility, then the Market Participant which holds the Capacity Credits assigned to the Facility will be deemed to have failed to satisfy the Reserve Capacity Obligations for the Facility during that time period.

4.12.4. AEMO must determine the Peak Reserve Capacity Obligation Quantity for each Scheduled Facility, Semi-Scheduled Facility, Non-Scheduled Facility or Demand Side Programme for each Dispatch Interval as follows:

(a) the Peak Reserve Capacity Obligation Quantity for a Registered Facility is equal to zero for each Dispatch Interval in which no Peak Capacity Credits are assigned to the Registered Facility;

(b) the Peak Reserve Capacity Obligation Quantity for a Non-Scheduled Facility is equal to zero for each Dispatch Interval;

(c) the Peak Reserve Capacity Obligation Quantity for a Demand Side Programme:

i. for a Dispatch Interval that falls within a period specified for the Demand Side Programme under clause 4.10.1(f)(vi), is equal to the number of Peak Capacity Credits assigned to the Demand Side Programme for the Dispatch Interval, except if clauses 4.12.4(c)(iii) or 4.12.4(c)(iv) apply;

ii. for a Dispatch Interval that falls outside the periods specified for the Demand Side Programme under clause 4.10.1(f)(vi), is equal to zero;

iii. will equal zero for the remainder of a Capacity Year once the capacity of the Demand Side Programme has been dispatched under clause 7.6.5A for the number of Trading Intervals per Capacity Year that is specified for the Demand Side Programme under clause 4.10.1(f)(ii) plus, if the Demand Side Programme has Flexible Capacity Credits, the number of Trading Intervals per Capacity Year that is specified for the Demand Side Programme under clause 4.10.1(f)(iiA); and

iv. will equal zero for the remainder of a Trading Day once the capacity of the Demand Side Programme has been dispatched under clause 7.6.5A for the number of Trading Intervals per Trading Day that is specified for the Demand Side Programme under clause 4.10.1(f)(iii); and

(d) the Peak Reserve Capacity Obligation Quantity for a Scheduled Facility or Semi-Scheduled Facility which is assigned Peak Capacity Credits for a Dispatch Interval is equal to the sum of the Peak Reserve Capacity Obligation Quantities determined under clause 4.12.5 for each Separately Certified Component of the Registered Facility for the relevant Dispatch Interval.

~~4.12.4. AEMO must determine the Reserve Capacity Obligation Quantity for each Scheduled Facility, Semi-Scheduled Facility, Non-Scheduled Facility or Demand Side Programme for each Dispatch Interval as follows:~~

~~(a) the Reserve Capacity Obligation Quantity for a Registered Facility is equal to zero for each Dispatch Interval in which no Capacity Credits are assigned to the Registered Facility;~~

~~(b) the Reserve Capacity Obligation Quantity for a Non-Scheduled Facility is equal to zero for each Dispatch Interval;~~

~~(c) the Reserve Capacity Obligation Quantity for a Demand Side Programme:~~

~~i. for a Dispatch Interval that falls within a period specified for the Demand Side Programme under clause 4.10.1(f)(vi), is equal to the number of Capacity Credits assigned to the Demand Side Programme~~

~~for the Dispatch Interval, except where clauses 4.12.4(c)(iii) or 4.12.4(c)(iv) apply;~~

~~ii. for a Dispatch Interval that falls outside the periods specified for the Demand Side Programme under clause 4.10.1(f)(vi), is equal to zero;~~

~~iii. will equal zero for the remainder of a Capacity Year once the capacity of the Demand Side Programme has been dispatched under clause 7.6.5A for the number of hours per Capacity Year that is specified for the Demand Side Programme under clause 4.10.1(f)(ii); and~~

~~iv. will equal zero for the remainder of a Trading Day once the capacity of the Demand Side Programme has been dispatched under clause 7.6.5A for the number of hours per Trading Day that is specified for the Demand Side Programme under clause 4.10.1(f)(iii); and~~

~~(d) the Reserve Capacity Obligation Quantity for a Scheduled Facility or Semi-Scheduled Facility which is assigned Capacity Credits for a Dispatch Interval is equal to the sum of the Reserve Capacity Obligation Quantities determined under clause 4.12.5 for each Separately Certified Component of the Registered Facility for the relevant Dispatch Interval.~~

4.12.5. AEMO must determine the Peak Reserve Capacity Obligation Quantity for each Separately Certified Component of a Scheduled Facility or Semi-Scheduled Facility, for each Dispatch Interval for which the Separately Certified Component is assigned ~~Peak~~ Peak Capacity Credits, as follows:

(a) the Peak Reserve Capacity Obligation Quantity for an Intermittent Generating System is equal to zero for each Dispatch Interval;

~~(a) the Reserve Capacity Obligation Quantity for an Intermittent Generating System is equal to zero for each Dispatch Interval;~~

(b) subject to the exceptions specified in clauses 4.12.5(d) and 4.12.5(e), the Peak Reserve Capacity Obligation Quantity for a Non-Intermittent Generating System:

i. for a Dispatch Interval during a Trading Day where the maximum daily temperature at the site of the Non-Intermittent Generating System does not exceed 41 degrees Celsius, is equal to the number of Peak Capacity Credits assigned to the Non-Intermittent Generating System for the Dispatch Interval; and

ii. for a Dispatch Interval during a Trading Day where the maximum daily temperature at the site of the Non-Intermittent Generating System exceeds 41 degrees Celsius, is equal to:

$$PCC \times MSOC45 / MSOC41$$

where:

1. PCC is the number of Peak Capacity Credits assigned to the Non-Intermittent Generating System for the Dispatch Interval;

2. MSOC45 is the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from the Non-Intermittent Generating System when it is operated normally at an ambient temperature of 45 degrees Celsius, as specified in Standing Data; and

3. MSOC41 is the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from the Non-Intermittent Generating System when it is operated normally at an ambient temperature of 41 degrees Celsius, as specified in Standing Data;

(c) subject to the exceptions specified in clauses 4.12.5(d), 4.12.5(f), 4.12.5(g) and 4.12.5(h),~~clauses 4.12.5(d), 4.12.5(f) and 4.12.5(g),~~ the Peak Reserve Capacity Obligation Quantity for an Electric Storage Resource:

i. for a Dispatch Interval which does not fall within a Peak Electric Storage Resource Obligation Interval for that Electric Storage Resource, is equal to zero;

ii. for a Dispatch Interval which falls within a Peak Electric Storage Resource Obligation Interval for that Electric Storage Resource, during a Trading Day where the maximum daily temperature at the site of the Electric Storage Resource does not exceed 41 degrees Celsius, is equal to the number of Peak Capacity Credits assigned to the Electric Storage Resource for the Dispatch Interval; and

iii. for a Dispatch Interval which falls within a Peak Electric Storage Resource Obligation Interval for the Electric Storage Resource, during a Trading Day where the maximum daily temperature at the site of the Electric Storage Resource exceeds 41 degrees Celsius, is equal to:

PCC × MSOC45 / MSOC41

where:

1. PCC is the number of Peak Capacity Credits assigned to the Electric Storage Resource for the Dispatch Interval;

2. MSOC45 is the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from the Electric Storage Resource when it is operated normally at an ambient temperature of 45 degrees Celsius, as specified in Standing Data; and

3. MSOC41 is the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from the Electric Storage Resource when it is operated normally at an ambient temperature of 41 degrees Celsius, as specified in Standing Data;

(d) if a Scheduled Facility or Semi-Scheduled Facility is subject to Commissioning Test Plan approved by AEMO in a Dispatch Interval, the Peak Reserve Capacity Obligation Quantity for each Separately Certified Component of the Registered Facility is equal to zero for the Dispatch Interval and clauses 4.12.5(e) and 4.12.5(f) do not apply;

~~(d) where a Scheduled Facility or Semi-Scheduled Facility is subject to Commissioning Test Plan approved by AEMO in a Dispatch Interval, the Reserve Capacity Obligation Quantity for each Separately Certified Component of the Registered Facility is equal to zero for the Dispatch Interval and clauses 4.12.5(e) and 4.12.5(f) do not apply;~~

(e) subject to clause 4.12.5(d), if a Separately Certified Component which is a Non-Intermittent Generating System is subject to a Planned Outage in a Dispatch Interval, the Peak Reserve Capacity Obligation Quantity of the Separately Certified Component for the Dispatch Interval is reduced from the value determined under clause 4.12.5(b) by the Peak Capacity Adjusted Planned Outage Quantity determined for the Separately Certified Component under clause 3.21.8;

~~(e) subject to clause 4.12.5(d), where a Separately Certified Component which is a Non-Intermittent Generating System is subject to a Planned Outage in a Dispatch Interval, the Reserve Capacity Obligation Quantity of the Separately Certified Component for the Dispatch Interval is reduced from the value determined under clause 4.12.5(b) by the Capacity Adjusted Planned Outage Quantity determined for the Separately Certified Component under clause 3.21.8;~~

(f) subject to clauses 4.12.5(d), 4.12.5(g), and 4.12.5(h) if a Separately Certified Component which is an Electric Storage Resource is subject to a Planned Outage in a Dispatch Interval, the Peak Reserve Capacity Obligation Quantity of the Separately Certified Component for the Dispatch Interval is reduced from the value determined under clause 4.12.5(c) by the Peak Capacity Adjusted Planned Outage Quantity determined for the Separately Certified Component under clause 3.21.8;

~~(f) subject to clauses 4.12.5(d) and 4.12.5(g), where a Separately Certified Component which is an Electric Storage Resource is subject to a Planned Outage in a Dispatch Interval, the Reserve Capacity Obligation Quantity of the Separately Certified Component for the Dispatch Interval is reduced from the value determined under clause 4.12.5(c) by the Capacity Adjusted Planned Outage Quantity determined for the Separately Certified Component under clause 3.21.8; and~~

(g) if:

i. AEMO issues a direction under clause 7.7.5 in respect of a Registered Facility containing a Separately Certified Component which is an Electric Storage Resource; and

ii. the direction requires the Registered Facility to operate at a level higher than its Peak Reserve Capacity Obligation Quantity in the Dispatch Interval to which the direction relates,

the Peak Reserve Capacity Obligation Quantity for the Electric Storage Resource is reduced to zero for all Dispatch Intervals subsequent to the Dispatch Interval in which the direction is issued in the relevant Trading Day and clause 4.12.5(f) does not apply for those Dispatch Intervals; and

(h) if:

i. AEMO issues a Dispatch Instruction to a Registered Facility containing an Electric Storage Resource which holds Flexible Capacity Credits; and

ii. the Dispatch Instruction requires the Registered Facility to Inject in a Dispatch Interval which is within a Flexible Electric Storage Resource Obligation Interval and not within a Peak Electric Storage Resource Obligation Interval for that Electric Storage Resource,

the Peak Reserve Capacity Obligation Quantity for the Electric Storage Resource is reduced to zero in all subsequent Dispatch Intervals in the relevant Trading Day which are not within a Flexible Electric Storage Resource Obligation Interval, and clause 4.12.5(f) does not apply for those Dispatch Intervals.

~~(g) where:~~

~~i. AEMO issues a direction under clause 7.7.5 in respect of a Registered Facility containing a Separately Certified Component which is an Electric Storage Resource; and~~

~~ii. the direction requires the Registered Facility to operate at a level higher than its Reserve Capacity Obligation Quantity in the Dispatch Interval to which the direction relates,~~

~~the Reserve Capacity Obligation Quantity for the Electric Storage Resource is reduced to zero for all Dispatch Intervals subsequent to the Dispatch Interval in which the direction is issued in the relevant Trading Day and clause 4.12.5(f) does not apply for those Dispatch Intervals.~~

4.12.6. The Peak Reserve Capacity Obligation Quantity for a Registered Facility f for a Trading Interval t is equal to:

$$PRCOQ(f,t)=\frac{\sum_{DI\in t} PRCOQ(f,DI)}{6}$$

where:

(a) $DI\in t$ denotes all Dispatch Intervals DI in Trading Interval t; and

(b) PRCOQ(f,DI) is the Peak Reserve Capacity Obligation Quantity determined for Registered Facility f for Dispatch Interval DI under clause 4.12.4.

4.12.7. AEMO must determine the Flexible Reserve Capacity Obligation Quantity for each Scheduled Facility, Semi-Scheduled Facility, or Demand Side Programme for each Dispatch Interval as follows:

(a) the Flexible Reserve Capacity Obligation Quantity for a Registered Facility is equal to zero for each Dispatch Interval in which no Flexible Capacity Credits are assigned to the Registered Facility;

(b) the Flexible Reserve Capacity Obligation Quantity for a Demand Side Programme:

i. for a Dispatch Interval that falls within a period specified for the Demand Side Programme under clause 4.10.1(f)(vi), is equal to the number of Flexible Capacity Credits assigned to the Demand Side Programme for the Dispatch Interval, except if clauses 4.12.7(b)(iii) or 4.12.7(b)(iv) apply;

ii. for a Dispatch Interval that falls outside the periods specified for the Demand Side Programme under clause 4.10.1(f)(vi), is equal to zero;

iii. will equal zero for the remainder of a Capacity Year once the capacity of the Demand Side Programme has been dispatched under clause 7.6.5A for the number of Trading Intervals per Capacity Year that is specified for the Demand Side Programme under clause 4.10.1(f)(ii), plus the number of Trading Intervals per Capacity Year that is specified for the Demand Side Programme under clause 4.10.1(f)(iiA); and

iv. will equal zero for the remainder of a Trading Day once the capacity of the Demand Side Programme has been dispatched under clause 7.6.5A for the number of Trading Intervals per Trading Day that is specified for the Demand Side Programme under clause 4.10.1(f)(iv); and

(c) the Flexible Reserve Capacity Obligation Quantity for a Scheduled Facility or Semi-Scheduled Facility which is assigned Flexible Capacity Credits for a Dispatch Interval is equal to the sum of the Flexible Reserve Capacity Obligation Quantities determined under clause 4.12.8 for each Separately Certified Component of the Registered Facility for the relevant Dispatch Interval.

4.12.8. AEMO must determine the Flexible Reserve Capacity Obligation Quantity for each Separately Certified Component of a Scheduled Facility or Semi-Scheduled Facility, for each Dispatch Interval for which the Separately Certified Component is assigned Flexible Capacity Credits, as follows:

(a) the Flexible Reserve Capacity Obligation Quantity for an Intermittent Generating System is equal to zero for each Dispatch Interval;

(b) subject to the exceptions specified in clauses 4.12.8(d) and 4.12.8(e), the Flexible Reserve Capacity Obligation Quantity for a Non-Intermittent Generating System:

i. for a Dispatch Interval during a Trading Day where the maximum daily temperature at the site of the Non-Intermittent Generating System does not exceed 41 degrees Celsius, is equal to the number of Flexible Capacity Credits assigned to the Non-Intermittent Generating System for the Dispatch Interval; and

ii. for a Dispatch Interval during a Trading Day where the maximum daily temperature at the site of the Non-Intermittent Generating System exceeds 41 degrees Celsius, is equal to:

FCC × MSOC45 / MSOC41

where:

1. FCC is the number of Flexible Capacity Credits assigned to the Non-Intermittent Generating System for the Dispatch Interval;

2. MSOC45 is the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from the Non-Intermittent Generating System when it is operated normally at an ambient temperature of 45 degrees Celsius, as specified in Standing Data; and

3. MSOC41 is the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from the Non-Intermittent Generating System when it is operated normally at an ambient temperature of 41 degrees Celsius, as specified in Standing Data;

(c) subject to the exceptions specified in clauses 4.12.8(d), 4.12.8(f), and 4.12.8(g), the Flexible Reserve Capacity Obligation Quantity for an Electric Storage Resource:

i. for a Dispatch Interval which does not fall within a Flexible Electric Storage Resource Obligation Interval for that Electric Storage Resource, is equal to zero;

ii. for a Dispatch Interval which falls within a Flexible Electric Storage Resource Obligation Interval for that Electric Storage Resource, during a Trading Day where the maximum daily temperature at the site of the Electric Storage Resource does not exceed 41 degrees Celsius, is equal to the number of Flexible Capacity Credits assigned to the Electric Storage Resource for the Dispatch Interval; and

iii. for a Dispatch Interval which falls within a Flexible Electric Storage Resource Obligation Interval, during a Trading Day where the maximum daily temperature at the site of the Electric Storage Resource exceeds 41 degrees Celsius, is equal to:

FCC × MSOC45 / MSOC41

where:

1. FCC is the number of Flexible Capacity Credits assigned to the Electric Storage Resource for the Dispatch Interval;

2. MSOC45 is the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from the Electric Storage Resource when it is operated normally at an ambient temperature of 45 degrees Celsius, as specified in Standing Data; and

3. MSOC41 is the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from the Electric Storage Resource when it is operated normally at an ambient temperature of 41 degrees Celsius, as specified in Standing Data;

(d) if a Scheduled Facility or Semi-Scheduled Facility is subject to a Commissioning Test Plan approved by AEMO in a Dispatch Interval, the Flexible Reserve Capacity Obligation Quantity for each Separately Certified Component of the Registered Facility is equal to zero for the Dispatch Interval and clauses 4.12.8(e) and 4.12.8(f) do not apply;

(e) subject to clause 4.12.8(d), if a Separately Certified Component which is a Non-Intermittent Generating System is subject to a Planned Outage in a Dispatch Interval, the Flexible Reserve Capacity Obligation Quantity of the Separately Certified Component for the Dispatch Interval is reduced from the value determined under clause 4.12.8(b) by the Flexible Capacity Adjusted Planned Outage Quantity determined for the Separately Certified Component under clause 3.21.16;

(f) subject to clauses 4.12.8(d) and 4.12.8(g), if a Separately Certified Component which is an Electric Storage Resource is subject to a Planned Outage in a Dispatch Interval, the Flexible Reserve Capacity Obligation Quantity of the Separately Certified Component for the Dispatch Interval is reduced from the value determined under clause 4.12.8(c) by the Flexible Capacity Adjusted Planned Outage Quantity determined for the Separately Certified Component under clause 3.21.16; and

(g) if:

i. AEMO issues a direction under clause 7.7.5 in respect of a Registered Facility containing a Separately Certified Component which is an Electric Storage Resource; and

ii. the direction requires the Registered Facility to operate at a level higher than its Peak Reserve Capacity Obligation Quantity in the Dispatch Interval to which the direction relates,

the Flexible Reserve Capacity Obligation Quantity for the Electric Storage Resource is reduced to zero for all Dispatch Intervals subsequent to the Dispatch Interval in which the direction is issued in the relevant Trading Day and clause 4.12.8(f) does not apply for those Dispatch Intervals.

4.12.9. The Flexible Reserve Capacity Obligation Quantity for a Registered Facility f for a Trading Interval t is equal to:

$$FRCOQ(f,t)=\frac{\sum_{DI\in t} FRCOQ(f,DI)}{6}$$

where:

(a) DI∈t denotes all Dispatch Intervals DI in Trading Interval t; and

(b) FRCOQ(f,DI) is the Flexible Reserve Capacity Obligation Quantity determined for Registered Facility f for Dispatch Interval DI under clause 4.12.7.

~~4.12.6. The Reserve Capacity Obligation Quantity for a Registered Facility f for a Trading Interval t is equal to:~~

$$~~RCOQ(f,t) = \frac{\sum_{DI\in t} RCOQ(f,DI)}{6}~~$$

~~where:~~

~~(a) DI∈t denotes all Dispatch Intervals DI in Trading Interval t; and~~

~~(b) RCOQ(f,DI) is the Reserve Capacity Obligation Quantity determined for Registered Facility f for Dispatch Interval DI under clause 4.12.4.~~

4.13. Reserve Capacity Security

4.13.1. If AEMO assigns Certified Reserve Capacity to a Facility (which, for the purposes of this section 4.13, excludes a Demand Side Programme) that is yet to enter service (or re-enter service after significant maintenance or having been upgraded), the relevant Market Participant must ensure that AEMO holds the benefit of a Reserve Capacity Security that is:

(a) in the form specified in clause 4.13.5; and

(b) an amount determined under clause 4.13.2(a) by the date and time specified in clause 4.1.13.

4.13.1A. For the purposes of this section 4.13, if an existing Facility is undergoing significant maintenance or being upgraded the requirement to provide Reserve Capacity Security applies only to the part of the Facility either undergoing significant maintenance or being upgraded.

4.13.1B. The obligation under clause 4.13.1 to provide Reserve Capacity Security only applies if AEMO does not already hold the benefit of a Reserve Capacity Security for the Facility or Facility upgrade.

4.13.1C. For the purposes of this section 4.13, a Facility includes part of a Facility, any upgrade or significant maintenance to an existing Facility, unless otherwise stated.

4.13.1D. If AEMO has drawn upon the Reserve Capacity Security for a Facility under clause 4.13.11A, and the Market Participant continues to have an obligation under clause

4.13.1, then the Market Participant must ensure that AEMO holds the benefit of a replacement Reserve Capacity Security by a date and time specified by AEMO, which Reserve Capacity Security must be:

(a) in the form specified in clause 4.13.5; and

(b) an amount not less than the amount required under clause 4.13.2.

4.13.2. For the purposes of this section 4.13 the amount of Reserve Capacity Security is:

(a) at the time and date referred to in clause 4.1.13, 25 percent of the Peak Benchmark Reserve Capacity Price included in the Request for Expressions of Interest issued for the relevant Reserve Capacity Cycle, expressed in $/MW per year, multiplied by an amount equal to:

i. the Peak Certified Reserve Capacity assigned to the Facility; less

ii. the total of any Peak Certified Reserve Capacity amount specified in accordance with clause 4.14.1(d) or referred to in clause 4.14.7(c)(ii); and

(b) at the time and date referred to in clause 4.1.21, 25 percent of the Peak Benchmark Reserve Capacity Price included in the Request for Expressions of Interest issued for the relevant Reserve Capacity Cycle, expressed in $/MW per year, multiplied by an amount equal to the total number of Peak Capacity Credits assigned to the Facility under clause 4.20.5A.

4.13.2A. A Market Participant may apply to AEMO for a recalculation of the amount of Reserve Capacity Security required to be held for a Facility using the formula in clause 4.13.2(b) after the time and date referred to in clause 4.1.21.

4.13.2B. Within 10 Business Days after receipt of a request from a Market Participant under clause 4.13.2A AEMO must recalculate the amount of Reserve Capacity Security required to be held by a Facility using the formula in clause 4.13.2(b). If the amount recalculated by AEMO under clause 4.13.2(b) is less than that originally calculated under clause 4.13.2(a) then AEMO must:

(a) notify the Market Participant of the result of the calculation;

(aA) if the amount recalculated under clause 4.13.2(b) is zero, return the Reserve Capacity Security;

(b) if the amount recalculated under clause 4.13.2(b) is greater than zero, offer the Market Participant the opportunity to replace the Reserve Capacity Security in accordance with clause 4.13.2C; and

(c) if the Market Participant provides a replacement Reserve Capacity Security in accordance with clause 4.13.2C, return any excess Reserve Capacity Security.

4.13.2C. If under clause 4.13.2B AEMO notifies a Market Participant that excess Reserve Capacity Security is currently held, then a Market Participant may replace the existing Reserve Capacity Security with replacement Reserve Capacity Security which must:

(a) be in the form specified in clause 4.13.5;

(b) be an amount not less than the amount required under clause 4.13.2(b); and

(c) become effective before AEMO returns any excess Reserve Capacity Security.

4.13.3. If a Market Participant's existing Reserve Capacity Security is due to expire or cease to have effect for any other reason and after that expiration the Market Participant will continue to have an obligation to ensure AEMO holds the benefit of a Reserve Capacity Security under clause 4.13.1, then that Market Participant must ensure that AEMO holds the benefit of replacement Reserve Capacity Security that is:

(a) in the form specified in clause 4.13.5;

(b) an amount not less than the amount required under clause 4.13.2; and

(c) effective when the existing Reserve Capacity Security expires or otherwise ceases to have effect.

4.13.4. If a Market Participant's Reserve Capacity Security is affected by any of the circumstances specified in the WEM Procedure referred to in clause 4.13.8 that may require replacement Reserve Capacity Security, then the Market Participant must ensure that AEMO holds the benefit of replacement Reserve Capacity Security that is:

(a) in the form specified in clause 4.13.5;

(b) an amount not less than the level required under clause 4.13.2; and

(c) effective before the end of the next Business Day or within any longer period approved in writing by AEMO after the Market Participant first becomes aware of the relevant change in circumstance (whether by reason of the Market Participant's own knowledge or a notification by AEMO).

4.13.5. The Reserve Capacity Security for a Market Participant must be:

(a) an obligation in writing that:

i. is from a Security Provider;

ii. is a guarantee or bank undertaking in a form prescribed by AEMO;

iii. is duly executed by the Security Provider and delivered unconditionally to AEMO;

iv. constitutes valid and binding unsubordinated obligations of the Security Provider to pay to AEMO amounts in accordance with its terms which relate to the relevant Market Participant's obligations under the ESM Rules to pay compensation under clause 4.13.11; and

v. permits drawings or claims by AEMO up to a stated amount; or

(b) if AEMO in its discretion considers it an acceptable alternative in the circumstances to the obligation under clause 4.13.5(a), a Security Deposit.

4.13.6. If Reserve Capacity Security is provided as a Security Deposit in accordance with clause 4.13.5(b), it will accrue interest daily at the AEMO Deposit Rate, and AEMO must pay the Market Participant the interest accumulated at the end of each calendar month less any liabilities and expenses incurred by AEMO, including bank fees and charges.

4.13.7. [Blank]

4.13.8. AEMO must develop a WEM Procedure dealing with:

(a) determining Reserve Capacity Security;

(b) assessing persons against the Acceptable Credit Criteria;

(c) Reserve Capacity Security arrangements, including:

i. the form of acceptable guarantees and bank undertakings;

ii. where and how it will hold Security Deposits and how the costs and fees of holding Security Deposits will be met;

iiA. the circumstances that may require Reserve Capacity Security to be replaced for the purposes of clause 4.13.4; and

iii. the application of monies drawn from Reserve Capacity Security in respect of amounts payable by the relevant Market Participant to AEMO under clause 4.13.11A; and

(d) other matters relating to section 4.13.

4.13.9. If a Market Participant does not comply with clause 4.13.1 in full by the date and time specified in clause 4.1.13 for the Reserve Capacity Cycle to which the certification relates, the Certified Reserve Capacity assigned to that Facility will lapse for the purposes of these ESM Rules.

4.13.10. If a Market Participant that provides Reserve Capacity Security in respect of a Facility:

(a) either:

i. operates the Facility at a level which is at least equivalent to its Required Level, adjusted to 90 percent of the level of Peak Capacity Credits specified in clause 4.20.5A, in at least two Trading Intervals before the end of the relevant Capacity Year; or

ii. provides AEMO with a report under clause 4.13.10C, which specifies that the Facility can operate at a level which is at least equivalent to its

Required Level, adjusted to 90 percent of the level of Peak Capacity Credits specified in clause 4.20.5A; and

(b) is considered by AEMO to be in Commercial Operation,

then AEMO will return the Reserve Capacity Security to the Market Participant as soon as practicable after the end of the relevant Capacity Year and in any event by 30 November of Year 4 of the relevant Reserve Capacity Cycle.

4.13.10A A Market Participant may request AEMO to determine that a Facility is in Commercial Operation for the purposes of Chapter 4 of these ESM Rules.

4.13.10B. On receipt of a request made under clause 4.13.10A AEMO must determine, within 20 Business Days, whether the Facility is in Commercial Operation. In making each such determination AEMO:

(a) must have regard to the following, if applicable:

i. whether the Facility has completed an approved Commissioning Test under clause 3.21A and subsequently produced energy for at least two Trading Intervals;

ii. any formal advice received from the Market Participant that it has completed an approved Commissioning Test under clause 3.21A and is commercially operational; and

iii. in accordance with clause 2.29.12, whether the Facility has installed Facility Sub-Metering; and

(b) may have regard to any additional information AEMO considers relevant.

4.13.10C. For a Facility, or component of a Facility, assigned a quantity of Certified Reserve Capacity using the Relevant Level Method, a Market Participant may provide AEMO with a report, in accordance with the relevant WEM Procedure, prepared by an independent expert accredited by AEMO, before the end of the relevant Capacity Year. The report must specify the independent expert's best estimate of the level to which the Facility can operate, expressed in MW as a sent out value, at the time the report is prepared.

4.13.11. If a Market Participant that provides a Reserve Capacity Security in respect of a Facility fails to operate that Facility in accordance with clauses 4.13.10(a) and (b) before the end of the relevant Capacity Year then the Market Participant must pay to AEMO, as compensation to the market, an amount equal to the Reserve Capacity Security amount for that Facility as soon as practicable after the end of the relevant Capacity Year and in any event by 30 November of Year 4 of the relevant Reserve Capacity Cycle.

4.13.11A. The payment obligation under clause 4.13.11 may be satisfied by AEMO drawing upon the Reserve Capacity Security for the Facility.

4.13.11B. AEMO must pay the amount claimed under clauses 4.13.11 or 4.13.11A, as compensation, to Market Participants in proportion to their Peak Individual Reserve Capacity Requirements during the relevant Trading Day in accordance with Chapter 9.

4.13.12. If the Reserve Capacity Security drawn upon under clause 4.13.11A is a Security Deposit, then the Market Participant forfeits the amount of the Security Deposit.

4.13.13. A Market Participant may apply to AEMO for the release of any Reserve Capacity Security held by AEMO, at any time prior to the end of the relevant Capacity Year, if the Reserve Capacity Security relates to a Facility that:

(a) has operated at a level equivalent to its Required Level, adjusted to 100 percent of the level of Peak Capacity Credits specified in clause 4.20.5A, in at least two Trading Intervals during the relevant Capacity Year; and

(b) is considered by AEMO to be in Commercial Operation.

4.13.14 If AEMO receives an application made under clause 4.13.13 or clause 4.28C.12 it must, within 10 Business Days:

(a) determine whether the need to maintain the Reserve Capacity Security has ceased;

(b) notify the Market Participant of its determination;

(c) if the Reserve Capacity Security is a Security Deposit that is no longer required to be held, return the Security Deposit (plus interest earned); and

(d) if the Reserve Capacity Security is not a Security Deposit and is no longer required to be held, notify the Security Provider that AEMO relinquishes any rights to draw on the Reserve Capacity Security.

4.13A. DSP Reserve Capacity Security

4.13A.1. If AEMO assigns Certified Reserve Capacity to a Demand Side Programme, the relevant Market Participant must ensure that AEMO holds the benefit of DSP Reserve Capacity Security that is:

(a) if:

i. clause 4.1.13 applies, for an amount determined under clause 4.13A.2(a) by the date and time referred to in clause 4.1.13; or

ii. clause 4.1.21 applies, for an amount determined under clause 4.13A.2(b) by the date and time referred to in clause 4.1.21; and

(b) in the form specified in clause 4.13A.6.

4.13A.2. For the purposes of this section 4.13A, the amount of DSP Reserve Capacity Security is:

(a) 25 percent of the Peak Benchmark Reserve Capacity Price included in the Request for Expressions of Interest issued for the relevant Reserve Capacity Cycle, expressed in $/MW per year, multiplied by an amount equal to:

i. the Peak Certified Reserve Capacity assigned to the Demand Side Programme; less

ii. the total of any Peak Certified Reserve Capacity amount specified in accordance with clause 4.14.1(d) or referred to in clause 4.14.7(c)(ii); or

(b) 25 percent of the Peak Benchmark Reserve Capacity Price included in the Request for Expressions of Interest issued for the relevant Reserve Capacity Cycle, expressed in $/MW per year, multiplied by an amount equal to the total number of Peak Capacity Credits assigned to the Demand Side Programme under clause 4.20.5A.

4.13A.3. If:

(a) AEMO holds the benefit of a DSP Reserve Capacity Security in accordance with this section 4.13A in respect of a Demand Side Programme for a Reserve Capacity Cycle; and

(b) AEMO assigns Certified Reserve Capacity to the same Demand Side Programme for a subsequent Reserve Capacity Cycle,

then the DSP Reserve Capacity Security for the previous Reserve Capacity Cycle will be deemed to satisfy the requirement in clause 4.13A.1 for AEMO to have the benefit of DSP Reserve Capacity Security for the subsequent Reserve Capacity Cycle if:

(c) the amount of the DSP Reserve Capacity Security complies with clause 4.13A.4; and

(d) the DSP Reserve Capacity Security remains in force at all relevant times for the purposes of this section 4.13A.

4.13A.4. Subject to clause 4.13A.5, if a Market Participant is required to ensure that AEMO holds the benefit of DSP Reserve Capacity Security for more than one Reserve Capacity Cycle, the total amount of the DSP Reserve Capacity Security for all of those Reserve Capacity Cycles in aggregate is the highest amount determined under clause 4.13A.1.

4.13A.5. The amount determined under clause 4.13A.4 does not include Reserve Capacity Cycles for which the Demand Side Programme does not have any Reserve Capacity Obligations.

4.13A.5A. If a Market Participant has a single certified Demand Side Programme that:

(a) is subject to clause 4.10.1B;

(b) comprises multiple registered Demand Side Programmes for the relevant Capacity Year; and

(c) has previously provided a single DSP Reserve Capacity Security with respect to the certified Demand Side Programme in accordance with clause 4.13A.1,

then the single DSP Reserve Capacity Security is deemed to satisfy the requirement in clause 4.13A.1 with respect to all of the registered Demand Side Programmes that the single certified Demand Side Programme comprises.

4.13A.5B. If AEMO:

(a) holds a single DSP Reserve Capacity Security for multiple registered Demand Side Programmes under clause 4.13A.5A; and

(b) intends to draw down on DSP Reserve Capacity Security in respect of one of the registered Demand Side Programmes,

then AEMO must apportion the single DSP Reserve Capacity Security across the multiple registered Demand Side Programmes it relates to as follows:

$$DSPRCS(f) = DSPRCS(CF) \times \frac{CC(f)}{\sum_{i \in CF} CC(i)}$$

where:

(c) DSPRCS(f) denotes the DSP Reserve Capacity Security AEMO apportions to registered Demand Side Programme f under this clause;

(d) DSPRCS(CF) denotes the single DSP Reserve Capacity Security AEMO holds in respect of certified Demand Side Programme CF under clause 4.13A.5A which, for the avoidance of doubt, excludes any previous reductions in relation to the same Capacity Year resulting from previous payments made under clause 4.13A.15A;

(e) CC(f) denotes the number of Peak Capacity Credits allocated to the registered Demand Side Programme f in accordance with clause 2.29.5AB(a)(i);

(f) CC(i) denotes the number of Capacity Credits allocated to the registered Demand Side Programme i in accordance with clause 2.29.5AB(a)(i); and

(g) i∈CF denotes the set of registered Demand Side Programmes (i) comprising the certified Demand Side Programme (CF).

4.13A.6. The DSP Reserve Capacity Security for a Demand Side Programme must be:

(a) an obligation in writing that:

i. is from a Security Provider;

ii. is a guarantee or bank undertaking in a form prescribed by AEMO;

iii. is duly executed by the Security Provider and delivered unconditionally to AEMO;

iv. constitutes valid and binding unsubordinated obligations of the Security Provider to pay to AEMO amounts in accordance with its terms which

relate to the relevant Market Participant's obligations under the ESM Rules to pay compensation under this section 4.13A; and

v. permits drawings or claims by AEMO up to a stated amount; or

(b) if AEMO in its discretion considers it an acceptable alternative in the circumstances to the obligation under clause 4.13A.6(a), a Security Deposit.

4.13A.7. If, at any time, and for whatever reason, the amount of the DSP Reserve Capacity Security is less than the amount determined in accordance with clauses 4.13A.1 or 4.13A.4, as applicable, the Market Participant must immediately:

(a) in the case of a DSP Reserve Capacity Security in the form specified in clause 4.13A.6(a):

i. replace the DSP Reserve Capacity Security for the amount determined in accordance with clauses 4.13A.1 or 4.13A.4, as applicable; or

ii. provide a further DSP Reserve Capacity Security for the difference between the amount of the DSP Reserve Capacity Security and the amount determined in accordance with clauses 4.13A.1 or 4.13A.4, as applicable,

and, in both cases, the DSP Reserve Capacity Security must comply with clause 4.13A.6(a); or

(b) in the case of a Security Deposit, increase the amount of the Security Deposit to the amount determined in accordance with clauses 4.13A.1 or 4.13A.4, as applicable, and do all other things AEMO may require, including signing any deeds or other documents, to ensure AEMO has the benefit of the increase in the amount of the Security Deposit.

4.13A.8. In respect of a Reserve Capacity Cycle, after the time and date referred to in clause 4.1.21, a Market Participant may apply to AEMO for a recalculation of the amount of DSP Reserve Capacity Security required to be held for a Demand Side Programme under clauses 4.13A.1 or 4.13A.4, as applicable.

4.13A.9. Within ten Business Days after receipt of a request from a Market Participant under clause 4.13A.8, AEMO must recalculate the amount of DSP Reserve Capacity Security required to be held for a Demand Side Programme under clauses 4.13A.1 or 4.13A.4, as applicable. If the amount recalculated by AEMO under clauses 4.13A.1 or 4.13A.4, as applicable, is less than that previously calculated under clauses 4.13A.1 or 4.13A.4, as applicable, then AEMO must:

(a) notify the Market Participant of the result of the calculation;

(b) offer the Market Participant the opportunity to replace the DSP Reserve Capacity Security in accordance with clause 4.13A.10, and

(c) if the Market Participant provides a replacement DSP Reserve Capacity Security in accordance with clause 4.13A.10, return any excess DSP Reserve Capacity Security.

4.13A.10. If under clause 4.13A.9 AEMO notifies a Market Participant that excess DSP Reserve Capacity Security is currently held, then a Market Participant may replace the existing DSP Reserve Capacity Security with replacement DSP Reserve Capacity Security which must:

(a) be in the form specified in clause 4.13A.6;

(b) be an amount not less than the amount required under clauses 4.13A.1 or 4.13A.4, as applicable; and

(c) become effective before AEMO returns any excess DSP Reserve Capacity Security.

4.13A.11. If a Market Participant's existing DSP Reserve Capacity Security is due to expire or cease to have effect for any reason and after that expiration the Market Participant will continue to have an obligation to ensure AEMO holds the benefit of DSP Reserve Capacity Security under clause 4.13A.1, then the Market Participant must ensure that AEMO holds the benefit of replacement DSP Reserve Capacity Security that is:

(a) in the form specified in clause 4.13A.6;

(b) an amount not less than the amount required under clauses 4.13A.1 or 4.13A.4, as applicable; and

(c) effective when the existing DSP Reserve Capacity Security expires or otherwise ceases to have effect.

4.13A.12. If a Market Participant's DSP Reserve Capacity Security is affected by any of the circumstances specified in the WEM Procedure referred to in clause 4.13A.23 that may require replacement DSP Reserve Capacity Security, then the Market Participant must ensure that AEMO holds the benefit of replacement DSP Reserve Capacity Security that is:

(a) in the form specified in clause 4.13A.6;

(b) an amount not less than the level required under clauses 4.13A.1 or 4.13A.4, as applicable; and

(c) effective before the end of the next Business Day or within any longer period approved in writing by AEMO after the Market Participant first becomes aware of the relevant change in circumstance (whether by reason of the Market Participant's own knowledge or a notification by AEMO).

4.13A.13. If DSP Reserve Capacity Security is provided as a Security Deposit in accordance with clause 4.13A.6(b), it will accrue interest daily at the AEMO Deposit Rate, and AEMO must pay the Market Participant the interest accumulated at the end of each calendar month less any liabilities and expenses incurred by AEMO, including bank fees and charges.

4.13A.14. If a Market Participant does not comply with clause 4.13A.1 in full by the date and time specified in clause 4.1.13 for the Reserve Capacity Cycle to which the

certification relates, the Certified Reserve Capacity assigned to that Demand Side Programme will lapse for the purposes of these ESM Rules.

4.13A.15. If a Market Participant that provides DSP Reserve Capacity Security in respect of a Demand Side Programme fails to reduce Withdrawal or increase Injection of the Associated Loads for that Demand Side Programme to a level which is at least equivalent to its Required Level, adjusted to 90 percent of the level of Peak Capacity Credits specified in clause 4.20.5A or allocated under clause 2.29.5AB and reduced by any reductions of Capacity Credits under clause 4.25.4C, in at least two Trading Intervals before the end of the relevant Capacity Year, then the Market Participant must pay to AEMO, as compensation to the market, an amount equal to the DSP Reserve Capacity Security amount for that Demand Side Programme for that Capacity Year as soon as practicable after the end of the relevant Capacity Year and in any event by 31 December of Year 4 of the relevant Reserve Capacity Cycle.

4.13A.15A. If a Demand Side Programme has its Capacity Credits reduced by AEMO under clauses 2.29.5AE, 2.29.5AF, 2.29.5AM or 2.29.5AN then, subject to clause 4.13A.16B, the Market Participant that provides the DSP Reserve Capacity Security for the Demand Side Programme must pay to AEMO, as compensation to the market, the greater of:

(a) if AEMO has reduced the level of Peak Capacity Credits under clauses 2.29.5AE or 2.29.5AM, an amount equal to the product of:

i. the shortfall in Peak Capacity Credits calculated by AEMO under clauses 2.29.5AE or 2.29.5AM; and

ii. 25 percent of the Peak Benchmark Reserve Capacity Price included in the Request for Expressions of Interest issued for the relevant Reserve Capacity Cycle, expressed in $/MW per year; and

(b) if AEMO has reduced the level of Flexible Capacity Credits under clauses 2.29.5AF or 2.29.5AN, an amount equal to the product of:

i. the shortfall in Flexible Capacity Credits calculated by AEMO under clauses 2.29.5AF or 2.29.5AN; and

ii. 25 percent of the Flexible Benchmark Reserve Capacity Price included in the Request for Expressions of Interest issued for the relevant Reserve Capacity Cycle, expressed in $/MW per year.

~~4.13A.15A. If a Demand Side Programme has its Capacity Credits reduced by AEMO under clauses 2.29.5AE, 2.29.5AF, 2.29.5AM or 2.29.5AN then, subject to clause 4.13A.16B, the Market Participant that provides the DSP Reserve Capacity Security for the Demand Side Programme must pay to AEMO, as compensation to the market, the greater of:~~

~~(a) if AEMO has reduced the level of Peak Capacity Credits under clauses 2.29.5AE or 2.29.5AM, an amount equal to the product of:~~

~~i. the shortfall in Peak Capacity Credits calculated by AEMO under clauses 2.29.5AE or 2.29.5AM; and~~

~~ii. 25 percent of the Peak Benchmark Reserve Capacity Price included in the Request for Expressions of Interest issued for the relevant Reserve Capacity Cycle, expressed in $/MW per year; and~~

~~(b) if AEMO has reduced the level of Flexible Capacity Credits under clauses 2.29.5AF or 2.29.5AN, an amount equal to the product of:~~

~~i. the shortfall in Flexible Capacity Credits calculated by AEMO under clauses 2.29.5AF or 2.29.5AN; and~~

~~ii. 25 percent of the Flexible Benchmark Reserve Capacity Price included in the Request for Expressions of Interest issued for the relevant Reserve Capacity Cycle, expressed in $/MW per year.~~

4.13A.16. The payment obligation under clauses 4.13A.15, 4.13A.15A or 4.25.4CD may be satisfied by AEMO drawing upon the DSP Reserve Capacity Security for the relevant registered Demand Side Programme, or the single DSP Reserve Capacity Security that AEMO holds under clause 4.13A.5A in accordance with clause 4.13A.5B.

4.13A.16A. AEMO must pay the amount claimed under clauses 4.13A.15, 4.13A.15A, 4.13A.16 or 4.25.4CD, as compensation, to Market Participants in proportion to their Peak Individual Reserve Capacity Requirements during the relevant Trading Day in accordance with Chapter 9.

4.13A.16B. AEMO may not draw down more DSP Reserve Capacity Security than the amount determined under clause 4.13A.2(b) for the relevant Capacity Year. For the avoidance of doubt, for a Demand Side Programme that was allocated Capacity Credits under clause 2.29.5AB(a)(i), AEMO may not draw down more than the part of the DSP Reserve Capacity Security apportioned to that DSP under clause 4.13A.5B, for the relevant Capacity Year.

4.13A.17. If the DSP Reserve Capacity Security drawn upon under clause 4.13A.16 is a Security Deposit, then the Market Participant forfeits the amount of the Security Deposit for the applicable Capacity Year.

4.13A.18. A Market Participant may:

(a) if AEMO has the benefit of DSP Reserve Capacity Security in accordance with this section 4.13A, request that the DSP Reserve Capacity Security be released; or

(b) if the Market Participant is required to provide DSP Reserve Capacity Security in accordance with this section 4.13A, request that the requirement for DSP Reserve Capacity Security is waived.

4.13A.19. If AEMO receives a request under clause 4.13A.18 it must, within ten Business Days:

(a) having regard to the matters in clause 4.13A.20, determine whether AEMO will release the DSP Reserve Capacity Security or waive the requirement for DSP Reserve Capacity Security;

(b) notify the Market Participant of its determination;

(c) if the DSP Reserve Capacity Security is a Security Deposit that is to be released, return the Security Deposit (plus interest earned); and

(d) if the DSP Reserve Capacity Security is not a Security Deposit and is to be released, notify the Security Provider that AEMO relinquishes any rights to draw on the DSP Reserve Capacity Security.

4.13A.20. In making a determination under clause 4.13A.19, AEMO must have regard to the following matters:

(a) the size and type of the Loads associated with the Demand Side Programme;

(b) the historical performance of the Demand Side Programme, including the results of any Reserve Capacity Tests; and

(c) any other matters AEMO considers relevant.

4.13A.21. If, at any time, AEMO is no longer satisfied that an assessment under clause 4.13A.20 would result in AEMO determining to release or waive the requirement for a Market Participant to provide AEMO with the benefit of DSP Reserve Capacity Security, AEMO must give notice to the Market Participant specifying:

(a) that the Market Participant must provide AEMO with the benefit of DSP Reserve Capacity Security;

(b) the reasons for its decision;

(c) the amount of the DSP Reserve Capacity Security as determined in accordance with clauses 4.13A.1 or 4.13A.4, as applicable; and

(d) the date by which the Market Participant must provide AEMO with the benefit of DSP Reserve Capacity Security, which must not be before the date which is five Business Days after the date of the notice.

4.13A.22. If a Market Participant receives a notice under clause 4.13A.21, the Market Participant must provide AEMO with the benefit of DSP Reserve Capacity Security for an amount and by the date specified in the notice.

4.13A.23. AEMO must document in a WEM Procedure the processes relating to:

(a) determining DSP Reserve Capacity Security;

(b) assessing persons against the Acceptable Credit Criteria;

(c) DSP Reserve Capacity Security arrangements, including:

i. the form of acceptable guarantees and bank undertakings;

ii. where and how it will hold Security Deposits and how the costs and fees of holding Security Deposits will be met;

iii. the circumstances that may require DSP Reserve Capacity Security to be replaced for the purposes of clause 4.13A.12; and

iv. the application of monies drawn from DSP Reserve Capacity Security in respect of amounts payable by the relevant Market Participant to AEMO under clause 4.13A.16; and

(d) requests under clause 4.13A.18, including:

i. how AEMO will make a determination on whether to accept or decline a request under clause 4.13A.19;

ii. the matters AEMO may take into account;

iii. the evidence a Market Participant will be required to provide in support of a request; and

iv. if AEMO declines a request, that AEMO will be required to provide reasons to the relevant Market Participant; and

(e) any other matters relating to this section 4.13A.

4.13A.24. If AEMO determines that a Market Participant no longer has any Reserve Capacity Obligations with respect to any Capacity Year for which the Market Participant was assigned Capacity Credits, AEMO must return any DSP Reserve Capacity Security to the Market Participant as soon as practicable after the end of the relevant Capacity Year and in any event by 30 November of Year 4 of the relevant Reserve Capacity Cycle.

4.13A.25. For the purposes of these ESM Rules, in determining whether a Demand Side Programme is in Commercial Operation, AEMO may have regard to any information AEMO considers relevant.

4.13B. Coordinator Review of Effectiveness of Certification of Reserve Capacity for Energy and Availability Limited Technologies

4.13B.1. The Coordinator must review the effectiveness of the approach for:

(a) certification of Reserve Capacity;

(b) determination of Reserve Capacity obligations;

(c) Reserve Capacity refunds; and

(d) the operation of clause 4.5.12 to ensure adequacy with clause 4.5.9(b),

for Electric Storage Resources and other energy limited resources in accordance with this section 4.13B.

4.13B.2. The Coordinator must complete a review under clause 4.13B.1:

(a) for the first review, before 1 October 2026; and

(b) for each subsequent review, at least once every five years from the completion of the preceding review under this section 4.13B.

4.13B.3. A review conducted under clause 4.13B.1 must examine:

(a) whether the method for rating the capacity of Electric Storage Resources and other energy limited resources for the purposes of setting Certified Reserve Capacity remains consistent with the State Electricity Objective;

(b) whether the use of different Peak Electric Storage Resource Obligation Durations for Electric Storage Resources commissioned in different years remains consistent with the State Electricity Objective;

(c) [Blank]

(d) whether the method and processes used by AEMO to determine the Mid Peak Electric Storage Resource Obligation Intervals remain consistent with the State Electricity Objective;

(e) whether applying Flexible Capacity refunds only outside the Hot Season remains consistent with the State Electricity Objective;

~~(e) [Blank]~~

(f) any trend in the Availability Duration Gap from year to year, and its implications for the approach to certification of Energy Storage Resources in the WEM; and

(g) whether the method to determine the Peak Demand Side Programme Dispatch Requirement and Flexible Demand Side Programme Dispatch Requirement, as set out in clauses 4.5.12(f), 4.5.12(g), and 4.5.12(h) remains consistent with the State Electricity Objective.

4.13B.4. In conducting a review under clause 4.13B.1, the Coordinator must invite submissions, and publish all submissions received, from Rule Participants and any other interested stakeholders.

4.13B.5. The Coordinator must publish a report containing:

(a) the issues identified by the Coordinator;

(b) the assumptions made by the Coordinator in undertaking the review;

(c) the results of any technical studies;

(d) a summary of any submissions on the draft report received by the Coordinator from Rule Participants and other interested stakeholders in accordance with clause 4.13B.4;

(e) the Coordinator's responses to the issues raised in those submissions;

(f) any recommendations of the Coordinator; and

(g) any other matters the Coordinator considers relevant to the review.

4.13B.6. If the Coordinator recommends changes as a result of the report prepared under this section 4.13B, the Coordinator must either submit a Rule Change Proposal or, if the change relates to the WEM Procedure documented by AEMO under clause 4.11.3A, recommend that AEMO initiate a Procedure Change Process to implement those changes.

Commitment of Capacity to Bilateral Trade

4.14. Bilateral Trade Declaration

4.14.1. Subject to clause 4.14.1A and clause 4.14.3, each Market Participant holding Certified Reserve Capacity for the current Reserve Capacity Cycle must, by the date and time specified in clause 4.1.14 provide the following information to AEMO for each Facility and component of a Facility (expressed in MW to a precision of 0.001 MW):

(a) the total quantity of Flexible Certified Reserve Capacity the Market Participant intends to trade bilaterally;

(b) the total quantity of Flexible Certified Reserve Capacity that the Market Participant has decided will not be made available to the market;

(c) the total quantity of Peak Certified Reserve Capacity the Market Participant intends to trade bilaterally; and

(d) the total quantity of Peak Certified Reserve Capacity that the Market Participant has decided will not be made available to the market.

4.14.1A. The quantities provided under clause 4.14.1 must meet the following criteria:

(a) the sum of the quantities provided under clauses 4.14.1(a) and 4.14.1(b) must equal the Flexible Certified Reserve Capacity of the Facility for the Reserve Capacity Cycle;

(b) the sum of the quantities provided under clauses 4.14.1(c) and 4.14.1(d) must equal the Peak Certified Reserve Capacity of the Facility for the Reserve Capacity Cycle; and

(c) the quantity provided under clause 4.14.1(a) must be less than or equal to the quantity provided under clause 4.14.1(c).

4.14.1B. Subject to clauses 4.14.1C, 4.14.1CA and 4.14.1CB, a Market Participant holding Peak Certified Reserve Capacity for the current Reserve Capacity Cycle may, by the date and time specified in clause 4.1.14, nominate to AEMO by notice in writing that a Non-Scheduled Facility be classified as a Fixed Price Facility, or a Facility Technology Type within a Scheduled Facility or a Semi-Scheduled Facility be classified as a Fixed Price Component for the Reserve Capacity Cycle, for either:

(a) five years; or

(b) ten years.

4.14.1C. For the purposes of clause 4.14.1B, a Non-Scheduled Facility may only be nominated to be classified as a Fixed Price Facility if:

(a) the Facility has not been assigned Capacity Credits in a previous Reserve Capacity Cycle;

(b) the Facility is an Energy Producing System;

(c) the Facility is not considered by AEMO to be in Commercial Operation;

(d) the Facility is not subject to an NCESS Contract (at the date Capacity Credits are first assigned to the Facility);

(e) the Facility is not a Network Augmentation Funding Facility under section 4.10A;

(f) section 4.28C does not apply to the Facility; and

(g) it is nominated under clause 4.14.1B(a).

4.14.1CA. A Facility Technology Type within a Facility may only be nominated to be classified as a Fixed Price Component under clause 4.14.1B(a) if:

(a) the Facility Technology Type has not been a Separately Certified Component in a previous Reserve Capacity Cycle;

(b) the Facility Technology Type is part of a Facility that is not a Non-Scheduled Facility or a Demand Side Programme;

(c) the Facility Technology Type is an Energy Producing System;

(d) the Facility Technology Type is not considered by AEMO to be in Commercial Operation;

(e) one of the following applies:

i. Facility Technology Type will be treated as a Facility upgrade under Appendix 3; or

ii. all Fixed Price Components of the Facility would collectively be treated as a Facility upgrade under Appendix 3; or

iii. the Facility has not been assigned Capacity Credits in a previous Reserve Capacity Cycle and all Facility Technology Types within the Facility are nominated to be classified as Fixed Price Components for the same duration under clause 4.14.1B;

(f) the Facility Technology Type is not part of a Facility which is subject to an NCESS Contract (at the date Capacity Credits are first assigned to the Facility or Separately Certified Component);

(g) the Facility Technology Type is not part of a Facility which is a Network Augmentation Funding Facility under section 4.10A; and

(h) the Facility Technology Type is not part of a Facility to which section 4.28C applies.

4.14.1CB. A Facility Technology Type within a Facility may only be nominated to be classified as a Fixed Price Component under clause 4.14.1B(b) if:

(a) either:

i. it holds Peak Certified Reserve Capacity in Capability Class 1 and it holds Flexible Certified Reserve Capacity; or

ii. it holds Peak Certified Reserve Capacity in Capability Class 1 or Capability Class 2, and:

1. AEMO has advised the applicant under clause 4.9.9(b) that AEMO considers that the Energy Producing System will only be fuelled from Eligible Renewable Energy Sources; or

2. it is an Electric Storage Resource that can maintain output at the level of its Peak Certified Reserve Capacity traded bilaterally under clause 4.14.1(c) in each Trading Day for at least as long as the highest forecast ESR Duration Requirement for any Capacity Year in the Long Term PASA Study Horizon published in the most recent Electricity Statement of Opportunities;

(b) [Blank]

(c) all Facility Technology Types within the Facility that have not been assigned Capacity Credits in a previous Reserve Capacity Cycle and are also nominated to be classified as Fixed Price Components; and

(d) it meets the requirements set out in clause 4.14.1CA to be classified as a Fixed Price Component under clause 4.14.1B(a).

4.14.1CC. If:

(a) a Facility Technology Type within a Facility that has been classified as a Fixed Price Component under clause 4.14.1B(b) in a previous Reserve Capacity Cycle either:

i. for a Facility nominated in accordance with clause 4.14.1CB(a)(i), does not hold Flexible Capacity Credits in the current Reserve Capacity Cycle;

ii. for a Facility nominated in accordance with clause 4.14.1CB(a)(ii)(1), AEMO has advised the applicant under clause 4.9.9(b) that AEMO considers that the energy sources used by the Energy Producing System have not been or will not be from Eligible Renewable Energy Sources, or the applicant has not provided sufficient evidence under clauses 4.10.1(e)(v)(3) or 4.10.1(fA)(vi)(2) to allow AEMO to make a determination under clause 4.9.9(b); or

iii. for a Facility nominated in accordance with clause 4.14.1CB(a)(ii)(2), if the Facility Technology Type is an Electric Storage Resource, it cannot currently maintain output at the level of its Peak Certified Reserve

Capacity for at least as long as the highest expected ESR Duration Requirement for any year in the Long Term PASA Study Horizon published in the Electricity Statement of Opportunities for Year 1 of the Reserve Capacity Cycle in which the Facility Technology Type was first awarded Peak Certified Reserve Capacity; and

(b) the Fixed Daily Peak Reserve Capacity Price for that Fixed Price Component is greater than or equal to the Floating Daily Peak Reserve Capacity Price,

then in the current Reserve Capacity Cycle and all future Reserve Capacity Cycles, AEMO must no longer treat that Facility Technology Type as if it had been nominated as a Fixed Price Component under clause 4.14.1B(b), but instead must treat it as if it had been nominated as a Fixed Price Component under clause 4.14.1B(a).

4.14.1D. A Market Participant holding Certified Reserve Capacity for the current Reserve Capacity Cycle for a Facility or a component of a Facility that is not committed must, by the date and time specified in clause 4.1.14, notify AEMO in writing of the Minimum Capacity Credits Quantity for the Facility or a component of a Facility for that Reserve Capacity Cycle.

4.14.2. A Capacity Credit (and the Reserve Capacity associated with a Capacity Credit) is "traded bilaterally" for the purposes of these ESM Rules if:

(a) the Market Participant holding the Capacity Credits in respect of a Facility, or Separately Certified Component, has entered into an arrangement with another Market Participant under which any of the Capacity Credits for that Facility, or Separately Certified Component, will be allocated to the other Market Participant for settlement purposes to allow the other Market Participant to meet its Individual Reserve Capacity Requirements in accordance with sections 4.30 and 4.31; or

(b) the Market Participant holding the Capacity Credits in respect of a Facility, or Separately Certified Component, allocates any of the Capacity Credits for that Facility, or Separately Certified Component, for settlement purposes to meet its own Individual Reserve Capacity Requirements in accordance with sections 4.30 and 4.31.

4.14.3. A Market Participant holding Certified Reserve Capacity with respect to a Facility subject to an NCESS Contract must nominate all Certified Reserve Capacity under clauses 4.14.1(a) and 4.14.1(c) as applicable.

4.14.4. [Blank]

4.14.5 [Blank]

4.14.6. If two or more Facilities cannot simultaneously exist (for example, because more than one Market Participant is proposing to build a Facility that will be located at the same site) then AEMO cannot accept a non-zero value provided in accordance with either

or both of clauses 4.14.1(a) and 4.14.1(c) in respect of more than one of these Facilities and must reject all but one Facility based on the following criteria:

(a) Facilities that are operational or are committed will be accepted ahead of other Facilities; then

(b) if more than one Facility remains, then Facilities that can demonstrate having secured financing will be accepted ahead of other Facilities; then

(c) if more than one Facility remains, then Facilities with the greatest quantity of Peak Certified Reserve Capacity will be accepted ahead of Facilities with lower Peak Certified Reserve Capacity; then

(cA) if more than one Facility remains, then Facilities with the greatest quantity of Flexible Certified Reserve Capacity will be accepted ahead of Facilities with lower Flexible Certified Reserve Capacity; then

(d) if more than one Facility remains, then Facilities identified in Expressions of Interest will be accepted ahead of other Facilities; then

(e) if more than one Facility remains, then AEMO will accept one based on the order in which they applied for Certified Reserve Capacity, including applications for Conditional Peak Certified Reserve Capacity.

4.14.7. AEMO must review the information provided by Market Participants in accordance with clause 4.14.1 to ensure that the information provided is consistent with the Certified Reserve Capacity of each Facility and the requirements of this section 4.14, and:

(a) if the information is not consistent, then AEMO must endeavour to resolve the discrepancy with the Market Participant within one Business Day of receipt;

(b) if the information is consistent, then AEMO must inform the Market Participant within one Business Day of receipt that the information is accepted; and

(c) if AEMO cannot establish what a Market Participant's intentions are with respect to all or part of its Certified Reserve Capacity within the time allowed for resolving discrepancies by clause 4.14.7(a), then the relevant part of that Market Participant's:

i. [Blank]

ii. Certified Reserve Capacity will be treated as being unavailable to the market,

and AEMO must notify the Market Participant of this outcome within one Business Day of the deadline for resolving discrepancies specified in clause 4.14.7(a).

4.14.8. If Certified Reserve Capacity is not to be made available to the market as a result of the acceptance by AEMO of information submitted by a Market Participant in accordance with clauses 4.14.1(b) and 4.14.1(d), or because clause 4.14.7(c)(ii) applies, then all obligations associated with that part of the Certified Reserve Capacity held by the relevant Market Participant are to terminate from the time AEMO

notifies the Market Participant that it accepts the information provided in accordance with clause 4.14.1 or the application of clause 4.14.7(c)(ii) (as applicable) and that part of the Certified Reserve Capacity ceases to be Certified Reserve Capacity for the purposes of these ESM Rules.

4.14.9. AEMO must notify each Market Participant that specified a non-zero amount under clause 4.14.1(a) or clause 4.14.1(c) by the date and time specified in clause 4.1.15 of the quantities of Peak Certified Reserve Capacity and Flexible Certified Reserve Capacity held by the Market Participant in respect of each Facility and component of a Facility that it can trade bilaterally, where these quantities must exclude Certified Reserve Capacity to which clause 4.14.8 relates.

4.14.10. [Blank]

4.14.11. AEMO must develop a WEM Procedure documenting the process AEMO and Market Participants must follow for the bilateral trade declaration under this section 4.14.

Network Access Quantity

4.15. Network Access Quantity

4.15.1. AEMO must determine Network Access Quantities and Indicative Network Access Quantities for Facilities in accordance with this section 4.15 and Appendix 3.

4.15.2. The Network Access Quantity for a Facility for a Reserve Capacity Cycle is the Final Network Access Quantity, if any, determined in accordance with the processes in Appendix 3 for that Reserve Capacity Cycle.

4.15.3. The assumptions that must be taken into account by the Network Access Quantity Model developed under clause 4.15.7, for the relevant Reserve Capacity Cycle are:

(a) assume that all major transmission Network elements are in service, except those which are normally configured to be out of service under peak demand conditions described in clause 4.4B.3;

(b) any other relevant information from Network Operators on the assumed status of the Network under peak demand conditions; and

(c) assume peak demand is equal to the value determined under clause 4.5.10(a)(iv) and used in the calculation of the Peak Reserve Capacity Requirement for the relevant Capacity Year.

4.15.4. Subject to clause 4.15.5, AEMO must develop, in accordance with the WEM Procedure referred to in clause 4.15.17, a range of facility dispatch scenarios that describe how Facilities could be dispatched at the time of peak demand (as described in clause 4.15.3(c)).

4.15.5. The facility dispatch scenarios to be developed by AEMO pursuant to clause 4.15.4 must:

(a) include, in AEMO's sole discretion, variations in the output of Facilities dispatched to meet peak demand;

(b) include Facilities with Peak Certified Reserve Capacity or Peak Early Certified Reserve Capacity for the relevant Reserve Capacity Cycle;

(c) ensure a Facility is not dispatched to a level greater than the Peak Certified Reserve Capacity or Peak Early Certified Reserve Capacity for the Facility; and

(d) include any other factors specified in the WEM Procedure referred to in clause 4.15.17.

4.15.6. AEMO must develop and maintain a Network Access Quantity Model in accordance with clause 4.15.7 and use the Network Access Quantity Model when undertaking the processes in Appendix 3 for each Reserve Capacity Cycle.

4.15.7. The Network Access Quantity Model must:

(a) apply the principles specified in clause 4.15.9;

(b) take into account the matters specified in clause 4.15.8 and the assumptions specified in clause 4.15.3;

(c) be in accordance with the processes in Appendix 3;

(d) incorporate the facility dispatch scenarios to be developed by AEMO under clause 4.15.4, RCM Constraint Equations, Constraint Equations developed using Non-Thermal Network Limits for Facilities (including Constraint Equations developed using Non-Thermal Network Limits under clause 4.4B.4), and the peak demand (as described in clause 4.15.3(c);

(e) comply with the WEM Procedure referred to in clause 4.15.17; and

(f) be consistent with the State Electricity Objective.

4.15.8. The matters that must be taken into account by the Network Access Quantity Model developed under clause 4.15.6, for the relevant Reserve Capacity Cycle, are:

(a) committed network augmentations of the SWIS that are expected to be in service for the Capacity Year to which the Reserve Capacity Cycle relates;

(b) the expected retirement of Facilities pursuant to a notice provided under clause 4.4A.1;

(c) committed Network changes; and

(d) any other matters specified in the WEM Procedure referred to in clause 4.15.17.

4.15.9. Subject to clause 4.15.9A, the principles that must be applied by the Network Access Quantity Model under clause 4.15.7 are:

(a) if a redispatch is required to avoid a constraint in the RCM Constraint Equations violating it is done so in a way that minimises the total change in output across all Facilities, subject to the NAQ rules as defined in Appendix 3;

(b) if multiple Facilities are competing for Network Access Quantity and the available Network Access Quantity is insufficient for all of those Facilities to receive a value equal to the Peak Certified Reserve Capacity for each of those Facilities, the available Network Access Quantity must be allocated in a manner that results in maximising the total Network Access Quantities determined for Facilities;

(c) the level of Network access expected to be available to the Facility is equal to at least 95% of the facility dispatch scenarios that could, applying the matters in clause 4.15.5, occur to meet peak demand (as described in clause 4.15.3(c)) on the SWIS for the relevant Capacity Year; and

(d) any Peak Certified Reserve Capacity assigned to a Facility in accordance with clause 4.11.1(bD) or clause 4.11.1(bE) is to be treated as unconstrained for the purposes of determining Network Access Quantities for Facilities in accordance with this section 4.15.

4.15.9A. If the Network Access Quantity Model is unable to fully comply concurrently with the requirements in both Appendix 3 and clause 4.15.9(c), it is not required to comply with the requirements in clause 4.15.9(c) but only to the extent necessary to enable it to fully comply with the requirements in Appendix 3.

4.15.10. The Network Access Quantity determined for a Facility is to be expressed to a precision of 0.001 MW.

4.15.11. AEMO must notify each Market Participant that specified a non-zero amount under clause 4.14.1(c) of the Network Access Quantity, if any, determined for its Facility under clause 4.15.2 by the date and time specified in clause 4.1.16A.

4.15.12. A Network Access Quantity for a Facility that is to cease operation permanently is:

(a) deemed to be relinquished by the Market Participant in respect to the Reserve Capacity Cycle in which the Facility is intended to cease operation permanently; and

(b) the relinquishment is effective from the earlier of:

i. the expected closure date specified in the notice under section 4.4A.1 in respect to the Facility; and

ii. any earlier date pursuant to an amendment to the notice under clause 4.4A.1 in accordance with clause 4.4A.3,

regardless of whether the notice is subsequently withdrawn under clause 4.4A.6.

4.15.13. AEMO must determine and record a Highest Network Access Quantity for each Facility in accordance with clause 4.15.14.

4.15.14. The Highest Network Access Quantity for a Facility for a Reserve Capacity Cycle is the quantity determined by AEMO as being equal to:

(a) the Highest Network Access Quantity assigned to the Facility for the previous Reserve Capacity Cycle which may be increased or decreased for the current Reserve Capacity Cycle in accordance with clause 4.15.15; and

(b) if the Facility has not been assigned a Highest Network Access Quantity in a previous Reserve Capacity Cycle, the Network Access Quantity determined by applying the method described in Appendix 3 for the Capacity Year in respect of the current Reserve Capacity Cycle.

4.15.15. If, for a Reserve Capacity Cycle:

(a) a Facility, that is not assigned Peak Certified Reserve Capacity using the Relevant Level Method and is assigned a quantity of Peak Certified Reserve Capacity that is less than the Highest Network Access Quantity for the Facility for that Reserve Capacity Cycle, the Highest Network Access Quantity for the Facility is to be reduced to equal the quantity of Peak Certified Reserve Capacity assigned to the Facility for that Reserve Capacity Cycle;

(b) the Network Access Quantity under clause 4.15.2 is higher than the Highest Network Access Quantity for the Facility, AEMO must increase the Highest Network Access Quantity for the Facility to an amount equal to the Network Access Quantity under clause 4.15.2; and

(c) a Facility is not assigned Certified Reserve Capacity for the Reserve Capacity Cycle, the Highest Network Access Quantity for the Facility is to be reduced to zero.

4.15.16. AEMO must publish the following information on the WEM Website by the date and time specified in clause 4.1.16A(d):

(a) the Network Access Quantity Model Inputs;

(b) the Network Access Quantity or Indicative Network Access Quantity determined for each Facility assessed in the Network Access Quantity Model; and

(c) the Highest Network Access Quantity for each Facility.

4.15.16A. AEMO must, no later than the date specified in clause 4.1.4, determine the set of Transmission Nodes at which Market Participants seeking certification of Demand Side Programmes subject to clause 4.10.1B will not be allowed to locate Associated Loads for those Demand Side Programmes in respect of Year 3 of the relevant Reserve Capacity Cycle. In doing so, AEMO must utilise the Network Access Quantity Model from the immediately preceding Reserve Capacity Cycle to identify

Transmission Nodes at which the dispatch of Demand Side Programmes subject to clause 4.10.1B may result in:

(a) the reduction to the Withdrawal of those Demand Side Programmes below the level of Peak Capacity Credits held by the Market Participant in respect of those Demand Side Programmes; or

(b) the Injection of Facilities that were assigned Peak Capacity Credits in the immediately preceding Reserve Capacity Cycle being curtailed below the level of Peak Capacity Credits held by those Facilities.

4.15.17. AEMO must document in a WEM Procedure:

(a) the processes, methodologies, inputs, parameters and assumptions to be applied in the Network Access Quantity Model for modelling the prioritisation and determination of Network Access Quantities for Facilities under Appendix 3;

(b) the processes to be followed by AEMO in determining the facility dispatch scenarios under clause 4.15.5;

(c) the processes AEMO must follow when determining Network Access Quantities for a Reserve Capacity Cycle, including how Network Access Quantities are determined for Facilities;

(d) the processes to be followed by AEMO for publishing the information under clause 4.15.16;

(e) without limiting any other provision of these ESM Rules, information that a Market Participant or Network Operator must provide to AEMO and the format it must be provided in, for the purposes of operating the Network Access Quantity Model and determining Network Access Quantities for Facilities under Appendix 3;

(eA) the processes, methodologies, inputs, parameters and assumptions to be applied to the Network Access Quantity Model from the immediately preceding Reserve Capacity Cycle for making the determination under clause 4.15.16A; and

(f) any other matters that AEMO reasonably deems relevant to performing its functions under this section 4.15.

Benchmark Reserve Capacity Prices

4.16. Benchmark Reserve Capacity Prices

4.16.1. For each Reserve Capacity Cycle, the Coordinator must publish a Peak Benchmark Reserve Capacity Price and a Flexible Benchmark Reserve Capacity Price as determined in accordance with this section 4.16 prior to the date and time specified in clause 4.1.19.

4.16.2. The Peak Benchmark Reserve Capacity Price:

(a) must be expressed in dollars per MW of Peak Capacity Credits per year; and

(b) must reflect the expected annualised capital cost plus the annualised fixed operating and maintenance cost of the Benchmark Peak Technology.

4.16.2A. The Flexible Benchmark Reserve Capacity Price:

(a) must be expressed in dollars per MW of Flexible Capacity Credits per year; and

(b) must reflect the expected annualised capital cost plus the annualised fixed operating and maintenance cost of the Benchmark Flexible Technology.

4.16.3. The Coordinator must develop a WEM Procedure documenting the method it must use and the process it must follow in determining the Benchmark Reserve Capacity Prices, and the Coordinator must follow that documented WEM Procedure to annually review the value of the Benchmark Reserve Capacity Prices in accordance with this section 4.16 and in accordance with the timing requirements specified in clause 4.1.19.

4.16.3A. The Economic Regulation Authority must support the Coordinator in the development of key economic parameters to be used in the determination of the Peak Benchmark Reserve Capacity Price and the Flexible Reserve Capacity Price.

4.16.4. If the Coordinator, acting reasonably, expects a parameter which is used to determine a Benchmark Reserve Capacity Price to change from year to year, the Coordinator:

(a) must not specify a fixed value for that parameter in the WEM Procedure referred to in clause 4.16.3; and

(b) must specify the principles and processes for determining that parameter in the WEM Procedure referred to in clause 4.16.3.

4.16.5. The Coordinator must revise the value of the Benchmark Reserve Capacity Prices using the method described in the WEM Procedure referred to in clause 4.16.3.

4.16.6. The Coordinator must prepare a draft report describing how it has arrived at proposed revised values for the Benchmark Reserve Capacity Prices under clause 4.16.5. The Coordinator must publish the report on the Coordinator's Website and request submissions from all sectors of the Western Australia energy industry, including end-users.

4.16.7. After considering of the submissions on the draft report described in clause 4.16.6 the Coordinator must propose final revised values for the Benchmark Reserve Capacity Prices and publish those values and its final report, including submissions received on the draft report on the Coordinator's Website.

4.16.8. Proposed revised values for the Benchmark Reserve Capacity Prices become the Benchmark Reserve Capacity Prices after the Coordinator has posted a notice on the

Coordinator's Website of the new values of the Benchmark Reserve Capacity Prices with effect from the date and time specified in the Coordinator's notice.

4.16.8A. Within five days of publication of the Benchmark Reserve Capacity Prices by the Coordinator under clause 4.16.8, AEMO must publish the Benchmark Reserve Capacity Prices on the WEM Website.

4.16.9. The Coordinator must review the WEM Procedure referred to in clause 4.16.3 and must undertake a public consultation process as part of the review:

(a) at least once in every five year period; and

(b) if the Coordinator has determined new Benchmark Technologies under clause 4.16.11(b), within the timeframe required to publish the Benchmark Reserve Capacity Prices for the next Reserve Capacity Cycle in accordance with clause 4.1.19(a).

4.16.10. If the Coordinator recommends changes as a result of the review in clause 4.16.9, the Coordinator must either submit a Rule Change Proposal or initiate a Procedure Change Process, as the case may be, to implement those changes.

4.16.11. The Coordinator must determine the Benchmark Technologies:

(a) initially, by 31 January 2024; and then the earlier of

(b) within six months of the revised ESR Duration Requirement being published in the Electricity Statement of Opportunities, if the ESR Duration Requirement determined by AEMO under clause 4.5.12(d) is different from the ESR Duration Requirement for the previous Reserve Capacity Cycle; or

(c) within three years of the previous determination of the Benchmark Technologies under this clause 4.16.11.

4.16.11A. A review conducted under clause 4.16.11(c) must also examine whether the method to determine ESR Duration Requirements for Electric Storage Resources as set out in clause 4.5.12(d) and Appendix 11 remains consistent with the State Electricity Objective.

4.16.12. When determining the Benchmark Technologies under clause 4.16.11, the Coordinator must determine:

(a) the appropriate reference technology to be used for each Benchmark Technology;

(b) the technical parameters to be used for each Benchmark Technology, including size and capabilities;

(c) the uncongested network location to be used for each Benchmark Technology, or if there is no uncongested network location, a network location with relatively low congestion; and

(d) whether the relevant Benchmark Reserve Capacity Price is to be assessed on the basis of:

i. the gross capital cost of the relevant Benchmark Technology; or

ii. the capital cost of the relevant Benchmark Technology less any expected contribution to capital costs from participation in the Real-Time Market.

4.16.12A. At least once every six years, in conjunction with a determination of the Benchmark Technologies under clause 4.16.11, the Coordinator must consider the shape of the price curves for the Peak Reserve Capacity Price and the Flexible Reserve Capacity Price under clause 4.29.1, to assess whether the Peak Reserve Capacity Price and the Flexible Reserve Capacity Price remain consistent with the State Electricity Objective.

4.16.13. The Coordinator must consult with Market Participants when making the determination of the parameters under clause 4.16.12 and the assessment of Peak Reserve Capacity Price and the Flexible Reserve Capacity Price under clause 4.16.12A.

4.16.14. The Coordinator must publish the results of the:

(a) determination under clause 4.16.11;

(b) determination of each of the parameters under clause 4.16.12; and

(c) the assessment in clause 4.16.12A.

4.17. [Blank]

4.18. [Blank]

4.19. [Blank]

Capacity Credits

4.20. Capacity Credits

4.20.1. [Blank]

4.20.2. [Blank]

4.20.3. [Blank]

4.20.4. [Blank]

4.20.5. [Blank]

4.20.5A. AEMO must:

(a) subject to clause 4.20.5C, assign a quantity of Peak Capacity Credits and a quantity of Flexible Capacity Credits to each Facility where the quantities are determined in accordance with clauses 4.20.5B and 4.20.5BA for the relevant Facility;

(b) publish, by the date and time specified in clause 4.1.16A:

i. for each Facility assigned Capacity Credits under clause 4.20.5A(a):

1. the quantity of Peak Capacity Credits assigned; and

2. the quantity of Flexible Capacity Credits assigned; and;

3. the Facility Class;

ii. the Peak Reserve Capacity Price for the Reserve Capacity Cycle;

iiA. the Flexible Reserve Capacity Price for the Reserve Capacity Cycle;

iii. if the Reserve Capacity Cycle is a Transitional Reserve Capacity Cycle, the Transitional Daily Peak Reserve Capacity Price for the Reserve Capacity Cycle multiplied by the number of Trading Days in the relevant Capacity Year for the Reserve Capacity Cycle;

iiiA. subject to clauses 1.63.10(e)(ix) and 4.1.27(e)(ix), if the Reserve Capacity Cycle is a Transitional Reserve Capacity Cycle, the Transitional Daily Flexible Reserve Capacity Price for the Reserve Capacity Cycle multiplied by the number of Trading Days in the relevant Capacity Year for the Reserve Capacity Cycle;

iv. each Fixed Daily Peak Reserve Capacity Price for each Facility and Separately Certified Component that is a Fixed Price Facility or Fixed Price Component for that Reserve Capacity Cycle multiplied by the number of Trading Days in the relevant Capacity Year for the Reserve Capacity Cycle; and

v. subject to clauses 1.63.10(e)(ix) and 4.1.27(e)(ix), each Fixed Daily Flexible Reserve Capacity Price for each Facility and Separately Certified Component that is a Fixed Price Facility or Fixed Price Component for that Reserve Capacity Cycle multiplied by the number of Trading Days in the relevant Capacity Year for the Reserve Capacity Cycle.

4.20.5AA. For each Reserve Capacity Cycle, if AEMO has assigned Capacity Credits to Facilities or Separately Certified Components at any of the prices required to be published under clause 4.20.5A(b), AEMO must, by the date and time specified in clause 4.1.22, publish a summary of the aggregate quantity of MW of Capacity Credits assigned to Facilities or Separately Certified Components at each price for the Reserve Capacity Cycle.

4.20.5B. The quantity of Peak Capacity Credits assigned to a Facility f is equal to the Network Access Quantity determined by AEMO in accordance with section 4.15 for Facility f.

4.20.5BA. The quantity of Flexible Capacity Credits assigned to a Facility f is equal to the lesser of:

(a) the Network Access Quantity determined by AEMO in accordance with section 4.15 for Facility f; and

(b) the quantity of Flexible Certified Reserve Capacity notified by AEMO under clause 4.14.9.

4.20.5C. If, for a Facility for a Reserve Capacity Cycle:

(a) the Network Access Quantity determined for the Facility in accordance with section 4.15 is not greater than zero; or

(b) a Network Access Quantity has not been determined for the Facility in accordance with section 4.15,

the Facility will not be eligible to be assigned a quantity of Peak Capacity Credits or Flexible Capacity Credits under clause 4.20.5A(a) for that Reserve Capacity Cycle, including, to avoid doubt, a quantity equal to zero.

4.20.5D. [Blank]

4.20.6. [Blank]

4.20.7. Payments for Capacity Credits under these ESM Rules can only occur for the period between the time and date that the associated Reserve Capacity Obligations commence and the time and date that the associated Reserve Capacity Obligations cease.

4.20.8 If, by the date and time specified in clause 4.1.21B, AEMO becomes aware that no capacity associated with the Capacity Credits assigned to a new Facility that is yet to enter service will be made available to the market for an entire Capacity Year, it must issue a Notice of Intention to Cancel Capacity Credits to the Market Participant for that Facility for that Capacity Year.

4.20.9 A Notice of Intention to Cancel Capacity Credits issued to a Market Participant by AEMO, in accordance with clause 4.20.8, must include:

(a) the details of the Facility to which the Notice of Intention to Cancel Capacity Credits applies;

(aA) whether the Notice of Intention to Cancel Capacity Credits applies to Peak Capacity Credits, Flexible Capacity Credits, or both Peak Capacity Credits and Flexible Capacity Credits;

(b) details of the evidence considered by AEMO in determining that no capacity associated with the Capacity Credits assigned to the Facility will be made available to the market for the entire Capacity Year; and

(c) the Capacity Year for which the cancellation of Capacity Credits assigned to the Facility will apply.

4.20.10. Within 10 Business Days of being issued a Notice of Intention to Cancel Capacity Credits in accordance with clause 4.20.8, the Market Participant may make a submission to AEMO detailing any reasons it considers should be taken into account by AEMO in making a final determination to cancel the Capacity Credits assigned to the Facility for the Capacity Year.

4.20.11. If AEMO has issued a Notice of Intention to Cancel Capacity Credits in accordance with clause 4.20.8, AEMO must, within 20 Business Days of issuing the Notice of Intention to Cancel Capacity Credits, decide whether it will cancel the Capacity Credits assigned to the Facility for the Capacity Year.

4.20.12. If AEMO makes a decision to cancel the Capacity Credits assigned to a Facility for a Capacity Year in accordance with clause 4.20.11, it must notify the Market Participant of its decision within 5 Business Days, including:

(a) the details of the Facility;

(b) a response to all issues raised by the Market Participant in any submission made in accordance with clause 4.20.10;

(c) details of the evidence considered by AEMO in determining that no capacity associated with the Capacity Credits assigned to the Facility will be made available to the market for the entire Capacity Year; and

(d) the Capacity Year for which the cancellation of Capacity Credits assigned to the Facility will apply.

4.20.13. Within 10 Business Days of making a decision, in accordance with clause 4.20.11, to cancel the Capacity Credits assigned to a Facility AEMO must publish on the WEM Website the information specified in clauses 4.20.12(a), 4.20.12(c) and 4.20.12(d).

4.20.14. If AEMO has made a decision to cancel the Capacity Credits assigned to a Facility in accordance with clause 4.20.11, AEMO must cancel the Capacity Credits assigned to the Facility for the Capacity Year specified in clause 4.20.12(d).

4.20.15. If AEMO has made a decision not to cancel the Capacity Credits assigned to a Facility for a Capacity Year in accordance with clause 4.20.11, it must notify the Market Participant of its decision within 5 Business Days.

4.20.16. If AEMO has assigned fewer Peak Capacity Credits to a Facility for a Capacity Year than the total Peak Certified Reserve Capacity for each component of the Facility for that Capacity Year, the Market Participant must, by the date and time specified in clause 4.1.21A, notify AEMO of:

(a) the number of Peak Capacity Credits that are to be associated with each component of the Facility for the Capacity Year, where the number must not exceed the Peak Certified Reserve Capacity assigned to each component of the Facility for that Capacity Year; and

(b) the number of Flexible Capacity Credits that are to be associated with each component of the Facility for the Capacity Year, where the number must not exceed:

i. the Flexible Certified Reserve Capacity assigned to that component for that Capacity Year; and

ii. the number of Peak Capacity Credits to be associated with that component for the Capacity Year.

4.20.16A. If AEMO has assigned fewer Flexible Capacity Credits to a Facility for a Capacity Year than the total Flexible Certified Reserve Capacity for each component of the Facility for that Capacity Year, the Market Participant must, by the date and time specified in clause 4.1.21A, notify AEMO of the number of Flexible Capacity Credits that are to be associated with each component of the Facility for the Capacity Year, where the number of Flexible Capacity Credits to be associated with a component must not exceed:

(a) the Flexible Certified Reserve Capacity assigned to that component for that Capacity Year; and

(b) the number of Peak Capacity Credits to be associated with that component for the Capacity Year.

4.20.17. If AEMO has assigned Capacity Credits to a Facility for a Capacity Year, AEMO must set the number of Capacity Credits to be associated with each component of the Facility for the Capacity Year as:

(a) the number of Capacity Credits the Market Participant nominated to trade bilaterally under clause 4.14.1; or

(b) where clause 4.20.16 applies, the number of Capacity Credits notified to AEMO under that clause to be associated with each component of the Facility.

4.20.17A. If AEMO has assigned Flexible Capacity Credits to a Facility for a Capacity Year, AEMO must set the number of Flexible Capacity Credits to be associated with each component of the Facility for the Capacity Year as:

(a) the number of Flexible Capacity Credits the Market Participant nominated to trade bilaterally under clause 4.14.1(a); or

(b) if clause 4.20.16 or clause 4.20.16A applies, the number of Flexible Capacity Credits notified to AEMO under that clause to be associated with each component of the Facility.

4.20.17B. AEMO must, by the date and time specified in clause 4.1.22:

(a) determine whether the Peak Reserve Capacity Requirement has been met or exceeded with the Peak Capacity Credits assigned for the third Capacity Year of the Long Term PASA Study Horizon for a Reserve Capacity Cycle:

i. to Facilities or parts of Facilities to which section 4.13 applies, for which no Reserve Capacity Security was required to be provided under section 4.13; or

ii. to Demand Side Programmes determined by AEMO to be in Commercial Operation;

(aA) determine whether the Flexible Reserve Capacity Requirement has been met or exceeded with the Flexible Capacity Credits assigned for the third Capacity Year of the Long Term PASA Study Horizon for a Reserve Capacity Cycle:

i. to Facilities or parts of Facilities to which section 4.13 applies, for which no Reserve Capacity Security was required to be provided under section 4.13; or

ii. to Demand Side Programmes determined by AEMO to be in Commercial Operation; and

(b) publish AEMO's determination under clauses 4.20.17B(a) and 4.20.17B(aA).

4.20.18. AEMO must publish on the WEM Website, for each Market Participant holding Capacity Credits, the Capacity Credits provided by each Facility for each Reserve Capacity Cycle.

4.21. [Blank]

4.22. [Blank]

4.23. Capacity Credits and Force Majeure

4.23.1. There are no force majeure conditions associated with Capacity Credits.

4.23A. Capacity Credits and Facility Registration

4.23A.1. [Blank]

4.23A.2. [Blank]

4.23A.3. If at any time a Market Participant holds Capacity Credits with respect to a facility (the "primary facility") that must be registered as more than one Registered Facility, either as a result of Facility aggregation not being approved by AEMO or being revoked, then AEMO may re-allocate the Certified Reserve Capacity, Capacity Credits and Network Access Quantity of the primary facility between the primary facility and the Registered Facilities subject to the conditions that:

(a) the Registered Facilities were documented in the original application for Certified Reserve Capacity:

i. as contributing to the capacity covered by those Capacity Credits; and

ii. were represented in the same way in the Constraint Equations or Constraint Sets that were used to determine the total Network Access Quantity for the Registered Facilities;

(b) AEMO must not allocate more Certified Reserve Capacity, Network Access Quantity or Capacity Credits to a Registered Facility than that Registered Facility can provide based on information provided in the original application for Certified Reserve Capacity for the primary facility;

(c) after the re-allocation the total Certified Reserve Capacity, the total Network Access Quantity and the total number of Capacity Credits, respectively, of the primary facility and the Registered Facilities must equal the Certified Reserve Capacity, the Network Access Quantity and the number of Capacity Credits immediately prior to the re-allocation; and

(d) AEMO must consult with the applicable Market Participant and give consideration to its preferences in the re-allocations to the extent allowed by clauses 4.23A.3(a), 4.23A.3(b) and 4.23A.3(c).

4.23A.4. If at any time a Market Participant holds Capacity Credits with respect to Registered Facilities, for which AEMO has approved aggregation as a single Aggregated Facility in accordance with clause 2.30.7, then AEMO may re-allocate the Certified Reserve Capacity, Network Access Quantity, Capacity Credits and Reserve Capacity Obligation Quantities of the Registered Facilities to the Aggregated Facility subject to the conditions that:

(a) the information submitted with the application for aggregation must demonstrate that the Aggregated Facility can at all times meet the sum of the full Reserve Capacity Obligation Quantities of the Registered Facilities;

(aA) each Registered Facility is represented in the same way in the Constraint Equations or Constraint Sets that were used to determine the Network Access Quantity for each Registered Facility;

(b) AEMO must allocate to the Aggregated Facility the Peak Certified Reserve Capacity, Flexible Certified Reserve Capacity, Network Access Quantity, Peak Capacity Credits, Flexible Capacity Credits, ~~and~~ Peak Reserve Capacity Obligation Quantity, and Flexible Reserve Capacity Obligation Quantity it can provide based on information provided in the original application for Certified Reserve Capacity for the Registered Facilities;

(c) after the re-allocation the Certified Reserve Capacity, Network Access Quantity, the number of Capacity Credits and the Reserve Capacity Obligation Quantities of the Aggregated Facility must equal the sum of the Certified Reserve Capacities, Network Access Quantity, the total number of Capacity Credits, and the sum of the Reserve Capacity Obligation Quantities immediately prior to the aggregation; and

(d) the Network Access Quantity, Certified Reserve Capacity, Capacity Credits and the Reserve Capacity Obligation Quantities of the Aggregated Facility

must at all times be capable of being disaggregated in accordance with clause 4.23A.3.

Addressing Shortages of Reserve Capacity

4.24. Supplementary Capacity

4.24.1. If, at any time after the day which is six months before the start of a Capacity Year, AEMO considers that inadequate Peak Capacity will be available in the SWIS to maintain Power System Security and Power System Reliability, using the most recent published forecasts and the method outlined in clauses 4.5.9(a) and 4.5.9(b) and any other information AEMO considers relevant, then it must:

(a) determine the expected start and end dates for the period of the shortfall;

(b) determine the expected quantity of the shortfall; and

(c) seek to acquire supplementary Peak Capacity in accordance with clause 4.24.2.

4.24.1A. Without limiting clause 4.24.1, if, at any time after the day which is six months before the start of a Capacity Year, AEMO considers that there is a risk that adequate Peak Capacity may not be available in the SWIS to maintain Power System Security and Power System Reliability, then it may advertise a call for expressions of interest for supplementary Peak Capacity by publishing a notice on the WEM Website and issuing a Market Advisory.

4.24.1AA. If, at any time after the day which is nine months before the start of a Capacity Year AEMO considers that inadequate Flexible Capacity will be available to maintain Power System Security and Power System Reliability between 1 October and 30 November of that Capacity Year, using the most recent published forecasts and the method outlined in clauses 4.5.9(c) and any other information AEMO considers relevant, then it must:

(a) determine whether a shortfall in Flexible Capacity will also occur between 1 April and 30 September of the relevant Capacity Year;

(b) determine the expected start and end dates for the period of the shortfall or shortfalls;

(c) determine the expected amount of the shortfall or shortfalls; and

(d) seek to acquire supplementary Flexible Capacity in accordance with clause 4.24.2.

4.24.1AB. Without limiting clause 4.24.1AA, if, at any time after the day which is nine months before the start of a Capacity Year, AEMO considers that there is a risk that adequate Flexible Capacity may not be available to maintain Power System Security and Power System Reliability between 1 October and 30 November of that Capacity Year, then it

may advertise a call for expressions of interest for supplementary Flexible Capacity by publishing a notice on the WEM Website and issuing a Market Advisory.

4.24.1AC. If, at any time after the day which is three months before the start of a Capacity Year AEMO considers that inadequate Flexible Capacity will be available to maintain Power System Security and Power System Reliability between 1 April and 30 September of that Capacity Year, using the most recent published forecasts and the method outlined in clauses 4.5.9(c) and any other information AEMO considers relevant, then it must:

(a) determine the expected start and end dates for the period of the shortfall;

(b) determine the expected amount of the shortfall; and

(c) seek to acquire supplementary Flexible Capacity in accordance with clause 4.24.2.

4.24.1AD. Without limiting clause 4.24.1AC, if, at any time after the day which is three months before the start of a Capacity Year, AEMO considers that there is a risk that adequate Flexible Capacity may not be available to maintain Power System Security and Power System Reliability between 1 April and 30 September of that Capacity Year, then it may advertise a call for expressions of interest for supplementary Flexible Capacity by publishing a notice on the WEM Website and issuing a Market Advisory.

4.24.1B. A notice calling for expressions of interest for supplementary capacity in accordance with clauses 4.24.1A, 4.24.1AB or 4.24.1AD must include:

(a) the date and time by when any person wishing to respond to the call for expressions of interest must have completed and lodged with AEMO the form specified in clause 4.24.1B(i);

(b) contact details for AEMO and Western Power;

(bA) whether the supplementary capacity will be Peak Capacity or Flexible Capacity;

(c) AEMO's preliminary estimate of the amount of capacity which AEMO considers may be required if AEMO decides to seek to acquire supplementary capacity pursuant to clause 4.24.1;

(d) AEMO's preliminary estimate of the number of hours over which the capacity is expected to be used;

(e) AEMO's preliminary estimate of the time of the day where the capacity is expected to be required;

(f) AEMO's preliminary estimate of the term of any Supplementary Capacity Contract if AEMO decides to seek to acquire supplementary capacity pursuant to clause 4.24.1;

(g) [Blank]

(gA) a statement that a respondent must provide evidence that it has access to a network, or has taken steps to obtain access to a network, where applicable;

(h) the location on the WEM Website of the standard Supplementary Capacity Contract;

(i) the location on the WEM Website of the form to be used in responding to the call for expressions of interest;

(iA) the location on the WEM Website for general information about supplementary capacity; and

(j) the location on the WEM Website of the WEM Procedure referred to in clause 4.24.18.

4.24.1C. Following the close of a call for expressions of interest for supplementary capacity in accordance with clauses 4.24.1A, 4.24.1AB or 4.24.1AD, AEMO:

(a) must assess all responses received by the closing date, and may assess any late responses;

(b) must consult with Western Power on any network access matters related to the proposed Eligible Services specified in the responses in accordance with the WEM Procedure referred to in clause 4.24.18; and

(c) must, for each response assessed by it, provide feedback to each respondent on whether AEMO or Western Power, as applicable, considers the Eligible Services the respondent proposes to provide would be likely to be capable of meeting the requirements outlined in the call for expressions of interest and contained in the standard Supplementary Capacity Contract.

4.24.2. If AEMO decides to seek to acquire supplementary capacity and:

(a) the expected start date of the shortfall is at least 12 weeks from the date AEMO becomes aware of the shortfall, then it must call for tenders from potential suppliers of supplementary capacity in an invitation to tender;

(b) clause 4.24.2(a) does not apply, then it must either:

i. call for tenders from potential suppliers of supplementary capacity in an invitation to tender; or

ii. negotiate directly with potential suppliers of supplementary capacity.

4.24.3. The only eligible sources of supplementary Peak Capacity are the following services ("**Peak Eligible Services**"):

(a) load reduction, that is measures to reduce a consumer's consumption of electricity supplied through the SWIS from that which the consumer would have otherwise consumed, but excluding reductions provided by a Market Participant with a Demand Side Programme that does not satisfy its Reserve Capacity Obligations during the current Capacity Year or did not satisfy its

Reserve Capacity Obligations during the immediately preceding Capacity Year;

(b) [Blank]

(c) the production of electricity by Energy Producing Systems, or load reductions provided by loads, but only to the extent that the electricity is generated, or the load reduction is provided, by capacity for which the relevant Market Participant:

i. does not hold Peak Capacity Credits in the current Capacity Year or has not held Peak Capacity Credits in the current Capacity Year or the immediately preceding Capacity Year; or

ii. provides evidence satisfactory to AEMO, prior to a Supplementary Capacity Contract taking effect, that:

1. costs have been incurred to enable the provision of the capacity through the installation of physical equipment; and

2. the capacity is in addition to the sent out capacity of the Energy Producing Systems, or the maximum amount of load that can be curtailed, that existed prior to the installation of the physical equipment.

4.24.3A. The only eligible sources of supplementary Flexible Capacity are the following services ("**Flexible Eligible Services**"):

(a) load reduction, that is measures to reduce a consumer's consumption of electricity supplied through the SWIS from that which the consumer would have otherwise consumed and which meets the minimum requirements published under clause 4.10.1A(d) for the relevant Reserve Capacity Cycle, but excluding reductions provided by a Market Participant with a Demand Side Programme that does not satisfy its Reserve Capacity Obligations during the current Capacity Year or did not satisfy its Reserve Capacity Obligations during the immediately preceding Capacity Year;

(b) load increase, that is measures to increase a consumer's consumption of electricity supplied through the SWIS from that which the consumer would have otherwise consumed and which meets the minimum requirements published under clause 4.10.1A(d) for the relevant Reserve Capacity Cycle, but excluding increases provided by a Market Participant with a Demand Side Programme that does not satisfy its Reserve Capacity Obligations during the current Capacity Year or did not satisfy its Reserve Capacity Obligations during the immediately preceding Capacity Year;

(c) the production of electricity by Energy Producing Systems that meet the minimum requirements published under clause 4.10.1A(d) for the relevant Reserve Capacity Cycle and are not Registered Facilities; and

(d) the production of electricity by Energy Producing Systems that are Registered Facilities, or load reductions provided by loads, but only to the extent that the electricity is generated, or the load reduction is provided, by capacity that meets the minimum requirements published under clause 4.10.1A(d) for the relevant Reserve Capacity Cycle, and for which the relevant Market Participant:

i. does not hold Flexible Capacity Credits in the current Capacity Year, and has not held Flexible Capacity Credits in the current Capacity Year or the immediately preceding Capacity Year; or

ii. provides evidence satisfactory to AEMO, prior to a Supplementary Capacity Contract taking effect, that:

1. costs have been incurred to increase the flexibility of the capacity so that it meets the minimum requirements published under clause 4.10.1A(d) for the relevant Reserve Capacity Cycle through the installation of physical equipment; and

2. the capacity is in addition to the Flexible Capacity of the Facility that existed prior to the installation of the physical equipment.

4.24.4. A person is not required to be a Rule Participant in order to submit a tender in response to a call for tenders under clause 4.24.2 or enter into a Supplementary Capacity Contract with AEMO. However, if a Rule Participant does enter into a Supplementary Capacity Contract with AEMO, then it must comply with that contract.

4.24.5. AEMO must not call for tenders for supplementary capacity earlier than six calendar months prior to the calendar month in which the shortfall period is expected to start.

4.24.6. If AEMO decides to call for tenders for supplementary capacity, then, no earlier than 30 Business Days and no later than 10 Business Days prior to the proposed closing date for submission of tenders, AEMO must advertise the call for tenders in accordance with clause 4.24.6A. The advertisement must include:

(a) the date and time by when any person wishing to tender to supply Eligible Services must have completed and lodged with AEMO the form specified in clause 4.24.7;

(b) contact details for AEMO and Western Power;

(bA) whether the capacity will be supplementary Peak Capacity or supplementary Flexible Capacity;

(c) the amount of capacity required;

(d) the number of hours over which the capacity is expected to be used;

(e) the time of the day where the capacity is expected to be required;

(f) the expected term of any Supplementary Capacity Contracts entered into as a result of the call for tenders;

(g) the location on the WEM Website for general information about supplementary capacity;

(h) the location on the WEM Website of the standard Supplementary Capacity Contract;

(i) the location on the WEM Website of the tender form to be used in applying to provide Eligible Services; and

(j) the location on the WEM Website of the WEM Procedure referred to in clause 4.24.18.

4.24.6A. In advertising the call for tenders in accordance with clause 4.24.6, AEMO must:

(a) publish a notice on the WEM Website;

(b) publish a notice on at least one major tender portal; and

(c) issue a Market Advisory.

4.24.6AA. AEMO must use reasonable endeavours to identify and contact potential Eligible Services providers, and provide them with information regarding a call for tender under clause 4.24.6.

4.24.6AB. Western Power must provide meter related data to AEMO to assist it with identifying potential Eligible Service providers under clause 4.24.6AA.

4.24.7. AEMO must prescribe the tender form to be used by those applying to provide Eligible Services. This form must require the provision of the following information:

(a) the name and contact details of the applicant;

(b) the nature of the Eligible Service to be provided;

(bA) whether the Eligible Service is being offered on an:

i. availability and activation basis; or

ii. activation-only basis;

(bB) whether the Eligible Service involves a Non-Contestable Customer;

(c) the proposed commencement date and end date of the Supplementary Capacity Contract;

(d) the maximum number of hours over the term of the Supplementary Capacity Contract that the Eligible Service will be available;

(e) for an Eligible Service being offered on an availability and activation basis:

i. the maximum number of hours on each Trading Day during the term of the Supplementary Capacity Contract that the Eligible Service will be available; and

ii. the time of each Trading Day during the term of the Supplementary Capacity Contract that the Eligible Service will be available;

iii. the quantity of supplementary capacity being offered;

iv. the values of:

1. the availability price for the Eligible Service expressed in dollars per MW per Trading Day, which must be the same price for each Trading Day during the term of the Supplementary Capacity Contract; and

2. the activation price for the Eligible Service, expressed in dollars per MW per hour of activation, where this price must reflect direct or opportunity costs incurred;

(f) for an Eligible Service being offered on an activation-only basis:

i. any restrictions on the availability of the Eligible Service, including the days during a typical week when the Eligible Service will not be available for activation;

ii. the maximum quantity of supplementary capacity being offered; and

iii. the value of the activation price for the Eligible Service, expressed in dollars per MW per hour of activation;

(g) any information required to complete the relevant standard form Supplementary Capacity Contract for the Eligible Service and the applicant, together with full details of any amendments to the standard form Supplementary Capacity Contract required by the applicant;

(gA) the notification time for activating the Eligible Service;

(h) the mechanism for activating the Eligible Service;

(i) the mechanisms available for measuring the Eligible Service provided;

(j) [Blank]

(k) the location of the Eligible Service and any associated Transmission Node Identifier and any associated NMI, where applicable;

(l) evidence that the Eligible Service will have access to a network for the contract period, where applicable; and

(m) the applicant's consent for Western Power to provide AEMO with relevant information, including information related to meters, meter readings and status of access arrangements, where applicable.

4.24.8. In determining the result of a call for tenders and entering into Supplementary Capacity Contracts for Eligible Services being offered on an availability and activation basis:

(a) AEMO must only accept an offer for the provision of Eligible Services;

(b) AEMO must only accept an offer for the provision of a Peak Eligible Service being offered on an availability and activation basis if AEMO is satisfied that

the Peak Eligible Service will be available during times of system peak demand coinciding with the shortfall period;

(bA) AEMO must only accept an offer for the provision of a Flexible Eligible Service if AEMO is satisfied that the Flexible Eligible Service will be available during times of high ramp coinciding with the shortfall period;

(bA) AEMO must only accept an offer for the provision of an Eligible Service involving a Non-Contestable Customer if the provider is Synergy;

(c) subject to clauses 4.24.8(a), 4.24.8(b) and 4.24.9, AEMO is to seek to enter into the lowest cost mix of Supplementary Capacity Contracts that:

i. will meet the requirement for supplementary Peak Capacity or supplementary Flexible Capacity; or

ii. will, if it is not possible to meet the requirement for supplementary Peak Capacity or supplementary Flexible Capacity, minimise the remaining Peak Capacity shortfall or Flexible Capacity shortfall,

where the cost per MW of each Supplementary Capacity Contract is to be defined to be the sum of:

iii. the total availability payment per MW over the proposed contract period, assuming the service is fully available at the times proposed; plus

iv. the product of the activation price and the lesser of:

1. the number of hours specified in the advertisement for the call for tenders under clause 4.24.6(d); and

2. the number of hours specified for the Eligible Service in the relevant tender form in accordance with clause 4.24.7(d); and

(d) AEMO must be reasonably satisfied that the provider of the Eligible Service has access to a network, where applicable.

4.24.8A In determining the result of a call for tenders and entering into Supplementary Capacity Contracts for Eligible Services being offered on an activation only basis, AEMO must:

(a) only accept an offer for the provision of Eligible Services;

(b) have regard to:

i. any restrictions on availability specified for the Eligible Service in the relevant tender form in accordance with clause 4.24.7(f)(i); and

ii. the notification time for activating the Eligible Service specified in the relevant tender form in accordance with clause 4.24.7(gA); and

(c) be reasonably satisfied that the provider of the Eligible Service has access to a network, where applicable.

4.24.9. AEMO is not under any obligation to accept any tender, or enter into a Supplementary Capacity Contract in respect of any tender, made in response to a call for tenders under clause 4.24.2.

4.24.10. If AEMO negotiates directly with a potential supplier of Eligible Services in accordance with clause 4.24.2(b)(ii), then it must provide the following information to the potential supplier:

(a) the amount of capacity required;

(aA) whether the capacity will be supplementary Peak Capacity or supplementary Flexible Capacity;

(b) the relevant standard form Supplementary Capacity Contract; and

(c) details of the information to be provided by the potential supplier, including:

i. the quantity of supplementary capacity being offered;

ii. the mechanism for activating the Eligible Service;

iii. the mechanisms available for measuring the Eligible Service provided;

iv. the proposed availability price for the Eligible Service expressed in dollars per MW per Trading Day, which must be the same price for each Trading Day during the term of the Supplementary Capacity Contract;

v. the proposed activation price for the Eligible Service, expressed in dollars per MW per hour of activation, where this price must reflect direct or opportunity costs incurred; and

vi. the location of the Eligible Service and any associated Transmission Node Identifier and any associated NMI, where applicable.

4.24.11. Subject to clauses 4.24.3, 4.24.11A and 4.24.14, AEMO may at its discretion enter into any negotiated Supplementary Capacity Contract, but must use reasonable endeavours to minimise the cost of Eligible Services acquired in this manner.

4.24.11A. Where AEMO has issued a call for tenders under clauses 4.24.2(a) or 4.24.2(b)(i), AEMO must not enter into negotiations for a negotiated Supplementary Capacity Contract under clause 4.24.11 before the completion of the tender, including, to avoid doubt, assessment of all in-time responses received by AEMO in response to the tender.

4.24.11B. Following the completion of a tender process called under clauses 4.24.2(a) or 4.24.2(b)(i) and any negotiations in accordance with clause 4.24.2(b)(ii), as applicable, AEMO must publish on the WEM Website the following information for each Supplementary Capacity Contract:

(a) the name of the service provider that has been contracted to provide supplementary capacity;

(aA) whether the Supplementary Capacity Contract is for Peak Capacity or Flexible Capacity;

(b) the maximum service quantity contracted under the Supplementary Capacity Contract, expressed in MW;

(bA) the initial verified service quantity contracted under the Supplementary Capacity Contract, expressed in MW;

(c) whether the contract was entered in through a tender process or direct negotiation;

(d) the type of the Eligible Service contracted;

(dA) the commencement date and end date of the Supplementary Capacity Contract;

(e) for an Eligible Service provided on an availability and activation basis:

i. the maximum number of hours on each Trading Day during the term of the Supplementary Capacity Contract that the Eligible Service will be available;

ii. the time of each Trading Day during the term of the Supplementary Capacity Contract that the Eligible Service must be available; and

iii. the availability price for the Eligible Service expressed in dollars per MW per Trading Day; and

(f) the activation price for the Eligible Service, expressed in dollars per MW per hour of activation.

4.24.12. AEMO must, in consultation with stakeholders, develop and maintain a standard form Supplementary Capacity Contract, which accords with the requirements in clause 4.24.13.

4.24.13. A standard form Supplementary Capacity Contract will require the supplier of an Eligible Service to reduce net consumption, or to increase energy production, on instruction from AEMO and must specify:

(a) that there are no force majeure conditions;

(b) the settlement process to be followed, including timing of payments;

(c) contract variation conditions;

(d) any conditions required to ensure that if a different person takes over the facility used to provide the Eligible Service, that the person taking over will be bound by the contract obligations (for example, by requiring the execution of a deed of assumption or novation);

(e) the financial consequences of failing to supply the Eligible Service in accordance with the contract, based on the arrangements which apply under section 4.26 if a Market Participant holding Capacity Credits for a Facility fails to comply with its Reserve Capacity Obligations;

(f) [Blank]

(g) the technical standards and verification arrangements which facilities used to provide Eligible Services must comply with, including for Flexible Eligible Services the minimum requirements published under clause 4.10.1A(d) for the relevant Reserve Capacity Cycle; and

(h) blank schedules specifying:

i. the term of the Supplementary Capacity Contract, where:

1. for supplementary Peak Capacity, this term is not to exceed, but may be shorter than, the Hot Season; and

2. for supplementary Flexible Capacity, this term is not to apply during the Hot Season;

ii. the sources of the net consumption reduction or energy production increase;

iii. the amount of net consumption reduction or energy production increase required;

iv. the notification time to be given for activation;

v. the method of notification of activation;

vi. the minimum duration of any activation;

vii. the maximum duration of any single activation;

viii. any limits on the number of times AEMO can request activation;

ix. the basis to be used for measuring the response;

x. the availability price;

xi. the activation price;

xii. technical matters relating to the facility (including testing); and

xiii. the fact that activation instructions will be given by AEMO.

4.24.14. AEMO must enter into a Supplementary Capacity Contract in the form of the standard form Supplementary Capacity Contract, except if AEMO considers that one or more variations are reasonably required, having regard to the specific characteristics of the facility providing the supplementary capacity and to any other matter that AEMO considers appropriate, AEMO may enter into a Supplementary Capacity Contract containing such variations.

4.24.14A. Matters specified in a Supplementary Capacity Contract, including but not limited to:

(a) the notification time for an activation; and

(b) the method(s) for measuring the response of Eligible Services contracted to reduce their net consumption;

must be aligned, to the extent practicable and considering the characteristics of the facility providing the Eligible Service, with the equivalent provisions applicable to a similar type of facility providing a similar service under the ESM Rules.

4.24.15. AEMO must recover the full cost it incurs in respect of Supplementary Capacity Contracts in accordance with section 4.28 and Chapter 9.

4.24.16. AEMO must verify the ability of each contracted Eligible Service to provide the maximum quantity contracted under the Supplementary Capacity Contract.

4.24.17. [Blank]

4.24.18. AEMO must document in a WEM Procedure:

(a) the process it follows in:

i. acquiring Eligible Services;

ii. entering into Supplementary Capacity Contracts;

iii. [Blank]

iv. determining how a payment in relation to a Supplementary Capacity Contract is to be made to the party identified in clause 4.29.3(e)(ii) if that party is not a Market Participant; and

v. determining that a provider of an Eligible Service has access to the network;

(b) requirements regarding the information and assistance AEMO may require from Western Power to support:

i. an expression of interest process or a procurement process for supplementary capacity under this section 4.24; and

ii. measuring the performance of activated Eligible Services subject to a Supplementary Capacity Contract;

(c) requirements, developed in consultation with Western Power, regarding the information that must be provided by those intending to respond to a call for expressions of interest under clauses 4.24.1A, 4.24.1AB or 4.24.1AD, or intending to provide supplementary capacity in response to a call for tenders or direct negotiation under clause 4.24.2, who request assistance or an assessment from Western Power in accordance with clause 4.24.18B;

(d) timelines, developed in consultation with Western Power if applicable, for the provision of requested information and for assistance or an assessment of requests submitted; and

(e) contact details for Western Power which must be used by AEMO or those applying to provide Eligible Services when assistance or assessment by Western Power is requested in accordance with clause 4.24.18B.

4.24.18A. Western Power must provide information and respond to requests for assistance or assessment related to the provision of supplementary capacity under this section 4.24 in accordance with the WEM Procedure referred to in clause 4.24.18.

4.24.18B. A request to Western Power for assistance or an assessment by those intending to respond to a call for expressions of interest under clauses 4.24.1A, 4.24.1AB or 4.24.1AD, or intending to provide supplementary capacity in response to a call for tenders or direct negotiation under clause 4.24.2 or a request to Western Power by AEMO must:

(a) be in writing and addressed to the contact nominated by Western Power in the WEM Procedure referred to in clause 4.24.18;

(b) allow sufficient time to enable Western Power to provide the assistance or make the assessment requested in accordance with the timelines specified under clause 4.24.18(d); and

(c) contain the information and analysis as may be required under the WEM Procedure referred to in clause 4.24.18.

4.24.19. Following each call for tenders for supplementary capacity or otherwise acquiring Eligible Services, the Coordinator may review the supplementary capacity provisions of this section 4.24.

4.24.20. If, following a call for tenders for supplementary capacity or otherwise acquiring Eligible Services, the Coordinator decides to review the supplementary capacity provisions of this section 4.24, the Coordinator must undertake a public consultation process in respect of the outcome of the review.

Testing, Monitoring and Compliance

4.25. Reserve Capacity Testing

4.25.1. AEMO must take steps to verify, in accordance with clause 4.25.2, that each Facility or Separately Certified Component of a Facility assigned Peak Capacity Credits can:

(a) in the case of a Non-Intermittent Generating System or an Electric Storage Resource, during the period the Reserve Capacity Obligations apply, operate at a level equivalent to its Required Level, adjusted to the level of Peak Capacity Credits currently held by the Facility or Separately Certified Component, as applicable, at least once during each of the following periods:

i. 1 October to 31 March; and

ii. 1 April to 30 September,

which for a Non-Intermittent Generating System, must be achieved on each type of fuel detailed under clause 4.10.1(e)(v)(1)(ii); and

(b) [Blank]

(c) in the case of a Demand Side Programme, during the period the Reserve Capacity Obligations apply, decrease its DSP Energy Level to operate at a level equivalent to its Required Level in that Trading Interval, adjusted to the level of Peak Capacity Credits currently held, at least once during each of the following periods:

i. 1 October to 31 March; and

ii. 1 April to 30 September.

4.25.1A. Notwithstanding anything else in this section 4.25, clause 4.25.1 does not apply to an Intermittent Generating System or Non-Scheduled Facility. To avoid doubt, an Intermittent Generating System or Non-Scheduled Facility is not subject to Reserve Capacity Tests under this section 4.25.

4.25.1B. AEMO must take steps to verify, in accordance with clause 4.25.1C, that each Facility or Separately Certified Component of a Facility assigned Flexible Capacity Credits can:

(a) in the case of a Non-Intermittent Generating System or an Electric Storage Resource, during the period the Reserve Capacity Obligations apply:

i. start from a cold state and ramp to provide Injection at a MW quantity matching the number of Flexible Capacity Credits currently held (converted to a sent out basis to 41 degrees Celsius using temperature dependence information submitted to AEMO under clause 4.10.1(e)(i) or provided in Standing Data (if available)); and

ii. start from a level of Injection at a MW quantity matching the number of Flexible Capacity Credits currently held (converted to a sent out basis to 41 degrees Celsius using temperature dependence information submitted to AEMO under clause 4.10.1(e)(i) or provided in Standing Data (if available)) and ramp to zero,

while meeting the minimum standards set under clause 4.10.1A(d), at least once during each of the following periods:

iii. 1 October to 31 March; and

iv. 1 April to 30 September; and

(b) in the case of a Demand Side Programme, during the period the Reserve Capacity Obligations apply, decrease its consumption to operate at a level equivalent to its Relevant Demand minus the Flexible Capacity Credits assigned to the Facility, while meeting the minimum standards set under clause 4.10.1A(d) at least once during each of the following periods:

i. 1 October to 31 March; and

ii. 1 April to 30 September.

4.25.1C. AEMO may verify the matters specified in clause 4.25.1B by:

(a) in the case of a Facility that is not required to install Facility Sub-Metering in accordance with clause 2.29.12:

i. observing the Facility operate as part of normal market operations as determined from Meter Data Submissions; or

ii. subject to clause 4.25.2B, testing, in accordance with clause 4.25.9, and the Facility successfully passing that test as determined from Meter Data Submissions;

(b) in the case of a Demand Side Programme, testing, in accordance with clause 4.25.9, and the Facility successfully passing that test as determined from metered consumption;

(c) in the case of a Facility required to install Facility Sub-Metering in accordance with clause 2.29.12:

i. observing the Facility operate, in respect of each Separately Certified Component, as part of normal operations as determined from Meter Data Submissions and meter data recorded by the Facility Sub-Metering; or

ii. subject to clause 4.25.2B, testing, in accordance with clause 4.25.9, in respect of each Separately Certified Component, as determined from Meter Data Submissions and meter data recorded by the Facility Sub-Metering and that Separately Certified Component successfully passing the test.

4.25.2. AEMO may verify the matters specified in clause 4.25.1 by:

(a) in the case of a Facility that is not required to install Facility Sub-Metering in accordance with clause 2.29.12:

i. observing the Facility operate as part of normal market operations as determined from Meter Data Submissions for not less than:

1. for a Non-Intermittent Generating System, two consecutive Trading Intervals; or

2. for an Electric Storage Resource, its Peak Electric Storage Resource Obligation Duration; or

ii. subject to clause 4.25.2B, testing, in accordance with clause 4.25.9, for not less than:

1. for a Non-Intermittent Generating System, two consecutive Trading Intervals; or

2. for an Electric Storage Resource, its Peak Electric Storage Resource Obligation Duration,

and the Facility successfully passing that test as determined from Meter Data Submissions;

(b) in the case of a Demand Side Programme:

i. observing the Facility decrease its DSP Energy Level in response to a Dispatch Instruction issued by AEMO, for at least two consecutive Trading Intervals, as determined from Meter Data Submissions; or

ii. testing, in accordance with clause 4.25.9, for not less than two consecutive Trading Intervals and the Facility successfully passing that test as determined from Meter Data Submissions;

(c) [Blank]

(d) [Blank]

(e) in the case of a Facility required to install Facility Sub-Metering in accordance with clause 2.29.12:

i. observing the Facility operate, in respect of each Separately Certified Component, as part of normal operations as determined from Meter Data Submissions and meter data recorded by the Facility Sub-Metering, for not less than:

1. for a Non-Intermittent Generating System, two consecutive Trading Intervals; or

2. for an Electric Storage Resource, its Peak Electric Storage Resource Obligation Duration; or

ii. subject to clause 4.25.2B, testing, in accordance with clause 4.25.9, in respect of each Separately Certified Component, as determined from Meter Data Submissions and meter data recorded by the Facility Sub-Metering, for not less than:

1. for a Non-Intermittent Generating System, two consecutive Trading Intervals; or

2. for an Electric Storage Resource, its Peak Electric Storage Resource Obligation Duration,

and that Separately Certified Component successfully passing the test.

4.25.2A. A Market Participant for a Facility required to install Facility Sub-Metering in accordance with clause 2.29.12 may provide AEMO with meter data, recorded by Facility Sub-Metering, by:

(a) 5 February, in respect of the immediately preceding period commencing 1 October; and

(b) 5 August, in respect of the immediately preceding period commencing 1 April,

for the purposes of observing the Separately Certified Component in accordance with clauses 4.25.1C(c)(i) or 4.25.2(e)(i)~~clause 4.25.2(e)(i)~~.

4.25.2B. AEMO must subject a Facility or Separately Certified Component to a Reserve Capacity Test under clauses 4.25.2(a)(ii), 4.25.2(b), 4.25.2(b)(ii) or 4.25.2(e)(ii) if:

(a) the Market Participant for the Facility, has not provided meter data, recorded by the Facility Sub-Metering to AEMO, if applicable, in accordance with and by the time specified in clause 4.25.2A;

(b) AEMO has determined, in accordance with clauses 4.25.2(a)(i) or 4.25.2(e)(i), that the Facility or Separately Certified Component of the Facility, as applicable, did not operate at the level specified in clause 4.25.1(a) by:

i. 31 January, in respect of the immediately preceding period 1 October to 31 January; and

ii. 31 July, in respect of the immediately preceding period 1 April to 31 July;

(c) AEMO is conducting a re-test in accordance with:

i. clauses 4.25.4 or 4.25.6(b)(i); or

ii. clauses 4.25.6(a)(i) and/or 4.25.6(c)(i); or

~~(c) AEMO is conducting a re-test in accordance with clauses 4.25.4 and 4.25.6; or~~

(d) AEMO has not issued the Demand Side Programme with a non-zero Dispatch Instruction by:

i. 31 January, in respect of the immediately preceding period 1 October to 31 January; and

ii. 31 July, in respect of the immediately preceding period 1 April to 31 July.

4.25.2BA. AEMO must subject a Facility or Separately Certified Component to a Reserve Capacity Test under clauses 4.25.1C(a)(ii), 4.25.1C(b) or 4.25.1C(c)(ii) if:

(a) AEMO has determined, in accordance with clauses 4.25.1C(a)(i) or 4.25.1C(c)(i), that the Facility or Separately Certified Component of the Facility, as applicable, did not demonstrate the capability specified in clause 4.25.1B(a):

i. in respect of the period 1 October to 31 January, by 31 January that same year; or

ii. in respect of the period 1 April to 31 July, by 31 July that same year;

(b) the Market Participant for the Facility has not provided meter data, recorded by the Facility Sub-Metering to AEMO, if applicable, in accordance with and by the time specified in clause 4.25.2A;

(c) AEMO is conducting a re-test in accordance with clause 4.25.3F, clause 4.25.6(b)(ii), clause 4.25.6(a)(ii) and/or 4.25.6(c)(ii); or

(d) a Demand Side Programme has failed to deliver the quantity determined by AEMO under clause 7.13.5.

4.25.2BB. Subject to clause 4.25.2BC, in each period outlined in clauses 4.25.1(c)(i) and 4.25.1(c)(ii), at any time after a DSP Dispatch Event for a Demand Side Programme in that period, the relevant Market Participant may request that AEMO conduct a Reserve Capacity Test of that Demand Side Programme.

4.25.2BC. A Market Participant must not request more than three Reserve Capacity Tests for the same Demand Side Programme under clause 4.25.2BB in each period outlined in clauses 4.25.1(c)(i) and 4.25.1(c)(ii).

4.25.2C. A Market Participant for a Facility required to install Facility Sub-Metering in accordance with clause 2.29.12 that is tested by AEMO in accordance with clauses 4.25.1C(c)(ii), 4.25.2(e)(ii), 4.25.3F, 4.25.4 or 4.25.6~~in accordance with clauses 4.25.2(e)(ii), 4.25.4 or 4.25.6~~ must provide meter data, recorded by Facility Sub-Metering, for the Reserve Capacity Test period to AEMO within five Business Days of the Reserve Capacity Test.

4.25.2D. If the Market Participant does not provide meter data to AEMO in accordance with and by the time specified in clause 4.25.2C, AEMO must reduce the Capacity Credits associated with the Separately Certified Component of the Facility subject to the Reserve Capacity Test to zero from the second Trading Day following the Scheduling Day on which AEMO determines the deadline for providing that meter data to AEMO under clause 4.25.2C.

4.25.2E. AEMO must, in assessing the performance of a Facility or Separately Certified Component tested for Peak Capacity in accordance with clauses 4.25.2(a), 4.25.2(e), 4.25.4 or 4.25.6:

(a) in the case of an Electric Storage Resource, measure the average performance across its Peak Electric Storage Resource Obligation Duration based on the average performance across the Trading Intervals; and

(b) in the case of a Non-Intermittent Generating System, measure the maximum performance in each Trading Interval.

4.25.3. AEMO must not subject a Facility to more Reserve Capacity Tests than it considers are required to satisfy the verification requirements of this section 4.25.

4.25.3A. AEMO must not subject a Facility to a Reserve Capacity Test if:

(a) that Facility is subject to a Planned Outage, or

(b) the relevant Market Participant has advised AEMO of a Forced Outage for that Facility in accordance with clause 3.21.2; or

(c) that Facility is undergoing a Commissioning Test approved in accordance with section 3.21A.

4.25.3B. A Market Participant may request that AEMO tests its Facility or Separately Certified Component under clauses 4.25.1C(a)(ii) and 4.25.2(a)(ii), clauses 4.25.1C(b) and

4.25.2(b)(ii), or clauses 4.25.1C(c)(ii) and 4.25.2(e)(ii) in a single Reserve Capacity Test.

4.25.3C. If a Market Participant makes a request under clause 4.25.3B, AEMO must comply with that request unless AEMO, acting reasonably, considers that doing so may endanger Power System Security or Power System Reliability.

4.25.3D. [Blank]

4.25.3E. If a Demand Side Programme fails a Reserve Capacity Test requested by AEMO under clause 4.25.1C, AEMO must, subject to clause 4.25.3H, determine the Flexible DSP Test Shortfall (to apply from the following Trading Day until the end of the Trading Day on which the Demand Side Programme passes a Reserve Capacity Test for Flexible Capacity) as the greater of zero and:

(a) the Flexible Capacity Credits held by the relevant Market Participant for that Facility; less

(b) the greatest difference between the Relevant Demand of the Demand Side Programme in a Trading Interval of a Reserve Capacity Test and the lowest absolute demand value achieved by the Demand Side Programme in the Reserve Capacity Test, while still meeting the minimum standards set under clause 4.10.1A(d).

4.25.3F. Subject to clause 4.25.4G, if a Facility, or a Separately Certified Component of a Facility, fails a Reserve Capacity Test requested by AEMO under clause 4.25.1C, AEMO must re-test that Facility, or Separately Certified Component of that Facility, as applicable, in accordance with clause 4.25.1C, not earlier than 14 days and not later than 28 days after the first Reserve Capacity Test.

4.25.3G. If a Facility, or Separately Certified Component of that Facility, as applicable, fails a second Reserve Capacity Test under clause 4.25.3F then, subject to clause 4.25.3H, from the second Trading Day following the Scheduling Day on which AEMO determines that the second Reserve Capacity Test was failed AEMO must:

(a) if the Reserve Capacity Test related to a Non-Intermittent Generating System or an Electric Storage Resource, reduce the number of Flexible Capacity Credits held by the relevant Market Participant for that Facility or Separately Certified Component of that Facility to reflect the maximum capabilities achieved in either Reserve Capacity Test performed; or

(b) if the Reserve Capacity Test related to a Demand Side Programme, calculate the Flexible DSP Test Shortfall (to apply from the following Trading Day until the end of the Trading Day on which the Demand Side Programme passes a Reserve Capacity Test for Flexible Capacity) as the number of Flexible Capacity Credits held by the relevant Market Participant for that Facility less the maximum level of reduction achieved in either of the two Reserve Capacity Tests while still meeting the minimum standards set under clause 4.10.1A(d).

4.25.3H. If a Facility fails to meet the minimum eligibility requirements published under clause 4.10.1A(d) and determined under clauses 4.10.1A(a)(i)(1), 4.10.1A(a)(i)(4), 4.10.1A(a)(i)(5), 4.10.1A(a)(iii)(1), 4.10.1A(a)(iii)(4), or 4.10.1A(a)(iv)(3) as applicable, then AEMO must determine the Capacity Credit reduction quantity or Flexible DSP Test Shortfall (as applicable) as 100% of the Flexible Capacity Credits associated with the Facility or Separately Certified Component.

4.25.4. If a Separately Certified Component of a Facility fails a Reserve Capacity Test requested by AEMO under clause 4.25.2, AEMO must re-test the Separately Certified Component in accordance with clause 4.25.2, not earlier than 14 days and not later than 28 days after the first Reserve Capacity Test. If the Separately Certified Component fails this second Reserve Capacity Test, then AEMO must, from the second Trading Day following the Scheduling Day on which AEMO determines that the second Reserve Capacity Test was failed:

(a) if the Reserve Capacity Test related to a Non-Intermittent Generating System, reduce the number of Peak Capacity Credits held by the relevant Market Participant for the Separately Certified Component to the greatest of the values obtained in the failed Trading Intervals in either Reserve Capacity Test performed (after adjusting these results to the equivalent values at a temperature of 41 degrees Celsius and allowing for the capability provided by operation on different types of fuels); or

(b) [Blank]

(c) if the Reserve Capacity Test related to an Electric Storage Resource, reduce the number of Peak Capacity Credits held by the relevant Market Participant for the Separately Certified Component to reflect the higher average performance achieved over the Peak Electric Storage Resource Obligation Duration for the Electric Storage Resource in either Reserve Capacity Test, in accordance with 4.25.2E(a) (after adjusting these results to performance at a temperature of 41 degrees Celsius).

4.25.4A A Market Participant may apply to AEMO for a reduction in the number of Capacity Credits the Market Participant holds for a Facility.

4.25.4B. In order for an application under clause 4.25.4A to be assessed by AEMO, it must:

(a) be in writing;

(b) relate to:

i. a Facility (other than a Demand Side Programme) for which AEMO has notified the Market Participant, in accordance with clause 4.13.14, of its determination that the need to maintain the Reserve Capacity Security for that Facility has ceased; or

ii. a Demand Side Programme that AEMO has determined is in Commercial Operation;

(bA) indicate whether the application relates to Peak Capacity Credits, or both Peak Capacity Credits and Flexible Capacity Credits;

(c) detail the reasons for the reduction in the number of Capacity Credits;

(cA) if the Facility contains multiple Separately Certified Components:

i. specify how the reduction in the number of Capacity Credits relates to each Separately Certified Component; and

ii. ensure that the number of Flexible Capacity Credits associated with the Separately Certified Component is less than or equal to the number of Peak Capacity Credits associated with the Separately Certified Component;

(cB) ensure that the number of Flexible Capacity Credits associated with the Facility is less than or equal to the number of Peak Capacity Credits associated with the Facility; and

(d) indicate whether the application relates only to the current Capacity Year or includes subsequent Capacity Years.

4.25.4C. Upon receiving an application under clause 4.25.4A, AEMO must, subject to clause 4.25.4CA:

(a) assess the application and any supporting documentation;

(b) within 10 Business Days of receiving the application inform the Market Participant of its decision whether to reduce the Capacity Credits and the reasons for its decision; and

(c) if applicable and in AEMO's sole discretion, reduce the quantity of Capacity Credits held by the Market Participant in respect of the Facility, or Separately Certified Component of the Facility, to which the application relates, from a Trading Day that is no earlier than the Trading Day commencing on the day that is two days after the day AEMO informed the Market Participant of its decision under clause 4.25.4C(b).

4.25.4CA. AEMO must not approve an application received under clause 4.25.4A if the reduction of Peak Capacity Credits for the relevant Facility would result in the number of Peak Capacity Credits for the Facility allocated by the relevant Market Participant in Capacity Credit Allocations for a Trading Day exceeding the number of Peak Capacity Credits for the Facility held for that Trading Day by the Market Participant that are able to be traded bilaterally under the ESM Rules.

4.25.4CB. AEMO must not approve an application received under clause 4.25.4A if the reduction of Flexible Capacity Credits for the relevant Facility would result in the number of Flexible Capacity Credits for the Facility allocated by the relevant Market Participant in Capacity Credit Allocations for a Trading Day exceeding the number of Flexible Capacity Credits for the Facility held for that Trading Day by the Market Participant that are able to be traded bilaterally under the ESM Rules.

4.25.4CC. If AEMO reduces Peak Capacity Credits for Demand Side Programme f with effect from Trading Day d under clause 4.25.4C(c), AEMO must calculate a Peak Capacity Payment Reduction Ratio as:

$$PeakCapacityPaymentReductionRatio(f,d) = \left(1 - \frac{DaysComplete(d)}{TDCY(d)}\right) \times \frac{ReductionQuantity(f,d)}{InitialQuantity(f,d)}$$

where:

(a) DaysComplete(d) is the number of Trading Days up to, but excluding, Trading Day d since 1 October of the Capacity Year in which Trading Day d falls;

(b) TDCY(d) is the number of Trading Days in the Capacity Year in which Trading Day d falls;

(c) ReductionQuantity(f,d) is the quantity of Peak Capacity Credits that AEMO reduced Demand Side Programme f by under clause 4.25.4C(c) in Trading Day d which, for the avoidance of doubt, excludes any previous reductions in relation to the same Capacity Year under clause 4.25.4C(c); and

(d) InitialQuantity(f,d) is the quantity of Peak Capacity Credits assigned to Demand Side Programme f in accordance with clauses 2.29.5AB(a)(i) or 4.20.5A in relation to the Capacity Year in which Trading Day d falls.

4.25.4CD. If AEMO reduces Peak Capacity Credits for Demand Side Programme f with effect from Trading Day d under clause 4.25.4C(c), the relevant Market Participant must, within 10 Business Days of being informed of the reduction by AEMO in accordance with clause 4.25.4C(b), pay to AEMO an amount equal to:

$$PeakCapacityPaymentReductionRatio(f,d) \times DSPSecurity(f)$$

where:

(a) PeakCapacityPaymentReductionRatio(f,d) is the Peak Capacity Payment Reduction Ratio calculated in accordance with clause 4.25.4CC; and

(b) DSPSecurity(f) is the amount of DSP Reserve Capacity Security originally required by AEMO in relation to Demand Side Programme f in accordance with clause 4.13A.2(b) or apportioned by AEMO to the Demand Side Programme under clause 4.13A.5B.

4.25.4D A Market Participant may not apply to AEMO for an increase in the number of Peak Capacity Credits for a Facility during a Capacity Year if the Facility has had its Peak Capacity Credits reduced in accordance with clause 4.25.4C for any part of that Capacity Year.

4.25.4E. A Market Participant may not apply to AEMO for an increase in the number of Flexible Capacity Credits for a Facility during a Capacity Year if the Facility has had its Flexible Capacity Credits reduced in accordance with clause 4.25.4C for any part of that Capacity Year.

~~4.25.4E. [Blank]~~

4.25.4F. A Market Participant may not offer any Non-Dispatchable Load that was associated with a Demand Side Programme for Supplementary Capacity if the Demand Side Programme has had its Capacity Credits reduced in accordance with clause 4.25.4C for any part of that Capacity Year.

4.25.5. In the event that the number of Capacity Credits held by a Market Participant is reduced during a Capacity Year in accordance with clauses 4.25.4 or 4.25.3G~~clause 4.25.4~~, then that Market Participant may request once prior to the end of the Capacity Year that AEMO perform a single re-test to be conducted for the Facility, or Separately Certified Component of the Facility, during the seven days following that request.

4.25.6. If AEMO receives a request for a Reserve Capacity re-test in accordance with clause 4.25.5, then:

(a) if the re-test relates to a Non-Intermittent Generating System, AEMO must, as applicable:

i. conduct such a re-test in accordance with clauses 4.25.2(a)(ii) or 4.25.2(e)(ii) and, following the re-test, set the number of Peak Capacity Credits held by the relevant Market Participant for the Facility or Separately Certified Component of the Facility to reflect the maximum capabilities achieved in the re-test (after adjusting these results to the equivalent values at a temperature of 41 degrees Celsius and allowing for the capability provided by operation on different types of fuel), but not to exceed the number of Peak Capacity Credits originally confirmed by AEMO for the Facility or Separately Certified Component of the Facility under section 4.20 in respect of the relevant Reserve Capacity Cycle; or

ii. conduct such a re-test in accordance with clauses 4.25.1C(a)(ii) or 4.25.1C(c)(ii) and, following the re-test, set the number of Flexible Capacity Credits held by the relevant Market Participant for the Facility or Separately Certified Component of the Facility to reflect the maximum capabilities achieved in the re-test, but not to exceed the number of Flexible Capacity Credits originally confirmed by AEMO for the Facility or Separately Certified Component under section 4.20 in respect of the relevant Reserve Capacity Cycle; and

(b) [Blank]

(c) if the re-test relates to an Electric Storage Resource, AEMO must, as applicable:

i. conduct such a re-test in accordance with clauses 4.25.2(a)(ii) or 4.25.2(e)(ii) and, following the re-test, set the number of Peak Capacity Credits held by the relevant Market Participant for the Facility or

Separately Certified Component of the Facility to reflect the average performance achieved over the Electric Storage Resource's Peak Electric Storage Resource Obligation Duration in the re-test (after adjusting these results to performance at a temperature of 41 degrees Celsius) but not to exceed the number of Capacity Credits originally confirmed by AEMO for the Facility or Separately Certified Component of the Facility under section 4.20 in respect of the relevant Reserve Capacity Cycle; or

ii. conduct such a re-test in accordance with clauses 4.25.1C(a)(ii) or 4.25.2(c)(ii) and, following the re-test, set the number of Flexible Capacity Credits held by the relevant Market Participant for the Facility or Separately Certified Component to reflect the maximum capabilities achieved in the re-test, but not to exceed the number of Flexible Capacity Credits originally confirmed by AEMO for the Facility under clause 4.20.5A(a) in respect of the relevant Reserve Capacity Cycle.

~~4.25.6. If AEMO receives a request for a Reserve Capacity re-test in accordance with clause 4.25.5, then:~~

~~(a) if the re-test relates to a Non-Intermittent Generating System, AEMO must conduct such a re-test in accordance with clauses 4.25.2(a)(ii) or 4.25.2(e)(ii) and, following the re-test, set the number of Peak Capacity Credits held by the relevant Market Participant for the Facility or Separately Certified Component of the Facility to reflect the maximum capabilities achieved in the re-test (after adjusting these results to the equivalent values at a temperature of 41 degrees Celsius and allowing for the capability provided by operation on different types of fuel), but not to exceed the number of Peak Capacity Credits originally confirmed by AEMO for the Facility or Separately Certified Component of the Facility under section 4.20 in respect of the relevant Reserve Capacity Cycle;~~

~~(b) [Blank]~~

~~(c) if the re-test relates to an Electric Storage Resource, AEMO must conduct such a re-test in accordance with clauses 4.25.2(a)(ii) or 4.25.2(e)(ii) and, following the re-test, set the number of Peak Capacity Credits held by the relevant Market Participant for the Facility or Separately Certified Component of the Facility to reflect the average performance achieved over the Electric Storage Resource's Peak Electric Storage Resource Obligation Duration in the re-test (after adjusting these results to performance at a temperature of 41 degrees Celsius) but not to exceed the number of Capacity Credits originally confirmed by AEMO for the Facility or Separately Certified Component of the Facility under section 4.20 in respect of the relevant Reserve Capacity Cycle.~~

4.25.7. [Blank]

4.25.8. [Blank]

4.25.9. In conducting a Reserve Capacity Test, AEMO must:

(a) subject to clauses 4.25.9(b), 4.25.9(c) and 4.25.9(dA), endeavour to conduct the Reserve Capacity Test without warning;

(b) allow sufficient time for the Market Participant to schedule fuel that is not required under these ESM Rules to be stored on-site;

(c) allow sufficient time for switching a Facility from one fuel to an alternative fuel if operation using the alternative fuel is being tested;

(cA) in the case of a Demand Side Programme and a test under clause 4.25.2(b)(ii), clause 4.25.4 or clause 4.25.6(b)(i), as far as possible conduct the Reserve Capacity Test under power system conditions similar to those that AEMO expects to apply at times of high demand;

(d) in the case of a Demand Side Programme and a test under clause 4.25.1C(b), clause 4.25.3F or clause 4.25.6(b)(ii), as far as possible conduct the Reserve Capacity Test under power system conditions similar to those that AEMO expects to apply at times of high system ramp rates;

~~(d) [Blank]~~

(dA) in the case of a Demand Side Programme and a test under clause 4.25.2(b)(ii), clause 4.25.4 or clause 4.25.6(b)(i), give at least two hours' and no more than three hours' notice to allow for arrangements to be made for the Facility to be triggered;

~~(dA) in the case of a Demand Side Programme, give at least two hours' and no more than three hours' notice to allow for arrangements to be made for the Facility to be triggered;~~

(e) deem the Reserve Capacity Test to be cancelled and discard the results if:

i. the Facility is constrained during the test period because of an outage of an item of equipment that is part of a Network; or

ii. AEMO determines that the Reserve Capacity Test was invalid in accordance with the WEM Procedure referred to in clause 4.25.14;

(f) maintain adequate records of the Reserve Capacity Test to allow independent verification of the test results including the level of Injection or Withdrawal, ramp rate, and response time required during the Reserve Capacity Test; and

(g) [Blank]

(h) notify the Market Participant of:

i. the time that the Reserve Capacity Test must be performed;

ii. the level of output required by the Separately Certified Component or level of Injection or Withdrawal required by the Facility for the Reserve Capacity Test, as applicable;

iii. the ramp rate required; and

iv. in the case of a test under clause 4.25.1C, 4.25.3F or 4.25.5, a test plan which details the requirements of the Reserve Capacity Test.

~~(h) notify the Market Participant of the time that the Reserve Capacity Test must be performed, and the level of output required by the Separately Certified Component or level of Injection or Withdrawal required by the Facility for the Reserve Capacity Test, as applicable.~~

4.25.10. [Blank]

4.25.11. Every three months AEMO must publish details of:

(a) Facilities that have undergone a Reserve Capacity Test during the preceding three months; and

(b) whether any of those Reserve Capacity Tests were delayed and the reasons for the delay.

4.25.12. AEMO may use the results of Reserve Capacity Tests in respect of a Facility in assigning Certified Reserve Capacity for the Facility for subsequent Reserve Capacity Cycles.

4.25.13. [Blank]

4.25.14. AEMO must document the procedure to be followed in performing Reserve Capacity Tests in a WEM Procedure, including the situations in which AEMO may deem a Reserve Capacity Test to be invalid.

4.26. Financial Implications of Failure to Satisfy Reserve Capacity Obligations

4.26.1. If a Market Participant holding Capacity Credits associated with a Facility fails to comply with its Reserve Capacity Obligations applicable to any given Trading Interval then the Market Participant must pay a refund to AEMO calculated in accordance with the following provisions.

(a) The Peak Trading Interval Refund Rate for a Facility f in the Trading Interval t is determined as follows:

$$\text{Peak Trading Interval Refund Rate}(f,t) = \text{PRF}(f,t) \times \text{PY}(f,t)$$

where:

i. Peak Trading Interval Refund Rate (f,t) is the Peak Trading Interval Refund Rate for Facility f in Trading Interval t;

ii. PRF(f,t) is the Peak Capacity refund factor for Facility f in Trading Interval t and is calculated in accordance with clause 4.26.1(c); and

iii. PY(f,t) is the per Trading Interval price for Peak Capacity associated with Facility f in Trading Interval t and is determined in accordance with clause 4.26.1(b).

~~(a) The Trading Interval Refund Rate for a Facility f in the Trading Interval t is determined as follows:~~

~~Trading Interval Refund Rate(f,t)=RF(f,t) × Y(f,t)~~

~~where:~~

~~i. Trading Interval Refund Rate (f,t) is the Trading Interval Refund Rate for a Facility f in the Trading Interval t;~~

~~ii. RF(f,t) is the refund factor for a Facility f in the Trading Interval t and is calculated in accordance with clause 4.26.1(c); and~~

~~iii. Y(f,t) is the per Trading Interval capacity price associated with a Facility f in the Trading Interval t and is determined in accordance with clause 4.26.1(b).~~

(b) For a Facility f, for which a Market Participant holds Peak Capacity Credits, in the Trading Interval t, PY(f,t) is determined as follows:

i. if Facility f is not a Registered Facility in Trading Interval t, PY(f,t) equals the Entity Daily Peak Reserve Capacity Price for the Facility in Trading Interval t divided by 48, or the highest Entity Daily Peak Reserve Capacity Price for any Separately Certified Component of the Facility in Trading Interval t divided by 48;

ii. if AEMO has determined that in Trading Interval t Facility f is not in Commercial Operation and is either a Scheduled Facility or Semi-Scheduled Facility:

$$PY(f,t) = \sum_{c \in f} \frac{PCC(c,t)}{PCC(f,t)} \times \frac{EDPRCP(c,t)}{48}$$

where:

1. c∈f denotes all Separately Certified Components c of Facility f;

2. PCC(c,t) is the Peak Capacity Credits associated with Separately Certified Component c in Trading Interval t;

3. PCC(f,t) is the Peak Capacity Credits associated with Facility f in Trading Interval t; and

4. EDPRCP(c,t) is the Entity Daily Peak Reserve Capacity Price for Separately Certified Component c in Trading Interval t;

iii. if AEMO has determined that in Trading Interval t Facility f is in Commercial Operation and is either a Scheduled Facility or Semi-Scheduled Facility:

$$PY(f,t) = \left(\sum_{c \in ESR(f,t)} \frac{PESROI(c,t) \times PCC(c,t)}{PCC(f,t)} \times \frac{EDPRCP(c,t)}{PESROD(c,t)} \right) + \left(\sum_{c \in NonESR(f,t)} \frac{PCC(c,t)}{PCC(f,t)} \times \frac{EDPRCP(c,t)}{48} \right)$$

where:

1. c∈ESR(f,t) refers to all Separately Certified Components c of Facility f in Trading Interval t that are Electric Storage Resources;
2. PESROI(c,t) is 1 if Trading Interval t is a Peak Electric Storage Resource Obligation Interval for Separately Certified Component c and 0 otherwise;
3. PCC(c,t) is the Peak Capacity Credits associated with Separately Certified Component c in Trading Interval t;
4. PCC(f,t) is the Peak Capacity Credits associated with Facility f in Trading Interval t;
5. EDPRCP(c,t) is the Entity Daily Peak Reserve Capacity Price for Separately Certified Component c in Trading Interval t;
6. PESROD(c,t) is the number of Trading Intervals in the Peak Electric Storage Resource Obligation Duration for Separately Certified Component c in the Trading Day containing Trading Interval t; and
7. c∈NonESR(f,t) refers to all Separately Certified Components c of Facility f in Trading Interval t that are not Electric Storage Resources;

iv. if Facility f is a Non-Scheduled Facility, PY(f,t) equals the Entity Daily Peak Reserve Capacity Price for the Facility divided by 48; and

v. if Facility f is a Demand Side Programme:

$$PY(f,t) = \frac{PRCP}{DSP_MIN_AV_TI \times QTY_BD_CY}$$

where:

1. PRCP is the Peak Reserve Capacity Price for the relevant Capacity Year;
2. DSP_MIN_AV_TI is the minimum number of Trading Intervals per Trading Day that a Demand Side Programme must nominate to be available to provide Peak Capacity if issued a Dispatch Instruction in accordance with clause 4.10.1(f)(iii); and
3. QTY_BD_CY is the number of Business Days in the relevant Capacity Year.

(b) For a Facility f, for which a Market Participant holds Capacity Credits in Trading Interval t, Y(f,t) is determined as follows:

i. if Facility f is not a Registered Facility in Trading Interval t, Y(f,t) equals the Entity Daily Peak Reserve Capacity Price for the Facility in Trading Interval t divided by 48, or the highest Entity Daily Peak Reserve Capacity Price for any Separately Certified Component of the Facility in Trading Interval t divided by 48;

ii. if AEMO has determined that in Trading Interval t Facility f is not in Commercial Operation and is either a Scheduled Facility or Semi-Scheduled Facility:

$$Y(f,t) = \sum_{c \subset f} \frac{CC(c,t)}{CC(f,t)} \times \frac{EDPRCP(c,t)}{48}$$

where:

1. c⊂f denotes all Separately Certified Components c of Facility f;
2. CC(c,t) is the Capacity Credits associated with Separately Certified Component c in Trading Interval t;
3. CC(f,t) is the Capacity Credits associated with Facility f in Trading Interval t; and
4. EDPRCP(c,t) is the Entity Daily Peak Reserve Capacity Price for Separately Certified Component c in Trading Interval t;

iii. if AEMO has determined that in Trading Interval t Facility f is in Commercial Operation and is either a Scheduled Facility or Semi-Scheduled Facility:

$$Y(f,t) = \left(\sum_{c \in ESR(f,t)} \frac{PESROI(c,t) \times CC(c,t)}{CC(f,t)} \times \frac{EDPRCP(c,t)}{PESROD(c,t)} \right) + \left(\sum_{c \in NonESR(f,t)} \frac{CC(c,t)}{CC(f,t)} \times \frac{EDPRCP(c,t)}{48} \right)$$

where:

1. c⊂ESR(f,t) refers to all Separately Certified Components c of Facility f in Trading Interval t that are Electric Storage Resources;
2. PESROI(c,t) is 1 if Trading Interval t is a Peak Electric Storage Resource Obligation Interval for Separately Certified Component c and 0 otherwise;
3. CC(c,t) is the Capacity Credits associated with Separately Certified Component c in Trading Interval t;

4. CC(f,t) is the Capacity Credits associated with Facility f in Trading Interval t;

5. EDPRCP(c,t) is the Entity Daily Peak Reserve Capacity Price for Separately Certified Component c in Trading Interval t;

6. PESROD(c,t) is the number of Trading Intervals in the Peak Electric Storage Resource Obligation Duration for Separately Certified Component c in the Trading Day containing Trading Interval t; and

7. c∈NonESR(f,t) refers to all Separately Certified Components c of Facility f in Trading Interval t that are not Electric Storage Resources;

iv. if Facility f is a Non-Scheduled Facility, Y(f,t) equals the Entity Daily Peak Reserve Capacity Price for the Facility divided by 48; and

v. if Facility f is a Demand Side Programme:

$$Y(f,t) = \frac{PRCP}{DSP_MIN_AV_TI \times QTY_BD_CY}$$

where:

1. PRCP is the Peak Reserve Capacity Price for the relevant Capacity Year;

2. DSP_MIN_AV_TI is the minimum number of Trading Intervals per Trading Day that a Demand Side Programme must nominate to be available to provide Peak Capacity if issued a Dispatch Instruction in accordance with clause 4.10.1(f)(iii); and

3. QTY_BD_CY is the number of Business Days in the relevant Capacity Year.

(c) The Peak Capacity refund factor PRF(f,t) for a Facility f in the Trading Interval t is the lesser of:

i. six; and

ii. the greater of the Peak Capacity dynamic refund factor PRF_dynamic(t) as determined under clause 4.26.1(d) and the minimum Peak Capacity refund factor PRFfloor(f,t) as determined under clauses 4.26.1(f) or 4.26.1(g) as appropriate.

(c) The refund factor RF(f,t) for a Facility f in the Trading Interval t is the lesser of:

i. six; and

ii. the greater of the dynamic refund factor RF_dynamic(t) as determined under clause 4.26.1(d) and the minimum refund factor RFfloor(f,t) as determined under clauses 4.26.1(f) or 4.26.1(g) as appropriate.

(d) The Peak Capacity dynamic refund factor PRF_dynamic(t) in Trading Interval t is determined as follows:

PRF_dynamic(t) = 11.75 - ($\frac{5.75}{750}$) × $\sum_{f \in F}$ Spare(f,t)

where:

i. F is the set of all Registered Facilities for which Market Participants hold Peak Capacity Credits in the Trading Interval t and f is a Facility within that set; and

ii. Spare(f,t) is the available Peak Capacity related to Registered Facility f, which is not dispatched in Trading Interval t determined in accordance with clause 4.26.1(e).

~~(d) The dynamic refund factor RF_dynamic(t) in the Trading Interval t is determined as follows:~~

~~RF_dynamic(t) = 11.75 - ($\frac{5.75}{750}$) × $\sum_{f \in F}$ Spare(f,t)~~

~~where:~~

~~i. F is the set of all Registered Facilities for which Market Participants hold Capacity Credits in the Trading Interval t and f is a Facility within that set; and~~

~~ii. Spare(f,t) is the available capacity related to the Registered Facility f, which is not dispatched in the Trading Interval t determined in accordance with clause 4.26.1(e).~~

(e) For Registered Facility f in the Trading Interval t, Spare(f,t) is determined as follows:

i. if~~where~~ Facility f is a Scheduled Facility:

$$max\left(0, PRCOQ(f,t) - PCAFO(f,t) - max\left(0, 2 \times SOMS(f,t)\right)\right)$$

~~$$max\left(0, RCOQ(f,t) - CAFO(f,t) - max\left(0, 2 \times SOMS(f,t)\right)\right)$$~~

where:

1. PRCOQ(f,t)~~RCOQ(f,t)~~ is the Peak Reserve Capacity Obligation Quantity determined for the Facility f in Trading Interval t;

2. PCAFO(f,t)~~CAFO(f,t)~~ is the Peak Capacity Adjusted Forced Outage Quantity for Facility f in Trading Interval t calculated in 3.21.7B; and

3. SOMS(f,t) is the Sent Out Metered Schedule for Facility f in Trading Interval t;

iA. if~~where~~ Facility f is a Semi-Scheduled Facility:

$$max\left(0, PRCOQ(f,t) - PCAFO(f,t) - max\left(0, 2 \times SOMS(f,t)\right)\right)$$

~~$$max\left(0, RCOQ(f,t) - CAFO(f,t) - max\left(0, 2 \times SOMS(f,t)\right)\right)$$~~

where:

1. PRCOQ(f,t)~~RCOQ(f,t)~~ is the Peak Reserve Capacity Obligation Quantity determined for Facility f in Trading Interval t;

2. PCAFO(f,t)~~CAFO(f,t)~~ is the Peak Capacity Adjusted Forced Outage Quantity for Facility f in Trading Interval t calculated in 3.21.7B; and

3. SOMS(f,t) is the Sent Out Metered Schedule for Facility f in Trading Interval t;

ii. if~~where~~ Facility f is a Non-Scheduled Facility, zero; and

iii. if Facility f is a Demand Side Programme:

1. if Demand Side Programme f is subject to a Reserve Capacity Test or a Dispatch Instruction issued under clause 7.6.5A with a non-zero dispatch quantity in Trading Interval t:

$$PRCOQ(f,t) - DIMW(f,t)$$

2. otherwise:

$$PRCOQ(f,t)$$

where:

3. PRCOQ(f,t) is the Peak Reserve Capacity Obligation Quantity for Demand Side Programme f in Trading Interval t; and

4. DIMW(f,t) is the quantity by which Demand Side Programme f was instructed by AEMO to amend its DSP Energy Level in Trading Interval t as specified by AEMO in accordance with clause 7.13.5.

(f) Subject to clause 4.26.1(g), the minimum refund factor PRF floor(f,t) in the Trading Interval t is determined as follows:

PRF floor(f,t) = 1 - 0.75 × Dispatchable(f,t)

where:

i. Dispatchable(f,t) for a Facility f in the Trading Interval t is its portion of capacity which is not subject to a Forced Outage for energy over the 4320 previous Trading Intervals pt prior to and including the Trading Interval t, where this is equal to one in the Trading Interval if no Peak Capacity Credits are held by the Facility in any of the 4320 previous Trading Intervals, determined as follows:

$$\text{Dispatchable}(f,t) = 1 - \left(\frac{\sum_{pt \in PT} \text{PCAFO}(f,pt)}{\sum_{pt \in PT} \text{PCC}(f,pt)}\right)$$

where:

1. PT is the set of 4320 Trading Intervals immediately prior to and including the Trading Interval t and pt is a Trading Interval within that set;

2. PCAFO(f,pt) is the Peak Capacity Adjusted Forced Outage Quantity for Facility f in the Trading Interval pt, as determined in accordance with clause 3.21.7B; and

3. PCC(f,pt) is the number of Peak Capacity Credits a Market Participant holds for Facility f in the Trading Interval pt.

~~(f) Subject to clause 4.26.1(g), the minimum refund factor RF floor(f,t) in the Trading Interval t is determined as follows:~~

~~RF floor(f,t) = 1 - 0.75 × Dispatchable(f,t)~~

~~where:~~

~~i. Dispatchable(f,t) for a Facility f in the Trading Interval t is its portion of capacity which is not subject to a Forced Outage over the 4320 previous Trading Intervals pt prior to and including the Trading Interval t, where this is equal to one in the Trading Interval if no Capacity Credits are held by the Facility in any of the 4320 previous Trading Intervals, determined as follows:~~

$$\text{Dispatchable}(f,t) = 1 - \left(\frac{\sum_{pt \in PT} CAFO(f,pt)}{\sum_{pt \in PT} CC(f,pt)}\right)$$

~~where:~~

~~1. PT is the set of 4320 Trading Intervals immediately prior to and including the Trading Interval t and pt is a Trading Interval within that set;~~

~~2. CAFO(f,pt) is the Capacity Adjusted Forced Outage Quantity for Facility f in the Trading Interval pt, as determined in accordance with clause 3.21.7B; and~~

~~3. CC(f,pt) is the number of Capacity Credits a Market Participant holds for Facility f in the Trading Interval pt; and~~

(g) PRF floor(f,t) is equal to one in the Trading Interval t for a Facility f to which any of the following applies:

i. the Facility f is a Demand Side Programme; or

ii. the Facility f is not a Registered Facility or AEMO has deemed the Facility to not be in Commercial Operation in the Trading Interval t.

(h) The Flexible Trading Interval Refund Rate for a Facility f in the Trading Interval t is determined as follows:

Flexible Trading Interval Refund Rate(f,t)=FRF(f,t) × FY(f,t)

where:

i. Flexible Trading Interval Refund Rate (f,t) is the Flexible Trading Interval Refund Rate for Facility f in Trading Interval t;

ii. FRF(f,t) is the Flexible Capacity refund factor for Facility f in Trading Interval t and is calculated in accordance with clause 4.26.1(j); and

iii. FY(f,t) is the per Trading Interval price for Flexible Capacity associated with Facility f in Trading Interval t and is determined in accordance with clause 4.26.1(i);

(i) For a Facility f, for which a Market Participant holds Flexible Capacity Credits, in the Trading Interval t, FY(f,t) is zero if Trading Interval t falls in the Hot Season, and is otherwise determined as follows:

i. if Facility f is not a Registered Facility in Trading Interval t:

$$\mathrm{FY}(\mathrm{f},\mathrm{t}) = \frac{12}{8} \times \frac{\mathrm{EDFRCP}(\mathrm{f},\mathrm{t})}{48}$$

where EDFRCP(f,t) is the Entity Daily Flexible Reserve Capacity Price for Facility f in Trading Interval t;

ii. if AEMO has determined that in Trading Interval t Facility f is not in Commercial Operation and is either a Scheduled Facility or Semi-Scheduled Facility:

$$\mathrm{FY}(\mathrm{f},\mathrm{t}) = \frac{12}{8} \times \frac{\sum_{\mathrm{c}\in\mathrm{f}} \mathrm{EDFRCP}(\mathrm{c},\mathrm{t}) \times \mathrm{FCC}(\mathrm{c},\mathrm{t})}{\mathrm{FCC}(\mathrm{f},\mathrm{t}) \times 48}$$

where:

1. c∈f refers to all Separately Certified Components c of Facility f in Trading Interval t;

2. EDFRCP(c,t) is the Entity Daily Flexible Reserve Capacity Price for Separately Certified Component c in Trading Interval t;

3. FCC(c,t) is the quantity of Flexible Capacity Credits associated with Separately Certified Component c in Trading Interval t; and

4. FCC(f,t) is the quantity of Flexible Capacity Credits associated with Facility f in Trading Interval t;

iii. if AEMO has determined that in Trading Interval t Facility f is in Commercial Operation and is either a Scheduled Facility or Semi-Scheduled Facility, FY(f,t) is defined as:

$$FY(f,t) = \frac{12}{8} \times \left(\left(\sum_{c\in ESR(f,t)} \frac{FESROI(t) \times FCC(c,t)}{FCC(f,t)} \times \frac{EDFRCP(c,t)}{FCOD(t)} \right) + \left(\sum_{c\in NonESR(f,t)} \frac{FCC(c,t)}{FCC(f,t)} \times \frac{EDFRCP(c,t)}{48} \right) \right)$$

where:

1. 12/8 is the number of months in a year divided by the number of months outside the Hot Season;

2. $c \in ESR(f,t)$ refers to all Separately Certified Components c of Facility f in Trading Interval t which are Electric Storage Resources;

3. FESROI(t) is 1 if Trading Interval t is a Flexible Electric Storage Resource Obligation Interval and 0 otherwise;

4. FCC(c,t) is the Flexible Capacity Credits associated with Separately Certified Component c in Trading Interval t;

5. FCC(f,t) is the total Flexible Capacity Credits held by Facility f in Trading Interval t;

6. EDFRCP(c,t) is the Entity Daily Flexible Reserve Capacity Price for Separately Certified Component c in Trading Interval t;

7. FCOD(t) is the number of Trading Intervals in the Flexible Capacity Obligation Duration in the Trading Day containing Trading Interval t; and

8. $c \in NonESR(f,t)$ refers to all Separately Certified Components c of Facility f in Trading Interval t that are not Electric Storage Resources; and

iv. if Facility f is a Demand Side Programme:

$$FY(f,t) = \frac{12}{8} \times EDFRCP(f,t) \times \frac{1}{48} \times \frac{TICY(t)}{DSPTICY(f,t)}$$

where:

1. EDFRCP(f,t) is the Entity Daily Flexible Reserve Capacity Price for Facility f in Trading Interval t;

2. TICY(t) is the number of Trading Intervals in the Capacity Year in which Trading Interval t falls; and

3. DSPTICY(f,t) is the number of Trading Intervals in the Capacity Year in which Trading Interval t falls which fall in the period specified under clause 4.10.1(f)(vi) for Demand Side Programme f.

(j) The Flexible Capacity refund factor FRF(f,t) for a Facility f in Trading Interval t is the lesser of:

i. six; and

ii. the greater of the Flexible Capacity dynamic refund factor FRF_dynamic(t) as determined under clause 4.26.1(k) and one.

(k) The Flexible Capacity dynamic refund factor FRF_dynamic(t) in Trading Interval t is determined as follows:

$$FRF_dynamic(t) = 2 \times \frac{2 \times (OD(t) - OD(t-1))}{0.25 \times EHFHDI}$$

where:

i. OD(t) is the Operational Demand for Trading Interval t; and

ii. EHFHDI is the expected highest Four-Hour Demand Increase determined under clause 4.5.10(bA)(ii) for the Capacity Year in which Trading Interval t falls.

~~(g) RF floor(f,t) is equal to one in the Trading Interval t for a Facility f to which any of the following applies:~~

~~i. the Facility f is a Demand Side Programme; or~~

~~ii. the Facility f is not a Registered Facility or AEMO has deemed the Facility to not be in Commercial Operation in the Trading Interval t.~~

4.26.1A. AEMO must calculate the Peak Reserve Capacity Deficit refund for each Facility f, for which a Market Participant holds Peak Capacity Credits, ("**Peak Facility Reserve Capacity Deficit Refund**") in each Trading Interval t as the lesser of:

(a) the product of:

i. the Peak Trading Interval Refund Rate, calculated under clause 4.26.1(a), applicable to Facility f in Trading Interval t; and

ii. the Peak Reserve Capacity Deficit for Facility f in Trading Interval t, where the Peak Reserve Capacity Deficit for Facility f in Trading Interval t is equal to whichever of the following applies:

1. if Facility f is not a Registered Facility then the number of Peak Capacity Credits associated with Facility f in Trading Interval t;

2. if Facility f is considered by AEMO to have not been in Commercial Operation in Trading Interval t and is either a Scheduled Facility, a Semi-Scheduled Facility or a Non-Scheduled Facility, the number of Peak Capacity Credits associated with Facility f;

3. if Facility f is considered by AEMO to have been in Commercial Operation in Trading Interval t and is either a Scheduled Facility or a Semi-Scheduled Facility:

$$\min(PCCIG(f,t), \max(0, \min(RL(f,t) - 2 \times MAX2(f,t), RL(f,t) - A(f,t)))) + PRTMRCD(f,t)$$

where:

i. PCCIG(f,t) is the number of Peak Capacity Credits held for Facility f associated with Separately Certified Components of Facility f which are Intermittent Generating Systems of the Facility in Trading Interval t;

ii. RL(f,t) is the Required Level for Facility f, adjusted to

100 percent of the level of Peak Capacity Credits held for Facility f in Trading Interval t;

iii. MAX2(f,t) is the second highest value of the output for Facility f (in MWh) achieved for a Trading Interval during the Trading Day in which Trading Interval t falls, as measured in Meter Data Submissions received by AEMO in accordance with section 8.4, that has been achieved since the date AEMO determined the Facility to be in Commercial Operation up to the relevant Trading Day, where this value must be set equal to or greater than the Max2 applied by AEMO for the previous Trading Day;

iv. A(f,t) is the level of output (in MW) detailed in the most recent report provided prior to Trading Interval t by the Market Participant for Facility f under clause 4.13.10C; and

v. PRTMRCD(f,t) is the Peak Real-Time Market Reserve Capacity Deficit determined for Facility f in Trading Interval t under clause 4.26.1B;

4. if Facility f is considered by AEMO to have been in Commercial Operation in Trading Interval t and is a Non-Scheduled Facility:

$$\min(PCC(f,t), \max(0, \min(RL(f,t) - 2 \times MAX2(f,t), RL(f,t) - A(f,t))))$$

where:

i. PCC(f,t) is the number of Peak Capacity Credits held for Facility f in Trading Interval t;

ii. RL(f,t) is the Required Level for Facility f, adjusted to 100 percent of the level of Peak Capacity Credits held for Facility f in Trading Interval t;

iii. MAX2(f,t) is the second highest value of the output for Facility f (in MWh) achieved for a Trading Interval during the Trading Day in which Trading Interval t falls, as measured in Meter Data Submissions received by AEMO in accordance with section 8.4, that has been achieved since the date AEMO determined the Facility to be in Commercial Operation up to the relevant Trading Day, where this value must be set equal to or greater than the Max2 applied by AEMO for the previous Trading Day; and

iv. A(f,t) is the level of output (in MW) detailed in the most recent report provided prior to Trading Interval t by the

Market Participant for Facility f under clause 4.13.10C; and

5. if Facility f is a Demand Side Programme, the Peak DSP Association Shortfall calculated by AEMO under clause 4.26.1AB, or zero if AEMO has not determined a Peak DSP Association Shortfall for the Trading Interval; and

(b) the Maximum Peak Facility Refund for the Facility in the relevant Capacity Year, less all Peak Facility Reserve Capacity Deficit Refunds applicable to the Facility in previous Trading Intervals falling in the same Capacity Year.

4.26.1AA. AEMO must determine the Peak DSP Delivery Shortfall for a Demand Side Programme for all Trading Intervals t from the first Trading Interval of DSP Dispatch Event e for the Demand Side Programme up to but excluding the first Trading Interval of the next DSP Dispatch Event e+1 for the Demand Side Programme as the minimum of:

(a) the number of Peak Capacity Credits held by the Market Participant for the Demand Side Programme for Trading Interval t; and

(b) the Peak DSP Event Shortfall determined under clause 4.26.1AD for the Demand Side Programme for DSP Dispatch Event e.

4.26.1AB. AEMO must calculate the Peak DSP Association Shortfall for each Demand Side Programme for each Trading Interval t from the start of the Capacity Year until the Trading Interval t-1 before the first Trading Interval t, in which one of the following applies:

(a) the Demand Side Programme is subject to a Dispatch Instruction issued under clause 7.6.5A with a non-zero dispatch quantity determined under clause 7.13.5; or

(b) the Demand Side Programme is undergoing a Reserve Capacity Test under section 4.25.

4.26.1AC. For the purpose of clause 4.26.1AB, AEMO must calculate the Peak DSP Association Shortfall for Demand Side Programme f in Trading Interval t as:

$$PDSPAS(f,t) = max\left(0, RCOQ(f,t) - AssocLoadCapacity(f,t)\right)$$

where:

(a) RCOQ(f,t) is the Reserve Capacity Obligation Quantity determined for Facility f in Trading Interval t; and

(b) AssocLoadCapacity(f,t) is the sum of the MW quantities by which each Associated Load in Facility f is expected to reduce its Withdrawal or increase its Injection, provided under clause 2.29.5B for the Associated Loads for Trading Interval t.

4.26.1AD. AEMO must calculate the Peak DSP Event Shortfall for each DSP Dispatch Event e as follows:

(a) if the Capacity Shortfall determined under clause 4.26.2D for each Trading Interval in e is zero, the DSP Event Shortfall for e is zero; and

(b) otherwise, the DSP Event Shortfall equals the lowest, non-zero, Capacity Shortfall of all Trading Intervals in e.

4.26.1B. AEMO must calculate the Real-Time Market Reserve Capacity Deficit for each Scheduled Facility or Semi-Scheduled Facility f for each Trading Interval t in which AEMO considers the Facility to have been in Commercial Operation as:

$$PRTMRCD(f,t) = min(PRCOQ(f,t), PCAFO(f,t) + PNISCRQ(f,t) + PESRCSF(f,t) + PRTMOSF(f,t)) + PNIMGRPPO(f,t) + PESRRPPO(f,t)$$

where:

(a) PRCOQ(f,t) is the Peak Reserve Capacity Obligation Quantity determined for Facility f in Trading Interval t;

(b) PCAFO(f,t) is the Peak Capacity Adjusted Forced Outage Quantity determined for Facility f in Trading Interval t under clause 3.21.7B;

(c) PNISCRQ(f,t) is the Peak Not In-Service Capacity Refund Quantity determined for Facility f in Trading Interval t under clause 4.26.1D;

(d) PESRCSF(f,t) is the Peak ESR Charge Shortfall determined for Facility f in Trading Interval t under clause 4.26.1E;

(e) PRTMOSF(f,t) is the Peak Real-Time Market Offer Shortfall determined for Facility f in Trading Interval t under clause 4.26.1G;

(f) PNIMGRPPO(f,t) is the total Peak Refund Payable Planned Outage Quantity determined for Separately Certified Components of Facility f which are Non-Intermittent Generating Systems in Trading Interval t under clause 4.26.1C; and

(g) PESRRPPO(f,t) is the total Peak Refund Payable Planned Outage Quantity determined for Separately Certified Components of Facility f which are Electric Storage Resources in Trading Interval t under clause 4.26.1CA.

~~4.26.1B. AEMO must calculate the Real-Time Market Reserve Capacity Deficit for each Scheduled Facility or Semi-Scheduled Facility f for each Trading Interval t in which AEMO considers the Facility to have been in Commercial Operation as:~~

~~$$RTMRCD(f,t) = min(RCOQ(f,t), CAFO(f,t) + NISCRQ(f,t) + ESRCSF(f,t) + RTMOSF(f,t)) + NIMGRPPO(f,t) + ESRRPPO(f,t)$$~~

~~where:~~

~~(a) RCOQ(f,t) is the Reserve Capacity Obligation Quantity determined for Facility f in Trading Interval t;~~

~~(b) CAFO(f,t) is the Capacity Adjusted Forced Outage Quantity determined for Facility f in Trading Interval t under clause 3.21.7B;~~

~~(c) NISCRQ(f,t) is the Not In-Service Capacity Refund Quantity determined for Facility f in Trading Interval t under clause 4.26.1D;~~

~~(d) ESRCSF(f,t) is the ESR Charge Shortfall determined for Facility f in Trading Interval t under clause 4.26.1E;~~

~~(e) RTMOSF(f,t) is the Real-Time Market Offer Shortfall determined for Facility f in Trading Interval t under clause 4.26.1G;~~

~~(f) NIMGRPPO(f,t) is the total Refund Payable Planned Outage Quantity determined for Separately Certified Components of Facility f which are Non-Intermittent Generating Systems in Trading Interval t under clause 4.26.1C; and~~

~~(g) ESRRPPO(f,t) is the total Refund Payable Planned Outage Quantity determined for Separately Certified Components of Facility f which are Electric Storage Resources in Trading Interval t under clause 4.26.1CA.~~

4.26.1C. If the Peak Capacity Adjusted Planned Outage Quantity in a Trading Interval for a Separately Certified Component of a Scheduled Facility or Semi-Scheduled Facility which is a Non-Intermittent Generating System is greater than zero, then AEMO must determine that Peak Capacity Adjusted Planned Outage Quantity to be:

(a) if the Peak Refund Exempt Planned Outage Count for the Separately Certified Component, calculated over the 1000 Trading Days preceding the Trading Day in which the Trading Interval falls, is less than 8400, a Peak Refund Exempt Planned Outage Quantity; or

(b) otherwise, a Peak Refund Payable Planned Outage Quantity.

~~4.26.1C. If the Capacity Adjusted Planned Outage Quantity in a Trading Interval for a Separately Certified Component of a Scheduled Facility or Semi-Scheduled Facility which is a Non-Intermittent Generating System is greater than zero, then AEMO must determine that Capacity Adjusted Planned Outage Quantity to be:~~

~~(a) if the Refund Exempt Planned Outage Count for the Separately Certified Component, calculated over the 1000 Trading Days preceding the Trading Day in which the Trading Interval falls, is less than 8400, a Refund Exempt Planned Outage Quantity; or~~

~~(b) otherwise, a Refund Payable Planned Outage Quantity.~~

4.26.1CA. If the Peak Capacity Adjusted Planned Outage Quantity in a Trading Interval for a Separately Certified Component of a Scheduled Facility or Semi-Scheduled Facility which is an Electric Storage Resource is greater than zero, then AEMO must determine that Peak Capacity Adjusted Planned Outage Quantity to be:

(a) if the Peak Refund Exempt Planned Outage Count for the Separately Certified Component, calculated over the 1000 Trading Days preceding the Trading

Day in which the Trading Interval falls, is less than 16800 divided by the ESR Duration Requirement for the Reserve Capacity Cycle, a Peak Refund Exempt Planned Outage Quantity; or

(b) otherwise, a Peak Refund Payable Planned Outage Quantity.

~~4.26.1CA. If the Capacity Adjusted Planned Outage Quantity in a Trading Interval for a Separately Certified Component of a Scheduled Facility or Semi-Scheduled Facility which is an Electric Storage Resource is greater than zero, then AEMO must determine that Capacity Adjusted Planned Outage Quantity to be:~~

~~(a) if the Refund Exempt Planned Outage Count for the Separately Certified Component, calculated over the 1000 Trading Days preceding the Trading Day in which the Trading Interval falls, is less than 1400, a Refund Exempt Planned Outage Quantity; or~~

~~(b) otherwise, a Refund Payable Planned Outage Quantity.~~

4.26.1D. AEMO must calculate the Not In-Service Capacity Refund Quantity for each Scheduled Facility or Semi-Scheduled Facility f for each Trading Interval t in which AEMO considers the Facility to have been in Commercial Operation as:

$$PNISCRQ(f,t) = \frac{5}{30} \times \sum_{DI \in t} \begin{cases} 0, \text{ if RTMSuspFlag(DI) = 1, otherwise} \\ \min(PRCOQ(f,DI) - PCAFO(f,DI),\ PNISCap(f,DI)) \end{cases}$$

where:

(a) PRCOQ(f,DI) is the Peak Reserve Capacity Obligation Quantity determined for Facility f in Dispatch Interval DI;

(b) PCAFO(f,DI) is the Peak Capacity Adjusted Forced Outage Quantity determined for Facility f in Dispatch Interval DI under clause 3.21.7C;

(c) NISCap(f,DI) is the Not In-Service Capacity quantity determined for Facility f in Dispatch Interval DI under clause 7.13A.1;

(d) RTMSuspFlag(DI) is the RTM Suspension Flag for Dispatch Interval DI; and

(e) DI$\in$t denotes all Dispatch Intervals DI in Trading Interval t.

~~4.26.1D. AEMO must calculate the Not In-Service Capacity Refund Quantity for each Scheduled Facility or Semi-Scheduled Facility f for each Trading Interval t in which AEMO considers the Facility to have been in Commercial Operation as:~~

$$NISCRQ(f,t) = \frac{5}{30} \times \sum_{DI \in t} \begin{cases} 0, \text{ if RTMSuspFlag(DI) = 1, otherwise} \\ \min(RCOQ(f,DI) - CAFO(f,DI),\ NISCap(f,DI)) \end{cases}$$

~~where:~~

~~(a) RCOQ(f,DI) is the Reserve Capacity Obligation Quantity determined for Facility f in Dispatch Interval DI;~~

~~(b) CAFO(f,DI) is the Capacity Adjusted Forced Outage Quantity determined for Facility f in Dispatch Interval DI under clause 3.21.7C;~~

~~(c) NISCap(f,DI) is the Not In-Service Capacity quantity determined for Facility f in Dispatch Interval DI under clause 7.13A.1;~~

~~(d) RTMSuspFlag(DI) is the RTM Suspension Flag for Dispatch Interval DI; and~~

~~(e) DI∈t denotes all Dispatch Intervals DI in Trading Interval t.~~

4.26.1E. AEMO must calculate the Peak ESR Charge Shortfall for each Scheduled Facility or Semi-Scheduled Facility f for each Trading Interval t in which AEMO considers the Facility to have been in Commercial Operation as:

$$\text{PESRChargeShortfall}(f,t) = \frac{\sum_{DI \in t} \sum_{c \in f} \text{PESRCSF}(c,DI)}{6}$$

where:

(a) PESRCSF(c,DI) is the capacity shortfall in MW determined for Separately Certified Component c in Dispatch Interval DI under clause 4.26.1F;

(b) DI∈t denotes all Dispatch Intervals DI in Trading Interval t; and

(c) c∈f denotes all Separately Certified Components c of Facility f that are Electric Storage Resources.

~~4.26.1E. AEMO must calculate the ESR Charge Shortfall for each Scheduled Facility or Semi-Scheduled Facility f for each Trading Interval t in which AEMO considers the Facility to have been in Commercial Operation as:~~

$$\text{ESRChargeShortfall}(f,t) = \frac{\sum_{DI \in t} \sum_{c \in f} \text{ESRCSF}(c,DI)}{6}$$

~~where:~~

~~(a) ESRCSF(c,DI) is the capacity shortfall in MW determined for Separately Certified Component c in Dispatch Interval DI under clause 4.26.1F;~~

~~(b) DI∈t denotes all Dispatch Intervals DI in Trading Interval t; and~~

~~(c) c∈f denotes all Separately Certified Components c of Facility f that are Electric Storage Resources.~~

4.26.1F. PESRCSF(c,DI) for Separately Certified Component c (which is an Electric Storage Resource) for Dispatch Interval DI is:

$$\text{PESRCSF}(c,DI) = \begin{cases} 0, \text{ if RTMSuspFlag}(DI) = 1, \text{ otherwise} \\ \max\left(0, \text{PRCOQ}(c,DI) - \text{PCAFO}(c,DI)\right) - \\ 12 \times \max\left(0, \text{ChargeLevel}(c,DI) - \text{MinChargeLevel}(c,DI)\right) \end{cases}$$

where:

(a) PRCOQ(c,DI) is the Peak Reserve Capacity Obligation Quantity determined for Separately Certified Component c in Dispatch Interval DI;

(b) PCAFO(c,DI) is the Peak Capacity Adjusted Forced Outage Quantity determined for Separately Certified Component c in Dispatch Interval DI under clause 3.21.7;

(c) ChargeLevel(c,DI) is the Charge Level in MWh, or alternative estimate from AEMO if the Charge Level is not available, of Separately Certified Component c determined at the start of Dispatch Interval DI;

(d) MinChargeLevel(c,DI) is the minimum Charge Level capability in MWh as specified in Standing Data for Separately Certified Component c in Dispatch Interval DI; and

(e) RTMSuspFlag(DI) is the RTM Suspension Flag for Dispatch Interval DI.

~~4.26.1F. ESRCSF(c,DI) for Separately Certified Component c (which is an Electric Storage Resource) for Dispatch Interval DI is:~~

$$ESRCSF(c,DI) = \begin{cases} 0, \text{ if } RTMSuspFlag(DI) = 1, \text{ otherwise} \\ \max\left(0, \frac{RCOQ(c,DI) - CAFO(c,DI) - ChargeLevel(c,DI)}{12 \times \max(0, ChargeLevel(c,DI) - MinChargeLevel(c,DI))}\right) \end{cases}$$

~~where:~~

~~(a) RCOQ(c,DI) is the Reserve Capacity Obligation Quantity determined for Separately Certified Component c in Dispatch Interval DI;~~

~~(b) CAFO(c,DI) is the Capacity Adjusted Forced Outage Quantity determined for Separately Certified Component c in Dispatch Interval DI under clause 3.21.7;~~

~~(c) ChargeLevel(c,DI) is the Charge Level in MWh, or alternative estimate from AEMO where the Charge Level is not available, of Separately Certified Component c determined at the start of Dispatch Interval DI;~~

~~(d) MinChargeLevel(c,DI) is the minimum Charge Level capability in MWh as specified in Standing Data for Separately Certified Component c in Dispatch Interval DI; and~~

~~(e) RTMSuspFlag(DI) is the RTM Suspension Flag for Dispatch Interval DI.~~

4.26.1G. AEMO must determine the shortfall in Peak Capacity offered into the Real-Time Market ("Peak Real-Time Market Offer Shortfall") for each Scheduled Facility or Semi-Scheduled Facility f for each Trading Interval t in which AEMO considers the Facility to have been in Commercial Operation as:

$$PRTMOSF(f,t) = max\left(0, \frac{\sum_{DI \in t} PRTMOSF(f,DI)}{6} - PCAFO(f,t) - PNISCRQ(f,t) - PESRCSF(f,t)\right)$$

where:

(a) PRTMOSF(f,DI) is the shortfall in Peak Capacity offered into the Real-Time Market determined for Facility f in Dispatch Interval DI under clause 4.26.1H;

(b) PCAFO(f,t) is the Peak Capacity Adjusted Forced Outage Quantity determined for Facility f in Trading Interval t under clause 3.21.7B;

(c) PNISCRQ(f,t) is the Peak Not In-Service Capacity Refund Quantity determined for Facility f in Trading Interval t under clause 4.26.1D; and

(d) PESRCSF(f,t) is the Peak ESR Charge Shortfall determined for Facility f in Trading Interval t under clause 4.26.1E.

~~4.26.1G. AEMO must determine the shortfall in Reserve Capacity offered into the Real-Time Market ("Real-Time Market Offer Shortfall") for each Scheduled Facility or Semi-Scheduled Facility f for each Trading Interval t in which AEMO considers the Facility to have been in Commercial Operation as:~~

$$RTMOSF(f,t) = max\left(0, \frac{\sum_{DI \in t} \text{RTMOSF(f, DI)}}{6} - CAFO(f,t) - NISCRQ(f,t) - ESRCSF(f,t)\right)$$

~~where:~~

~~(a) RTMOSF(f,DI) is the shortfall in Reserve Capacity offered into the Real-Time Market determined for Facility f in Dispatch Interval DI under clause 4.26.1H;~~

~~(b) CAFO(f,t) is the Capacity Adjusted Forced Outage Quantity determined for Facility f in Trading Interval t under clause 3.21.7B;~~

~~(c) NISCRQ(f,t) is the Not In-Service Capacity Refund Quantity determined for Facility f in Trading Interval t under clause 4.26.1D; and~~

~~(d) ESRCSF(f,t) is the ESR Charge Shortfall determined for Facility f in Trading Interval t under clause 4.26.1E.~~

4.26.1H. PRTMOSF(f,DI) for Facility f in Dispatch Interval DI is:

$$\text{PRTMOSF(f,DI)} = \begin{cases} 0 \text{ if RTMSuspFlag(DI) = 1, otherwise} \\ \max(0, \text{PRCOQ(f,DI)} - \text{OfferAvail(f,DI)}) \end{cases}$$

where:

(a) PRCOQ(f,DI) is the Peak Reserve Capacity Obligation Quantity determined for Facility f in Dispatch Interval DI;

(b) OfferAvail(f,DI) is the total MW quantity included in Real-Time Market Offers for energy from Facility f in Dispatch Interval DI (whether offered as Available Capacity or In-Service Capacity) that were used to calculate Dispatch Instructions and Market Clearing Prices for that Dispatch Interval; and

(c) RTMSuspFlag(DI) is the RTM Suspension Flag for Dispatch Interval DI.

~~4.26.1H. RTMOSF(f,DI) for Facility f in Dispatch Interval DI is:~~

$$\text{RTMOSF(f,DI)} = \begin{cases} 0 \text{ if RTMSuspFlag(DI) = 1, otherwise} \\ \max(0, \text{RCOQ(f,DI)} - \text{OfferAvail(f,DI)}) \end{cases}$$

~~where:~~

~~(a) RCOQ(f,DI) is the Reserve Capacity Obligation Quantity determined for Facility f in Dispatch Interval DI;~~

~~(b) OfferAvail(f,DI) is the total MW quantity included in Real-Time Market Offers for energy from Facility f in Dispatch Interval DI (whether offered as Available~~

~~Capacity or In-Service Capacity) that were used to calculate Dispatch Instructions and Market Clearing Prices for that Dispatch Interval; and~~

~~(c) RTMSuspFlag(DI) is the RTM Suspension Flag for Dispatch Interval DI.~~

4.26.1I. AEMO must calculate the Peak Generation Reserve Capacity Deficit Refund for each Market Participant for each Trading Interval as the sum of the Peak Facility Reserve Capacity Deficit Refunds for the Trading Interval for each Facility with a Facility Class (or, for an unregistered Facility, an indicative Facility Class) of Scheduled Facility, Semi-Scheduled Facility or Non-Scheduled Facility, for which the Market Participant holds Peak Capacity Credits in the Trading Interval.

~~4.26.1I. AEMO must calculate the Generation Reserve Capacity Deficit Refund for each Market Participant for each Trading Interval as the sum of the Facility Reserve Capacity Deficit Refunds for the Trading Interval for each Facility with a Facility Class (or, for an unregistered Facility, an indicative Facility Class) of Scheduled Facility, Semi-Scheduled Facility or Non-Scheduled Facility, for which the Market Participant holds Capacity Credits in the Trading Interval.~~

4.26.1J. If a Scheduled Facility or a Semi-Scheduled Facility that has a Peak Reserve Capacity Obligation Quantity greater than zero for a Dispatch Interval:

(a) has been issued a Dispatch Instruction with a Dispatch Target or a Dispatch Cap less than or equal to its Peak Reserve Capacity Obligation Quantity and did not Inject at a level of the Dispatch Cap or Dispatch Target during the Dispatch Interval; or

(b) has been issued a Dispatch Instruction with a Dispatch Target or a Dispatch Cap greater than its Peak Reserve Capacity Obligation Quantity and did not Inject at least at a level of the Peak Reserve Capacity Obligation Quantity during the Dispatch Interval,

the Market Participant for the Facility must, as soon as practicable at the end of the Dispatch Interval, or in any event, within 24 hours of the end of the Dispatch Interval, submit a Forced Outage for the energy Outage Capability in accordance with the WEM Procedure specified in clause 3.21.10.

~~4.26.1J. Where a Scheduled Facility or a Semi-Scheduled Facility that has a Reserve Capacity Obligation Quantity greater than zero for a Dispatch Interval:~~

~~(a) has been issued a Dispatch Instruction with a Dispatch Target or a Dispatch Cap less than or equal to its Reserve Capacity Obligation Quantity and did not Inject at a level of the Dispatch Cap or Dispatch Target during the Dispatch Interval; or~~

~~(b) has been issued a Dispatch Instruction with a Dispatch Target or a Dispatch Cap greater than its Reserve Capacity Obligation Quantity and did not Inject at least at a level of the Reserve Capacity Obligation Quantity during the Dispatch Interval,~~

~~the Market Participant for the Facility must, as soon as practicable at the end of the Dispatch Interval, or in any event, within 24 hours of the end of the Dispatch Interval, submit a Forced Outage in accordance with the WEM Procedure specified in clause 3.21.10.~~

4.26.2. If a Scheduled Facility or a Semi-Scheduled Facility that has a Flexible Reserve Capacity Obligation Quantity greater than zero for a Dispatch Interval:

(a) has been issued a Dispatch Target or a Dispatch Cap less than or equal to its Flexible Reserve Capacity Obligation Quantity and did not Inject at a level of the Dispatch Cap or Dispatch Target during the Dispatch Interval; or

(b) has been issued a Dispatch Target or a Dispatch Cap greater than its Flexible Reserve Capacity Obligation Quantity and did not Inject at least at a level of the Flexible Reserve Capacity Obligation Quantity during the Dispatch Interval,

the Market Participant for the Facility must, as soon as practicable at the end of the Dispatch Interval, or in any event, within 24 hours of the end of the Dispatch Interval, submit a Forced Outage for the Flexible Capacity Outage Capability in accordance with the WEM Procedure specified in clause 3.21.10.

~~4.26.2. [Blank]~~

4.26.2A. [Blank]

4.26.2AA. AEMO must determine the net STEM shortfall ("Net STEM Shortfall") in Reserve Capacity supplied by each Market Participant p holding Peak Capacity Credits for one or more Scheduled Facilities, Semi-Scheduled Facilities or Non-Scheduled Facilities in each Trading Interval t as:

$$\mathrm{STEMSF}(p,t) = \max(0, \mathrm{STEMREQ}(p,t) - \mathrm{CAPASTEM}(p,t) - \mathrm{RTCR}(p,t))$$

where:

(a) STEMREQ(p,t) is determined for Market Participant p in Trading Interval t under clause 4.26.2AB;

(b) CAPASTEM(p,t) is determined for Market Participant p in Trading Interval t under clause 4.26.2AE; and

(c) RTCR(p,t) is determined for Market Participant p in Trading Interval t under clause 4.26.2AH.

4.26.2AB. STEMREQ(p,t) for Market Participant p in Trading Interval t is:

$$\mathrm{STEMREQ}(p,t) = \frac{\sum_{DI \in t} \mathrm{STEMREQ}(p, DI)}{6}$$

where:

(a) STEMREQ(p,DI) is determined for Market Participant p in Dispatch Interval DI under clause 4.26.2AC; and

(b) DI∈t denotes all Dispatch Intervals DI in Trading Interval t.

4.26.2AC. STEMREQ(p,DI) for Market Participant p in Dispatch Interval DI is:

$$STEMREQ(p,DI) = \sum_{f \in SFFacilities(p,DI)} STEMFREQ(f,DI)$$

where:

(a) STEMFREQ(f,DI) is determined for Facility f in Dispatch Interval DI under clause 4.26.2AD; and

(b) f∈SFFacilities(p,DI) denotes all Scheduled Facilities and Semi-Scheduled Facilities for which Market Participant p holds Capacity Credits in Dispatch Interval DI and which AEMO considers to be in Commercial Operation in Dispatch Interval DI.

4.26.2AD. STEMFREQ(f,DI) for Facility f in Dispatch Interval DI is:

$$\mathrm{STEMFREQ(f,DI)} = \mathrm{STEMPRCOQ(f,DI)} - \mathrm{Max(0, STEMPCAFO(f,DI)} - \mathrm{PCAFO(f,DI))}$$

where:

(a) STEMPRCOQ(f,DI) is the STEM Peak Reserve Capacity Obligation Quantity determined for Facility f in Dispatch Interval DI;

(b) STEMPCAFO(f,DI) is the estimate of the Peak Capacity Adjusted Forced Outage Quantity for Facility f in Dispatch Interval DI determined on the Scheduling Day for the relevant Trading Day under clause 6.3A.3(g); and

(c) PCAFO(f,DI) is the Peak Capacity Adjusted Forced Outage Quantity determined for Facility f in Dispatch Interval DI under clause 3.21.7C.

~~4.26.2AD. STEMFREQ(f,DI) for Facility f in Dispatch Interval DI is:~~

~~$\mathrm{STEMFREQ(f,DI)} = \mathrm{STEMRCOQ(f,DI)} - \mathrm{Max(0, STEMCAFO(f,DI)} - \mathrm{CAFO(f,DI))}$~~

~~where:~~

~~(a) STEMRCOQ(f,DI) is the STEM Reserve Capacity Obligation Quantity determined for Facility f in Dispatch Interval DI;~~

~~(b) STEMCAFO(f,DI) is the estimate of the Capacity Adjusted Forced Outage Quantity for Facility f in Dispatch Interval DI determined on the Scheduling Day for the relevant Trading Day under clause 6.3A.3(g); and~~

~~(c) CAFO(f,DI) is the Capacity Adjusted Forced Outage Quantity determined for Facility f in Dispatch Interval DI under clause 3.21.7C.~~

4.26.2AE. CAPASTEM(p,t) for Market Participant p in Trading Interval t is:

(a) if~~where~~ the STEM Auction has been suspended by AEMO in accordance with section 6.10 or where STEMREQ(p,t)=0:

$$CAPASTEM(p,t) = STEMREQ(p,t)$$

(b) otherwise:

$$\mathrm{CAPASTEM(p,t)} = \left(\frac{\mathrm{NCP(p,t)} + \mathrm{UnclearedSTEMOffers(p,t)} + \mathrm{ClearedSTEMBids(p,t)}}{\mathrm{LF(p,t)} \times \frac{30}{60}} \right)$$

where:

i. STEMREQ(p,t) is determined for Market Participant p in Trading Interval t under clause 4.26.2AB;

ii. NCP(p,t) is Market Participant p's Net Contract Position for Trading Interval t in MWh;

iii. UnclearedSTEMOffers(p,t) is the total MWh quantity covered by the STEM Offers which were not scheduled in the relevant STEM Auction, determined by AEMO for Market Participant p under section 6.9 for Trading Interval t;

iv. ClearedSTEMBids(p,t) is the total MWh quantity covered by the STEM Bids which were scheduled in the relevant STEM Auction, determined by AEMO for Market Participant p under section 6.9 for Trading Interval t; and

v. LF(p,t) is determined for Market Participant p in Trading Interval t under clause 4.26.2AF.

4.26.2AF. LF(p,t) for Market Participant p for Trading Interval t is:

$$\mathrm{LF(p,t)} = \frac{\sum_{\mathrm{DI} \in t} \mathrm{LF(p,DI)}}{6}$$

where:

(a) LF(p,DI) is the capacity obligation weighted average of the Loss Factors for Market Participant p's Scheduled Facilities and Semi-Scheduled Facilities in Dispatch Interval DI determined under clause 4.26.2AG; and

(b) DI∈t denotes all Dispatch Intervals in Trading Interval t.

4.26.2AG. LF(p,DI) for Market Participant p in Dispatch Interval DI is:

$$\mathrm{LF(p,DI)} = \frac{\sum_{\mathrm{f} \in \mathrm{SFFacilities(p,DI)}} (\mathrm{LossFactor(f,DI)} \times \mathrm{STEMPRCOQ(f,DI)})}{\sum_{\mathrm{f} \in \mathrm{SFFacilities(p,DI)}} \mathrm{STEMPRCOQ(f,DI)}}$$

where:

(a) LossFactor(f,DI) is the Loss Factor for Facility f in Dispatch Interval DI;

(b) STEMPRCOQ(f,DI) is the STEM Peak Reserve Capacity Obligation Quantity determined for Facility f in Dispatch Interval DI; and

(c) f∈SFFacilities(p,DI) denotes all Scheduled Facilities and Semi-Scheduled Facilities for which Market Participant p holds Peak Capacity Credits in

Dispatch Interval DI and which AEMO considers to be in Commercial Operation in Dispatch Interval DI.

~~4.26.2AG.LF(p,DI) for Market Participant p in Dispatch Interval DI is:~~

$$\text{LF}(p, DI) = \frac{\sum_{f \in SFFacilities(p,DI)} (\text{LossFactor}(f, DI) \times \text{STEMRCOQ}(f, DI))}{\sum_{f \in SFFacilities(p,DI)} \text{STEMRCOQ}(f, DI)}$$

~~where:~~

~~(a) LossFactor(f,DI) is the Loss Factor for Facility f in Dispatch Interval DI;~~

~~(b) STEMRCOQ(f,DI) is the STEM Reserve Capacity Obligation Quantity determined for Facility f in Dispatch Interval DI; and~~

~~(c) f∈SFFacilities(p,DI) denotes all Scheduled Facilities and Semi-Scheduled Facilities for which Market Participant p holds Capacity Credits in Dispatch Interval DI and which AEMO considers to be in Commercial Operation in Dispatch Interval DI.~~

4.26.2AH. RTCR(p,t) for Market Participant p in Trading Interval t is:

$$RTCR(p,t) = \sum_{f \in SFFacilities(p,t)} (PCAFO(f,t) + PNISCRQ(f,t) + PESRCSF(f,t) + PRTMOSF(f,t) + \max(0, PNIMGRPPO(f,t) + PESRRPPO(f,t) - STEMPCAPO(f,t)))$$

where:

(a) PCAFO(f,t) is the Peak Capacity Adjusted Forced Outage Quantity determined for Facility f in Trading Interval t under clause 3.21.7B;

(b) PNISCRQ(f,t) is the Peak Not In-Service Capacity Refund Quantity determined for Facility f in Trading Interval t under clause 4.26.1D;

(c) PESRCSF(f,t) is the Peak ESR Charge Shortfall determined for Facility f in Trading Interval t under clause 4.26.1E;

(d) PRTMOSF(f,t) is the Peak Real-Time Market Offer Shortfall determined for Facility f in Trading Interval t under clause 4.26.1G;

(e) PNIMGRPPO(f,t) is the total Peak Refund Payable Planned Outage Quantity determined for Separately Certified Components of Facility f which are Non-Intermittent Generating Systems in Trading Interval t under clause 4.26.1C;

(f) PESRRPPO(f,t) is the total Peak Refund Payable Planned Outage Quantity determined for Separately Certified Components of Facility f which are Electric Storage Resources in Trading Interval t under clause 4.26.1CA;

(g) STEMPCAPO(f,t) is the estimate of the Peak Capacity Adjusted Planned Outage Quantity for Facility f in Trading Interval t determined on the Scheduling Day for the relevant Trading Day under clause 6.3A.3(g); and

(h) f∈SFFacilities(p,t) denotes all Scheduled Facilities and Semi-Scheduled Facilities for which Market Participant p holds Peak Capacity Credits in Trading Interval t and which AEMO considers to be in Commercial Operation in Trading Interval t.

~~4.26.2AH. RTCR(p,t) for Market Participant p in Trading Interval t is:~~

$$RTCR(p,t) = \sum_{f \in SFFacilities(p,t)} (CAFO(f,t) + NISCRQ(f,t) + ESRCSF(f,t) + RTMOSF(f,t) + \max(0, NIMGRPPO(f,t) + ESRRPPO(f,t) - STEMCAPO(f,t)))$$

~~where:~~

~~(a) CAFO(f,t) is the Capacity Adjusted Forced Outage Quantity determined for Facility f in Trading Interval t under clause 3.21.7B;~~

~~(b) NISCRQ(f,t) is the Not In-Service Capacity Refund Quantity determined for Facility f in Trading Interval t under clause 4.26.1D;~~

~~(c) ESRCSF(f,t) is the ESR Charge Shortfall determined for Facility f in Trading Interval t under clause 4.26.1E;~~

~~(d) RTMOSF(f,t) is the Real-Time Market Offer Shortfall determined for Facility f in Trading Interval t under clause 4.26.1G;~~

~~(e) NIMGRPPO(f,t) is the total Refund Payable Planned Outage Quantity determined for Separately Certified Components of Facility f which are Non-Intermittent Generating Systems in Trading Interval t under clause 4.26.1C;~~

~~(f) ESRRPPO(f,t) is the total Refund Payable Planned Outage Quantity determined for Separately Certified Components of Facility f which are Electric Storage Resources in Trading Interval t under clause 4.26.1CA;~~

~~(g) STEMCAPO(f,t) is the estimate of the Capacity Adjusted Planned Outage Quantity for Facility f in Trading Interval t determined on the Scheduling Day for the relevant Trading Day under clause 6.3A.3(g); and~~

~~(h) f∈SFFacilities(p,t) denotes all Scheduled Facilities and Semi-Scheduled Facilities for which Market Participant p holds Capacity Credits in Trading Interval t and which AEMO considers to be in Commercial Operation in Trading Interval t.~~

4.26.2B. [Blank]

4.26.2C. [Blank]

4.26.2CA. The Relevant Demand of a Demand Side Programme for a Trading Interval in a Capacity Year in which the Demand Side Programme:

(a) has been issued a Dispatch Instruction under clause 7.6.5A with a quantity determined under clause 7.13.5; or

(b) is undergoing a Reserve Capacity Test,

is the value determined for the Demand Side Programme using the method under clauses 2.29.5AG, 2.29.5AH or 2.29.5AI as applicable.

4.26.2CB. A Market Participant may request that AEMO disregards a day for the purpose of determining the Selected Days in accordance with Section 1 of Appendix 10 because the level of Withdrawal or Injection of the Demand Side Programme on that day:

(a) will not be representative of the usual operation of the Demand Side Programme due to any planned or foreseen event; or

(b) was not representative of the usual operation of the Demand Side Programme due to any unforeseen event.

4.26.2CC. AEMO must:

(a) reject a request made under clause 4.26.2CB if:

i. the request was made more than 1 day after the day that is requested to be excluded;

ii. by accepting the request, the total number of days accepted under this clause 4.26.2CC for this Demand Side Programme in the Capacity Year the day ends in would exceed 20 days; or

iii. the day requested to be disregarded would fall into the Baseline Window for a Trading Interval for which AEMO has:

1. issued a Dispatch Instruction for the relevant Demand Side Programme before the request under clause 4.26.2CC was received by AEMO; or

2. requested a Reserve Capacity Test under clause 4.25.2(b) for the relevant Demand Side Programme; and

(b) otherwise accept the request.

4.26.2CD. AEMO must, when determining the Relevant Demand of a Demand Side Programme under Appendix 10, exclude any days for which a request was accepted under clause 4.26.2CC(b).

4.26.2CE. AEMO may specify in a WEM Procedure how and in what format a Market Participant must make a request under clause 4.26.2CB.

4.26.2D. AEMO must determine the shortfall in Peak Capacity ("Peak Capacity Shortfall") supplied by each Market Participant holding Peak Capacity Credits associated with a Demand Side Programme f in each Trading Interval t relative to its Peak Reserve Capacity Obligation Quantity as:

(a) if Trading Interval t falls within a DSP Dispatch Event for Demand Side Programme f:

$$max\left(0, min\left(PRCOQ(f,t), DIMW(f,t)\right) - max\left(0, RD(f,t) - DSPLMW(f,t)\right)\right)$$

where:

i. PRCOQ(f,t) is the Peak Reserve Capacity Obligation Quantity of the Demand Side Programme f for Trading Interval t (in MW);

ii. DIMW(f,t) is the quantity by which the Demand Side Programme f was instructed by AEMO to amend its DSP Energy Level in Trading Interval t as specified by AEMO in accordance with clause 7.13.5;

iii. RD(f,t) is the Relevant Demand of the Demand Side Programme f for Trading Interval t, determined by AEMO in accordance with clause 4.26.2CA; and

iv. DSPLMW(f,t) is the Demand Side Programme Load of the Demand Side Programme f in Trading Interval t, multiplied by two to convert to units of MW; and

(b) zero, otherwise.

4.26.2E. For each Market Participant holding Capacity Credits, AEMO must determine the amount of the refund ("**Peak Capacity Cost Refund**") to be applied for Trading Day d as the sum of the Peak Trading Interval Capacity Cost Refunds of every Trading Interval in the Trading Day d, as calculated in accordance with clause 4.26.2F.

4.26.2F. The Peak Trading Interval Capacity Cost Refund for Market Participant p and Trading Interval t is the sum of:

(a) either:

i. if Market Participant p holds Peak Capacity Credits associated with an Energy Producing System, the Peak Generation Capacity Cost Refund for Market Participant p for Trading Interval t, determined in accordance with clause 4.26.3; or

ii. zero, otherwise; and

(b) the sum of the Peak Demand Side Programme Capacity Cost Refunds for Trading Interval t for each Facility with a Facility Class (or, for an unregistered Facility, an indicative Facility Class) of Demand Side Programme for which Market Participant p holds Peak Capacity Credits in Trading Interval t.

~~4.26.2F. The Trading Interval Capacity Cost Refund for Market Participant p and Trading Interval t is the sum of:~~

~~(a) either:~~

~~i. where Market Participant p holds Capacity Credits associated with an Energy Producing System, the Generation Capacity Cost Refund for Market Participant p for Trading Interval t, determined in accordance with clause 4.26.3; or~~

~~ii. zero, otherwise; and~~

~~(b) the sum of the Demand Side Programme Capacity Cost Refunds for Trading Interval t for each Facility with a Facility Class (or, for an unregistered Facility,~~

~~an indicative Facility Class) of Demand Side Programme for which Market Participant p holds Capacity Credits in Trading Interval t.~~

4.26.3. The Peak Generation Capacity Cost Refund for Trading Interval t in Capacity Year y for a Market Participant p holding Peak Capacity Credits associated with an Energy Producing System is the lesser of:

(a) the Maximum Peak Participant Generation Refund determined for Market Participant p and Capacity Year y less all Peak Generation Capacity Cost Refunds applicable to Market Participant p in previous Trading Intervals-falling in Capacity Year y; and

(b) (b) the Peak Generation Reserve Capacity Deficit Refund for Market Participant p and Trading Interval t, plus the Net STEM Refund in Trading Interval t for Market Participant p, where the Net STEM Refund is calculated as follows:

$$\text{N STEM Refund}(p, t) = \text{PTIRR weighted}(p, t) \times \text{N STEM Short}(p, t)$$

where:

i. N STEM Refund(p, t) is the Net STEM Refund for Market Participant p in Trading Interval t;

ii. PTIRR weighted(p, t) is the weighted average of the Peak Trading Interval Refund Rate in Trading Interval t for each Registered Facility that Market Participant p holds Peak Capacity Credits for and is calculated as follows:

$$\text{PTIRR weighted}(p, t) = \sum_{f \epsilon F} \frac{\text{PTIRR}(f, t) \times \text{PCC}(f, t)}{\sum_{f \epsilon F} \text{PCC}\,(f, t)}$$

where:

1. F denotes the set of all Registered Facilities registered to Market Participant p in Trading Interval t, for which Market Participant p holds Capacity Credits in Trading Interval t, excluding Demand Side Programmes and f is a Facility within that set;

2. PTIRR(f, t) is the Peak Trading Interval Refund Rate for Facility f in Trading Interval t; and

3. PCC(f,t) is the number of Peak Capacity Credits associated with Facility f in Trading Interval t; and

iii. N STEM Short(p, t) is the Net STEM Shortfall for Market Participant p in Trading Interval t.

~~4.26.3. The Generation Capacity Cost Refund for Trading Interval t in Capacity Year y for a Market Participant p holding Capacity Credits associated with an Energy Producing System is the lesser of:~~

(a) the Maximum Participant Generation Refund determined for Market Participant p and Capacity Year y less all Generation Capacity Cost Refunds applicable to Market Participant p in previous Trading Interval t falling in Capacity Year y; and

(b) the Generation Reserve Capacity Deficit Refund for Market Participant p and Trading Interval t, plus the Net STEM Refund in Trading Interval t for Market Participant p, where the Net STEM Refund is calculated as follows:

$$\text{N STEM Refund}(p,t) = \text{TIRR weighted}(p,t) \times \text{N STEM Short}(p,t)$$

where:

i. N STEM Refund(p, t) is the Net STEM Refund for Market Participant p in Trading Interval t;

ii. TIRR weighted(p, t) is the weighted average of the Trading Interval Refund Rate in Trading Interval t for each Registered Facility that Market Participant p holds Capacity Credits for and is calculated as follows:

$$\text{TIRR weighted}(p,t) = \sum_{f \in F} \frac{\text{TIRR}(f,t) \times CC(f,t)}{\sum_{f \in F} CC(f,t)}$$

where:

1. F denotes the set of all Registered Facilities registered to Market Participant p in Trading Interval t, for which Market Participant p holds Capacity Credits in Trading Interval t, excluding Demand Side Programmes and f is a Facility within that set;

2. TIRR(f, t) is the Trading Interval Refund Rate for Facility f in Trading Interval t; and

3. CC(f,t) is the number of Capacity Credits associated with Facility f in Trading Interval t; and

iii. N STEM Short(p, t) is the Net STEM Shortfall for Market Participant p in Trading Interval t.

4.26.3A. The Peak Demand Side Programme Capacity Cost Refund for Trading Interval t for a Facility f with a Facility Class (or, for an unregistered Facility, an indicative Facility Class) of Demand Side Programme is equal to the lesser of:

(a) the Maximum Peak Facility Refund for Facility f in the Capacity Year the Trading Interval t falls in, less all Peak Demand Side Programme Capacity Cost Refunds applicable to the Facility in previous Trading Intervals falling in the same Capacity Year; and

(b) the sum of:

i. either:

1. if Facility f is a Registered Facility:

$$PTIRR(f,t) \times min(PDSPDS(f,t), PRCOQ(f,t))$$

where:

i. PTIRR(f,t) is the Peak Trading Interval Refund Rate for Facility f in Trading Interval t;

ii. PDSPDS(f,t) is the Peak DSP Delivery Shortfall in MW determined in accordance with clause 4.26.1AA in Trading Interval t; and

iii. PRCOQ(f,t) is the Peak Reserve Capacity Obligation Quantity of the Demand Side Programme f for Trading Interval t (in MW); or

2. otherwise, zero; and

ii. the Peak Facility Reserve Capacity Deficit Refund for Trading Interval t for Facility f, determined in accordance with clause 4.26.1A.

4.26.4. AEMO must calculate the Flexible Reserve Capacity Deficit refund for each Facility f, for which a Market Participant holds Flexible Capacity Credits, ("**Flexible Facility Reserve Capacity Deficit Refund**") in each Trading Interval t as the lesser of:

(a) the product of:

i. the Flexible Trading Interval Refund Rate, calculated under clause 4.26.1(h), applicable to Facility f in Trading Interval t; and

ii. the Flexible Reserve Capacity Deficit for Facility f in Trading Interval t, which is zero if Trading Interval t is in the Hot Season, and otherwise equal to:

1. if Facility f is not a Registered Facility, the number of Flexible Capacity Credits associated with Facility f in Trading Interval t;

2. if Facility f is considered by AEMO to have not been in Commercial Operation in Trading Interval t, the number of Flexible Capacity Credits associated with Facility f in Trading Interval t;

3. if Facility f is considered by AEMO to have been in Commercial Operation in Trading Interval t, and is not a Demand Side Programme:

$$\min(FCCIG(f,t), \max(0, \min(RL(f,t) - 2 \times MAX2(f,t), RL(f,t) - A(f,t)))) + FRTMRCD(f,t)$$

where:

i. FCCIG(f,t) is the number of Flexible Capacity Credits held for Facility f associated with Separately Certified

Components of Facility f which are Intermittent Generating Systems of the Facility in Trading Interval t;

ii. RL(f,t) is the Required Level for Facility f, adjusted to 100 percent of the level of Peak Capacity Credits held for Facility f in Trading Interval t;

iii. MAX2(f,t) is the second highest value of the output for Facility f (in MWh) achieved for a Trading Interval during the Trading Day in which Trading Interval t falls, as measured in Meter Data Submissions received by AEMO in accordance with section 8.4, that has been achieved since the date AEMO determined the Facility to be in Commercial Operation up to the relevant Trading Day, where this value must be set equal to or greater than the MAX2 applied by AEMO for the previous Trading Day;

iv. A(f,t) is the level of output (in MW) detailed in the most recent report provided prior to Trading Interval t by the Market Participant for Facility f under clause 4.13.10C; and

v. FRTMRCD(f,t) is the Flexible Real-Time Market Reserve Capacity Deficit determined for Facility f in Trading Interval t under clause 4.26.5;

4. if Facility f is a Demand Side Programme, the capacity shortfall calculated as:

max(FDSPTS(f,t), FDSPDS(f,t))

where:

i. FDSPTS(f,t) is the Flexible DSP Test Shortfall determined by AEMO under clause 4.25.3E, clause 4.25.3G(b) or clause 4.25.6(b)(ii); and

ii. FDSPDS(f,t) is the Flexible DSP Delivery Shortfall in MW determined by AEMO under clause 4.26.4A.

(b) the Maximum Flexible Facility Refund for the Facility in the relevant Capacity Year, less all Flexible Facility Reserve Capacity Deficit Refunds applicable to the Facility in previous Trading Intervals falling in the same Capacity Year.

4.26.4A. AEMO must determine the Flexible DSP Delivery Shortfall as the average of the Flexible Capacity Shortfall values for a Demand Side Programme determined under clause 4.26.14 from the first Trading Day of the Capacity Year and ending with and including the relevant Trading Day, but excluding:

(a) Trading Intervals in which the Demand Side Programme failed to deliver its Flexible Reserve Capacity Obligation Quantity occurring prior to the Demand

Side Programme subsequently passing a Reserve Capacity Test under clause 4.25.2BA(d); and

(b) Trading Intervals in which the Demand Side Programme was not subject to a Dispatch Instruction issued under clause 7.6.5A with the quantity determined by AEMO under clause 7.13.5.

4.26.5. AEMO must calculate the Flexible Real-Time Market Reserve Capacity Deficit for each Scheduled Facility or Semi-Scheduled Facility f for each Trading Interval t in which AEMO considers the Facility to have been in Commercial Operation as zero if Trading Interval t is in the Hot Season, and otherwise:

$$FRTMRCD(f,t) = min(FRCOQ(f,t), FCAFO(f,t) + FNISCRQ(f,t) + FESRCSF(f,t) + FRTMOSF(f,t)) + FNIMGRPPO(f,t) + FESRRPPO(f,t)$$

where:

(a) FRCOQ(f,t) is the Flexible Reserve Capacity Obligation Quantity determined for Facility f in Trading Interval t;

(b) FCAFO(f,t) is the Flexible Capacity Adjusted Forced Outage Quantity determined for Facility f in Trading Interval t under clause 3.21.14;

(c) FNISCRQ(f,t) is the Flexible Not In-Service Capacity Refund Quantity determined for Facility f in Trading Interval t under clause 4.26.8;

(d) FESRCSF(f,t) is the Flexible ESR Charge Shortfall determined for Facility f in Trading Interval t under clause 4.26.9;

(e) FRTMOSF(f,t) is the Flexible Real-Time Market Offer Shortfall determined for Facility f in Trading Interval t under clause 4.26.11;

(f) FNIMGRPPO(f,t) is the total Flexible Refund Payable Planned Outage Quantity determined for Separately Certified Components of Facility f which are Non-Intermittent Generating Systems in Trading Interval t under clause 4.26.6; and

(g) FESRRPPO(f,t) is the total Flexible Refund Payable Planned Outage Quantity determined for Separately Certified Components of Facility f which are Electric Storage Resources in Trading Interval t under clause 4.26.7.

4.26.6. If the Flexible Capacity Adjusted Planned Outage Quantity in a Trading Interval for a Separately Certified Component of a Scheduled Facility or Semi-Scheduled Facility which is a Non-Intermittent Generating System is greater than zero, then AEMO must determine that Flexible Capacity Adjusted Planned Outage Quantity to be:

(a) if the Flexible Refund Exempt Planned Outage Count for the Separately Certified Component, calculated over the 1000 Trading Days preceding the Trading Day in which the Trading Interval falls, is less than 8400, a Flexible Refund Exempt Planned Outage Quantity; or

(b) otherwise, a Flexible Refund Payable Planned Outage Quantity.

4.26.7. If the Flexible Capacity Adjusted Planned Outage Quantity in a Trading Interval for a Separately Certified Component of a Scheduled Facility or Semi-Scheduled Facility which is an Electric Storage Resource is greater than zero, then AEMO must determine that Flexible Capacity Adjusted Planned Outage Quantity to be:

(a) if the Flexible Refund Exempt Planned Outage Count for the Separately Certified Component, calculated over the 1000 Trading Days preceding the Trading Day in which the Trading Interval falls, is less than 1400, a Flexible Refund Exempt Planned Outage Quantity; or

(b) otherwise, a Flexible Refund Payable Planned Outage Quantity.

4.26.8. AEMO must calculate the Flexible Not In-Service Capacity Refund Quantity for each Scheduled Facility or Semi-Scheduled Facility f for each Trading Interval t in which AEMO considers the Facility to have been in Commercial Operation as zero if Trading Interval t is in the Hot Season, and otherwise:

$$\text{FNISCRQ}(f,t) = \frac{5}{30} \times \sum_{DI \in t} \begin{cases} 0, \text{ if RTMSuspFlag}(DI) = 1, \text{ otherwise} \\ \min\left(\begin{matrix} \text{NISCap}(f, DI), \\ \text{FRCOQ}(f, DI) - \text{FCAFO}(f, DI) \end{matrix}\right) \end{cases}$$

where:

(a) RTMSuspFlag(DI) is the RTM Suspension Flag for Dispatch Interval DI;

(b) FRCOQ(f,DI) is the Flexible Reserve Capacity Obligation Quantity determined for Facility f in Dispatch Interval DI;

(c) FCAFO(f,DI) is the Flexible Capacity Adjusted Forced Outage Quantity determined for Facility f in Dispatch Interval DI under clause 3.21.15;

(d) NISCap(f,DI) is the Not In-Service Capacity quantity determined for Facility f in Dispatch Interval DI under clause 7.13A.1; and

(e) DI∈t denotes all Dispatch Intervals DI in Trading Interval t.

4.26.9. AEMO must calculate the Flexible ESR Charge Shortfall for each Scheduled Facility or Semi-Scheduled Facility f for each Trading Interval t in which AEMO considers the Facility to have been in Commercial Operation as:

$$\text{FESRChargeShortfall}(f,t) = \frac{\sum_{DI \in t} \sum_{c \in f} \text{FESRCSF}(c,DI)}{6}$$

where:

(a) FESRCSF(c,DI) is the Flexible Capacity shortfall in MW determined for Separately Certified Component c in Dispatch Interval DI under clause 4.26.10;

(b) DI∈t denotes all Dispatch Intervals DI in Trading Interval t; and

(c) c∈f denotes all Separately Certified Components c of Facility f that are Electric Storage Resources.

4.26.10. FESRCSF(c,DI) for Separately Certified Component c (which is an Electric Storage Resource) for Dispatch Interval DI is:

FESRCSF(c,DI) =

$$\begin{cases} 0, \text{ if RTMSuspFlag(DI) = 1, otherwise} \\ \max(0, \text{FRCOQ(c, DI)} - \text{FCAFO(c, DI)} - 12 \times \max(0, \text{ChargeLevel(c, DI)} - \text{MinChargeLevel(c, DI)})) \end{cases}$$

where:

(a) RTMSuspFlag(DI) is the RTM Suspension Flag for Dispatch Interval DI;

(b) FRCOQ(c,DI) is the Flexible Reserve Capacity Obligation Quantity determined for Separately Certified Component c in Dispatch Interval DI;

(c) FCAFO(c,DI) is the Flexible Capacity Adjusted Forced Outage Quantity determined for Separately Certified Component c in Dispatch Interval DI under clause 3.21.12;

(d) ChargeLevel(c,DI) is the Charge Level in MWh, or alternative estimate from AEMO if the Charge Level is not available, of Separately Certified Component c determined at the start of Dispatch Interval DI; and

(e) MinChargeLevel(c,DI) is the minimum Charge Level capability in MWh as specified in Standing Data for Separately Certified Component c in Dispatch Interval DI.

4.26.11. AEMO must determine the shortfall in Flexible Capacity offered into the Real-Time Market ("**Flexible Real-Time Market Offer Shortfall**") for each Scheduled Facility or Semi-Scheduled Facility f for each Trading Interval t in which AEMO considers the Facility to have been in Commercial Operation as:

$$FRTMOSF(f,t) = max\left(0, \frac{\sum_{DI \in t} \text{FRTMOSF(f,DI)}}{6} - FCAFO(f,t) - FNISCRQ(f,t) - FESRCSF(f,t)\right)$$

where:

(a) FRTMOSF(f,DI) is the shortfall in Flexible Capacity offered into the Real-Time Market determined for Facility f in Dispatch Interval DI under clause 4.26.12;

(b) FCAFO(f,t) is the Flexible Capacity Adjusted Forced Outage Quantity determined for Facility f in Trading Interval t under clause 3.21.14;

(c) FNISCRQ(f,t) is the Flexible Not In-Service Capacity Refund Quantity determined for Facility f in Trading Interval t under clause 4.26.8; and

(d) FESRCSF(f,t) is the Flexible ESR Charge Shortfall determined for Facility f in Trading Interval t under clause 4.26.9.

4.26.12. FRTMOSF(f,DI) for Facility f in Dispatch Interval DI is:

$$\text{FRTMOSF(f, DI)} = \begin{cases} 0, \text{ if RTMSuspFlag(DI) = 1, otherwise} \\ \max(0, \text{FRCOQ(f, DI)} - \text{OfferAvail(f, DI)}) \end{cases}$$

where:

(a) RTMSuspFlag(DI) is the RTM Suspension Flag for Dispatch Interval DI;

(b) FRCOQ(f,DI) is the Flexible Reserve Capacity Obligation Quantity determined for Facility f in Dispatch Interval DI; and

(c) OfferAvail(f,DI) is the total MW quantity included in Real-Time Market Offers for energy from Facility f in Dispatch Interval DI (whether offered as Available Capacity or In-Service Capacity) that were used to calculate Dispatch Instructions and Market Clearing Prices for that Dispatch Interval.

4.26.13. AEMO must calculate the Flexible Generation Reserve Capacity Deficit Refund for each Market Participant for each Trading Interval as the sum of the Flexible Facility Reserve Capacity Deficit Refunds for the Trading Interval for each Facility with a Facility Class (or, for an unregistered Facility, an indicative Facility Class) of Scheduled Facility or Semi-Scheduled Facility, for which the Market Participant holds Flexible Capacity Credits in the Trading Interval.

4.26.14. AEMO must determine the Flexible Capacity shortfall ("**Flexible Capacity Shortfall**") supplied by each Market Participant holding Flexible Capacity Credits associated with a Demand Side Programme f in each Trading Interval t outside the Hot Season relative to its Flexible Reserve Capacity Obligation Quantity as:

(a) if AEMO has issued a Dispatch Instruction with a non-zero MW quantity under section 7.6 to the Demand Side Programme f for the Trading Interval:

$$\max(0, \min(FRCOQ(f,t), DIMW(f,t)) - \max(0, RD(f,t) - DSPLMW(f,t)))$$

where:

i. FRCOQ(f,t) is the Flexible Reserve Capacity Obligation Quantity of the Demand Side Programme f for Trading Interval t (in MW);

ii. DIMW(f,t) is the quantity by which the Demand Side Programme f was instructed by AEMO to restrict its DSP Energy Level in Trading Interval t as specified by AEMO in accordance with clause 7.13.5;

iii. RD(f,t) is the Relevant Demand of the Demand Side Programme f for Trading Interval t, determined by AEMO in accordance with clause 4.26.2CA; and

iv. DSPLMW(f,t) is the Demand Side Programme Load of the Demand Side Programme f in Trading Interval t, multiplied by two to convert to units of MW; and

(b) zero, if AEMO has issued a Dispatch Instruction with a zero MW quantity under section 7.6 to the Demand Side Programme f for Trading Interval t.

4.26.15. For each Market Participant holding Flexible Capacity Credits, AEMO must determine the amount of the refund ("**Flexible Capacity Cost Refund**") to be applied for Trading Day d as the sum of the Flexible Trading Interval Capacity Cost Refunds of every Trading Interval in the Trading Day d, as calculated in accordance with clause 4.26.16.

4.26.16. The Flexible Trading Interval Capacity Cost Refund for Market Participant p and Trading Interval t is the sum of:

(a) either:

i. if Market Participant p holds Flexible Capacity Credits associated with an Energy Producing System, the Flexible Generation Capacity Cost Refund for Market Participant p for Trading Interval t, determined in accordance with clause 4.26.17; or

ii. zero, otherwise; and

(b) the sum of the Flexible Demand Side Programme Capacity Cost Refunds for Trading Interval t for each Facility with a Facility Class (or, for an unregistered Facility, an indicative Facility Class) of Demand Side Programme for which Market Participant p holds Flexible Capacity Credits in Trading Interval t.

4.26.17. The Flexible Generation Capacity Cost Refund for Trading Interval t in Capacity Year y for a Market Participant p holding Flexible Capacity Credits associated with an Energy Producing System is the lesser of:

(a) the Maximum Flexible Participant Generation Refund determined for Market Participant p and Capacity Year y less all Flexible Generation Capacity Cost Refunds applicable to Market Participant p in previous Trading Intervals falling in Capacity Year y; and

(b) the Flexible Generation Reserve Capacity Deficit Refund for Market Participant p and Trading Interval t.

4.26.18. The Flexible Demand Side Programme Capacity Cost Refund for Trading Interval t for a Facility f with a Facility Class (or, for an unregistered Facility, an indicative Facility Class) of Demand Side Programme is equal to the lesser of:

(a) the Maximum Flexible Facility Refund for Facility f in the Capacity Year the Trading Interval t falls in, less all Flexible Demand Side Programme Capacity Cost Refunds applicable to the Facility in previous Trading Intervals falling in the same Capacity Year; and

(b) the sum of:

i. either:

1. if Facility f is a Registered Facility:

$$FTIRR(f,t) \times FCS(f,t)$$

where:

i. FCS(f,t) is the Flexible Capacity Shortfall in MW for Facility f determined in accordance with clause 4.26.14 in Trading Interval t, and

ii. FTIRR(f,t) is the Flexible Trading Interval Refund Rate for Facility f in Trading Interval t; or

2. otherwise, zero; and

ii. the Flexible Facility Reserve Capacity Deficit Refund for Trading Interval t for Facility f, determined in accordance with clause 4.26.4.

~~4.26.3A. The Demand Side Programme Capacity Cost Refund for Trading Interval t for a Facility f with a Facility Class (or, for an unregistered Facility, an indicative Facility Class) of Demand Side Programme is equal to the lesser of:~~

~~(a) the Maximum Facility Refund for Facility f in the Capacity Year the Trading Interval t falls in, less all Demand Side Programme Capacity Cost Refunds applicable to the Facility in previous Trading Intervals falling in the same Capacity Year; and~~

~~(b) the sum of:~~

~~i. either:~~

~~1. if Facility f is a Registered Facility:~~

~~$TIRR(f,t) \times min(PDSPDS(f,t), RCOQ(f,t))$~~

~~where:~~

~~i. TIRR(f,t) is the Trading Interval Refund Rate for Facility f in Trading Interval t;~~

~~ii. PDSPDS(f,t) is the Peak DSP Delivery Shortfall in MW determined in accordance with clause 4.26.1AA in Trading Interval t, and~~

~~iii. RCOQ(f,t) is the Reserve Capacity Obligation Quantity of the Demand Side Programme f for Trading Interval t (in MW); or~~

~~2. otherwise, zero; and~~

~~ii. the Facility Reserve Capacity Deficit Refund for Trading Interval t for Facility f, determined in accordance with clause 4.26.1A.~~

4.27. Reserve Capacity Performance Monitoring

4.27.1. [Blank]

4.27.2. By the 25th day of each month, AEMO must assess the number of Equivalent Planned Outage Hours taken in the preceding 12 Trading Months by each Scheduled Facility and Semi-Scheduled Facility assigned Capacity Credits for the current Capacity Year.

4.27.3. If the number of Equivalent Planned Outage Hours for a Facility, as determined under clause 4.27.2, exceeds 1,750 hours for the preceding 12 Trading Months, AEMO may require the Market Participant holding Capacity Credits for that Facility to provide to AEMO:

(a) a Reserve Capacity Performance Report as described in clause 4.27.4; and

(b) a Reserve Capacity Performance Improvement Report as described in clause 4.27.4A, to be provided at intervals specified by AEMO, but not more frequently than once per quarter.

4.27.3A. In making its decision whether to require a report under clause 4.27.3, AEMO must assess whether the number of Equivalent Planned Outage Hours taken by the Facility in the previous 12 Trading Months was attributable to specific, infrequent events or is indicative of an underlying performance deficiency, and may consider any matters it deems relevant in making this assessment.

4.27.4. A Reserve Capacity Performance Report must include:

(a) explanations of all Planned Outages taken by the Facility in the 12 Trading Months referred to in clause 4.27.2;

(b) a statement of the expected maximum number of days of Planned Outages to be taken by the Facility in each of the next 36 Trading Months commencing from the Trading Month in which the report is requested, including adequate explanation to make clear the reason for each Planned Outage;

(bA) the relationship of the Planned Outages to the long term asset management strategy and established maintenance plan for the Facility;

(c) measures being undertaken or proposed by the Market Participant to increase the availability of the Facility, and their actual and anticipated effect on the frequency of Planned Outages; and

(d) any other information concerning the availability of the Facility that AEMO may request.

4.27.4A. A Reserve Capacity Performance Improvement Report must include:

(a) descriptions of the measures proposed, being undertaken or already undertaken by the Market Participant to increase the availability of the Facility;

(b) details of any changes to the expected maximum number of days of Planned Outages to be taken by the Facility for a Trading Month previously provided by the Market Participant under clause 4.27.4(b) or this clause 4.27.4A(b), including adequate explanations for each change; and

(c) explanation of any variation between expected and actual improvement of the availability of the Facility as a result of the measures taken.

4.27.5. A Market Participant must:

(a) provide a Reserve Capacity Performance Report to AEMO in a format specified in the WEM Procedure referred to in clause 4.27.12 within 20 Business Days of being requested to do so; and

(b) provide a Reserve Capacity Performance Improvement Report to AEMO in a format specified in the WEM Procedure referred to in clause 4.27.12 by the date specified by AEMO under clause 4.27.3(b).

4.27.6. AEMO may, at the Market Participant's expense, consult with any person AEMO considers suitably qualified to provide an opinion on a report provided under clause 4.27.5. AEMO may ask the person to provide an opinion on the report generally, or to limit the scope of the opinion to specified matters covered in the report.

4.27.7. [Blank]

4.27.8. [Blank]

4.27.9. [Blank]

4.27.10. Market Participants holding Capacity Credits for Facilities that are yet to commence operation must file a report on progress with AEMO:

(a) at least once every three months from the date the Capacity Credits are confirmed under clause 4.20.5A; and

(b) at least once every month between the start of the calendar year in which the date referred to in clause 4.10.1(c)(iii)(7) falls and the date AEMO notifies the Market Participant, under clause 4.13.14, that the need to maintain the Reserve Capacity Security for the Facility has ceased.

4.27.11. Reports provided under clause 4.27.10 must include any changes to Key Project Dates.

4.27.11A Upon receipt of a report provided under clause 4.27.10(a) AEMO must revise the date referred to in clause 4.10.1(c)(iii)(7) in accordance with the report unless, in its opinion, the Facility, or part of the Facility, is unlikely to have completed all Commissioning Tests by that date.

4.27.11B [Blank]

4.27.11C If, in accordance with clause 4.27.11A, AEMO rejects a change to the Key Project Dates provided in accordance with clause 4.27.10(b) or 4.27.11D AEMO must, within ten Business Days of receiving the report, notify the Market Participant of its decision and provide reasons why the dates have been rejected.

4.27.11D If AEMO rejects a change to the Key Project Dates it may require the Market Participant to provide additional information, submitted by a suitably authorised person, and may also require the Market Participant to submit further reports or revise the Key Project Dates. The provisions of clauses 4.27.11 to this clause 4.27.11D will apply to any further reports.

4.27.12. AEMO must document the procedure to be followed in performing Reserve Capacity monitoring in a WEM Procedure. Amongst other things, the WEM Procedure must list

the documents and other items that may be required by AEMO as supporting evidence in accordance with clause 4.27.11D.

Funding Reserve Capacity Purchased by AEMO

4.28. Funding Reserve Capacity Purchased by AEMO

4.28.1. AEMO must separate the total costs of Peak Capacity Credits acquired by it for a Trading Day into the following two sets:

(a) the Peak Targeted Reserve Capacity Cost, which is the cost of acquiring enough Peak Capacity Credits to ensure, to the extent possible given the number of Peak Capacity Credits AEMO has acquired, that the lesser of:

i. the Peak Reserve Capacity Requirement applicable to that Trading Day; and

ii. total Peak Capacity Credits held by Market Participants for the Trading Day,

is just covered after allowing for Capacity Credits traded bilaterally (as defined in clause 4.14.2 and subject to clause 4.28.2(b)) in that Trading Day; and

(b) the Peak Shared Reserve Capacity Cost, calculated in accordance with clause 4.28.4, which is the cost of other Peak Capacity Credits acquired but not allocated to the set referred to in clause 4.28.1(a),

determined on the basis that the Peak Capacity Credits acquired by AEMO are allocated to the set referred to in clause 4.28.1(a) in order of decreasing cost per Peak Capacity Credit until the capacity requirements referred to in clause 4.28.1(a) are met, with the remaining Peak Capacity Credits acquired by AEMO being allocated to the set referred to in clause 4.28.1(b).

4.28.1A. AEMO must separate the total costs of Flexible Capacity Credits acquired by it for a Trading Day into the following two sets:

(a) the Flexible Targeted Reserve Capacity Cost, which is the cost of acquiring enough Flexible Capacity Credits to ensure, to the extent possible given the number of Flexible Capacity Credits AEMO has acquired, that the lesser of:

i. the Flexible Reserve Capacity Requirement applicable to that Trading Day; and

ii. total Flexible Capacity Credits assigned to Facilities,

is just covered after allowing for Flexible Capacity Credits traded bilaterally (as defined in clause 4.14.2 and subject to clause 4.28.2(b)) in that Trading Day; and

(b) the Flexible Shared Reserve Capacity Cost, calculated in accordance with clause 4.28.4B, which is the cost of other Flexible Capacity Credits acquired but not allocated to the set referred to in clause 4.28.1A(a),

determined on the basis that the Flexible Capacity Credits acquired by AEMO are allocated to the set referred to in clause 4.28.1A(a) in order of decreasing cost per Flexible Capacity Credit until the capacity requirements referred to in clause 4.28.1A(a) are met, with the remaining Flexible Capacity Credits acquired by AEMO being allocated to the set referred to in clause 4.28.1A(b).

~~4.28.1. AEMO must separate the total costs of Capacity Credits acquired by it for a Trading Day into the following two sets:~~

~~(a) the cost of acquiring enough Capacity Credits to ensure, to the extent possible given the number of Capacity Credits AEMO has acquired, that the lesser of:~~

~~i. the Reserve Capacity Requirement applicable to that Trading Day; and~~

~~ii. total Capacity Credits held by Market Participants for the Trading Day,~~

~~is just covered after allowing for Capacity Credits traded bilaterally (as defined in clause 4.14.2 and subject to clause 4.28.2(b)) in that Trading Day; and~~

~~(b) the cost of other Capacity Credits acquired but not allocated to the set referred to in clause 4.28.1(a),~~

~~determined on the basis that the Capacity Credits acquired by AEMO are allocated to the set referred to in clause 4.28.1(a) in order of decreasing cost per Capacity Credit until the capacity requirements referred to in clause 4.28.1(a) are met, with the remaining Capacity Credits acquired by AEMO being allocated to the set referred to in clause 4.28.1(b).~~

4.28.2. For the purposes of clauses 4.28.1 and 4.28.1A:

(a) AEMO is taken to have acquired a Capacity Credit held by a Market Participant in respect of a Facility for a Trading Day if that Capacity Credit has not been allocated by that Market Participant to another Market Participant for settlement purposes under sections 4.30 and 4.31;

(b) any Capacity Credits that have been allocated to a Market Participant in excess of that Market Participant's Individual Reserve Capacity Requirement must be:

i. deemed to be Capacity Credits acquired by AEMO from the Market Participant; and

ii. not counted as Capacity Credits traded bilaterally;

(c) the cost of a Peak Capacity Credit deemed to be acquired by AEMO from a Market Participant under clause 4.28.2(b)(i) is the Peak Excess Allocation Price for that Market Participant in that Trading Day;

(d) the cost of each other Peak Capacity Credit acquired by AEMO from a Market Participant is the Entity Daily Peak Reserve Capacity Price for the relevant Facility or Separately Certified Component in that Trading Day;

(e) the cost of a Flexible Capacity Credit deemed to be acquired by AEMO from a Market Participant under clause 4.28.2(b)(i) is the Flexible Excess Allocation Price for that Market Participant in that Trading Day; and

(f) the cost of each other Flexible Capacity Credit acquired by AEMO from a Market Participant is the Entity Daily Flexible Reserve Capacity Price for the relevant Facility or Separately Certified Component in that Trading Day.

~~4.28.2. For the purposes of clause 4.28.1:~~

~~(a) AEMO is taken to have acquired a Capacity Credit held by a Market Participant in respect of a Facility for a Trading Day if that Capacity Credit has not been allocated by that Market Participant to another Market Participant for settlement purposes under sections 4.30 and 4.31;~~

~~(b) any Capacity Credits that have been allocated to a Market Participant in excess of that Market Participant's Individual Reserve Capacity Requirement must be:~~

~~i. deemed to be Capacity Credits acquired by AEMO from the Market Participant; and~~

~~ii. not counted as Capacity Credits traded bilaterally;~~

~~(c) [Blank]~~

~~(cA) [Blank]~~

~~(cB) the cost of a Capacity Credit deemed to be acquired by AEMO from a Market Participant under clause 4.28.2(b)(i) is equivalent to the Excess Allocation Price for that Market Participant in that Trading Day; and~~

~~(d) the cost of each other Capacity Credit acquired by AEMO from a Market Participant is the Entity Daily Peak Reserve Capacity Price for the relevant Facility or Separately Certified Component in that Trading Day.~~

4.28.3. For each Trading Day, AEMO must calculate the Peak Targeted Reserve Capacity Cost and must allocate this cost to Market Participants in accordance with section 9.8.

4.28.3A. For each Trading Day, AEMO must calculate the Flexible Targeted Reserve Capacity Cost and must allocate this cost to Market Participants in accordance with section 9.8.

4.28.4. For each Trading Day, AEMO must calculate a Peak Shared Reserve Capacity Cost being the sum of:

(a) the cost defined under clause 4.28.1(b); and

(aA) the sum of the costs determined under clause 4.28.4A for that Trading Day; and

(b) the net payments to be made by AEMO under all Supplementary Capacity Contracts relating to shortfalls of Peak Capacity or both Peak Capacity and Flexible Capacity, as identified by AEMO under clause 4.24.1(aA) for that Trading Day; less

(c) the sum of all Intermittent Load Refunds, calculated under clause 4.28A.1, paid by all Market Participants for that Trading Day; less

(cA) the sum of all Peak Capacity Cost Refunds, calculated under clause 4.26.2E, paid by all Market Participants for that Trading Day,

and AEMO must allocate this total cost to Market Participants in proportion to each Market Participant's Peak Individual Reserve Capacity Requirement.

~~4.28.4. For each Trading Day, AEMO must calculate a Shared Reserve Capacity Cost being the sum of:~~

~~(a) the cost defined under clause 4.28.1(b); and~~

~~(aA) the sum of the costs determined under clause 4.28.4A for that Trading Day; and~~

~~(b) the net payments to be made by AEMO under all Supplementary Capacity Contracts for that Trading Day; less~~

~~(c) the sum of all Intermittent Load Refunds, calculated under clause 4.28A.1, paid by all Market Participants for that Trading Day; less~~

~~(cA) the sum of all Capacity Cost Refunds, calculated under clause 4.26.2E, paid by all Market Participants for that Trading Day,~~

~~and AEMO must allocate this total cost to Market Participants in proportion to each Market Participant's Individual Reserve Capacity Requirement.~~

4.28.4A. For each Trading Interval, AEMO must determine the sum of the payments to be made by AEMO under NCESS Contracts for capacity procured by AEMO to meet the Peak Reserve Capacity Requirement, or both the Peak Reserve Capacity Requirement and the Flexible Reserve Capacity Requirement, for the relevant Reserve Capacity Cycle determined in accordance with clause 4.6.1.

4.28.4B. For each Trading Day, AEMO must calculate a Flexible Shared Reserve Capacity Cost being the sum of:

(a) the cost defined under clause 4.28.1A(b); and

(b) the sum of the costs determined under clause 4.28.4C for that Trading Day; and

(c) the net payments to be made by AEMO under Supplementary Capacity Contracts relating to shortfalls of Flexible Capacity which are not also shortfalls of Peak Capacity, as identified by AEMO under clause 4.24.1AA; less

(d) the sum of all Flexible Capacity Cost Refunds, calculated under clause 4.26.15, paid by all Market Participants for that Trading Day,

and AEMO must allocate this total cost to Market Participants in proportion to each Market Participant's Flexible Individual Reserve Capacity Requirement.

4.28.4C. For each Trading Interval, AEMO must determine the sum of the payments to be made by AEMO under NCESS Contracts for capacity procured by AEMO to meet the Flexible Reserve Capacity Requirement and not the Peak Reserve Capacity Requirement, for the relevant Reserve Capacity Cycle set under clause 4.6.1.

4.28.4D. For each Trading Day, AEMO must calculate a Reserve Capacity Security Compensation Amount being the sum of:

(a) any amounts paid under clauses 4.13.11 or 4.13.11A; ~~and~~

(b) any amounts paid under clauses 4.13A.15, 4.13A.15A or 4.13A.16; and~~,~~

(c) any amounts paid under clause 4.25.4CD,

and AEMO must allocate this total amount to Market Participants in proportion to each Market Participant's Individual Reserve Capacity Requirement.

4.28.5. The Peak Shared Reserve Capacity Cost may have a negative value.

4.28.5A. The Flexible Shared Reserve Capacity Cost may have a negative value.

4.28.5B. To determine the Peak IRCR Intervals, AEMO must:

(a) identify the 12 Trading Intervals with the highest Total Sent Out Generation in the most recently concluded Hot Season;

(b) select the Trading Days on which the Trading Intervals identified in clause 4.28.5B(a) fell;

(c) if fewer than three Trading Days are selected in clause 4.28.5B(b), select additional Trading Days containing Trading Intervals with the highest Total Sent Out Generation in the most recently concluded Hot Season, to make a total of three Trading Days; and

(d) for each Trading Day selected under clauses 4.28.5B(b) and 4.28.5B(c):

i. select the Trading Interval with the highest Total Sent Out Generation;

ii. select all other Trading Intervals that were identified in clause 4.28.5B(a);

iii. if the Trading Intervals selected in clauses 4.28.5B(d)(i) and 4.28.5B(d)(ii) are not contiguous, identify any gaps of three hours or less, and select all Trading Intervals in those gaps; and

iv. if fewer than three Trading Intervals have been selected, select the Trading Intervals (within that Trading Day) with the highest Total Sent

Out Generation immediately before or after the selected Trading Intervals to select three Trading Intervals for the Trading Day.

For the purposes of clauses 4.28.5B(a), 4.28.5B(c) and 4.28.5B(d)(i), when ordering Trading Intervals from those with highest to lowest Total Sent Out Generation, if AEMO identifies two or more Trading Intervals that have the same Total Sent Out Generation, AEMO must prioritise them according to when they occurred, with an earlier Trading Interval above a later Trading Interval.

4.28.5C. To determine the Flexible IRCR Intervals, AEMO must:

(a) select the three Trading Days in the previous Capacity Year containing the Trading Intervals with the highest Four-Hour Demand Increase. If two or more Trading Days have the same Four-Hour Demand Increase, AEMO shall select the latest Trading Days; and

(b) for each Trading Day selected in clause 4.28.5C(a) select the Trading Interval with the largest Four-Hour Demand Increase and the seven previous Trading Intervals.

4.28.6. For each Trading Month, AEMO must determine and provide to each Market Participant that Market Participant's Indicative Peak Individual Reserve Capacity Requirement by the date and time specified in clause 4.1.23C, and this Indicative Peak Individual Reserve Capacity Requirement must be determined using the method described in Appendix 5.

4.28.6A. For each Trading Month, AEMO must determine and provide to each Market Participant that Market Participant's Indicative Flexible Individual Reserve Capacity Requirement by the date and time specified in clause 4.1.23C, and this Indicative Flexible Individual Reserve Capacity Requirement must be determined using the method described in Appendix 4.

~~4.28.6. For each Trading Month, AEMO must determine and provide to each Market Participant that Market Participant's Indicative Individual Reserve Capacity Requirement by the date and time specified in clause 4.1.23C, where this Indicative Individual Reserve Capacity Requirement is determined using the methodology described in Appendix 5.~~

4.28.7. For each Trading Month, AEMO must determine and provide to each Market Participant that Market Participant's Peak Individual Reserve Capacity Requirement by the date and time specified in clause 4.1.24, where this Peak Individual Reserve Capacity Requirement is determined using the methodology described in Appendix 5.

4.28.7A. For each Trading Month, AEMO must determine and provide to each Market Participant that Market Participant's Flexible Individual Reserve Capacity Requirement by the date and time specified in clause 4.1.24, and this Flexible Individual Reserve Capacity Requirement must be determined using the method described in Appendix 4.

4.28.8. To assist AEMO in determining Indicative Peak Individual Reserve Capacity Requirements in accordance with clause 4.28.6 and Peak Individual Reserve Capacity Requirements in accordance with clause 4.28.7 for the Capacity Year starting on 1 October of Year 3 of a Reserve Capacity Cycle, Market Participants must, by the date and time specified in clause 4.1.23, provide to AEMO nominations of capacity requirements for Intermittent Loads, deemed to be Intermittent Loads under clause 1.48.2, expressed in MW, where the nominated quantity cannot exceed the greater of:

(a) the maximum allowed level of Intermittent Load specified in Standing Data for that Intermittent Load at the time of providing the data; and

(b) the maximum Contract Maximum Demand expected to be associated with that Intermittent Load during the Capacity Year to which the nomination relates. The Market Participant must provide evidence to AEMO of this Contract Maximum Demand level unless AEMO has previously been provided with that evidence.

~~4.28.8. To assist AEMO in determining Indicative Individual Reserve Capacity Requirements in accordance with clause 4.28.6 and Individual Reserve Capacity Requirements in accordance with clause 4.28.7 for the Capacity Year starting on 1 October of Year 3 of a Reserve Capacity Cycle, Market Participants must, by the date and time specified in clause 4.1.23, provide to AEMO:~~

~~(a) the identity of all interval meters associated with that Market Participant which measure Loads that it nominates as Non-Temperature Dependent Loads; and~~

~~(b) [Blank]~~

~~(c) nominations of capacity requirements for Intermittent Loads, deemed to be Intermittent Loads under clause 1.48.2, expressed in MW, where the nominated quantity cannot exceed the greater of:~~

~~i. the maximum allowed level of Intermittent Load specified in Standing Data for that Intermittent Load at the time of providing the data; and~~

~~ii. the maximum Contract Maximum Demand expected to be associated with that Intermittent Load during the Capacity Year to which the nomination relates. The Market Participant must provide evidence to AEMO of this Contract Maximum Demand level unless AEMO has previously been provided with that evidence.~~

4.28.8A. [Blank]

4.28.8B. AEMO must accept a nomination for capacity for an Intermittent Load from a Market Participant if that nomination is made in accordance with clause 4.28.8 provided that AEMO is satisfied of the accuracy of the data and evidence provided in accordance with clause 4.28.8(b)~~clause 4.28.8(c)(ii)~~.

~~4.28.8C. Subject to clause 4.28.11, a Market Participant may provide to AEMO the identity of additional interval meters (to those provided under clause 4.28.8) associated with the Market Participant which measure Loads that it nominates as Non-Temperature Dependent Loads for the remainder of the relevant Capacity Year by providing the relevant information to AEMO no later than 15 Business Days prior to the date and time specified in clause 4.1.23C for the first Trading Month for which the Market Participant wants AEMO to take the updated information into account.~~

4.28.9. ~~AEMO must only accept the load measured by an interval meter nominated in accordance with clauses 4.28.8(a) or 4.28.8C as a Non-Temperature Dependent Load if that load satisfies the requirements of Appendix 5A.~~[Blank]

~~4.28.9A. A Market Participant may submit a Consumption Deviation Application to AEMO in accordance with the WEM Procedure referred to in clause 4.28.9E, in respect of a Load that it has nominated as a Non-Temperature Dependent Load under clause 4.28.8(a) or clause 4.28.8C and a Trading Interval, if:~~

~~(a) the level of consumption of the Load was affected in the Trading Interval; and~~

~~(b) the Market Participant considers that the deviation in the level of consumption was due to:~~

~~i. the Trading Interval falling on a Trading Day that is not a Business Day; or~~

~~ii. a maintenance event.~~

~~4.28.9B. AEMO may charge an Application Fee to cover its costs of requesting clarification or further information of any aspect of a Consumption Deviation Application in accordance with clause 4.28.9F.~~

~~4.28.9C. A Consumption Deviation Application submitted under clause 4.28.9A must:~~

~~(a) be submitted as soon as practicable, but in any event:~~

~~i. for an application that relates to the Individual Reserve Capacity Requirement for October in the relevant Capacity Year, must be submitted by the date and time specified in clause 4.1.23; and~~

~~ii. for an application that relates to the Individual Reserve Capacity Requirement for a Trading Month, other than October, in the relevant Capacity Year, must be submitted by the date and time specified in clause 4.28.8C; and~~

~~(b) contain, or be accompanied by, the information specified in the WEM Procedure referred to in clause 4.28.9E.~~

~~4.28.9D. AEMO must accept or reject a Consumption Deviation Application submitted under clause 4.28.9A in accordance with the WEM Procedure referred to in clause 4.28.9E no later than the time the information is needed for the calculation of the relevant Indicative Individual Reserve Capacity Requirement.~~

~~4.28.9E. AEMO must specify the following matters in a WEM Procedure:~~

~~(a) the process that a Market Participant must follow when submitting a Consumption Deviation Application for a Load under clause 4.28.9A;~~

~~(b) the information and supporting evidence that a Market Participant must provide in its Consumption Deviation Application submitted under clause 4.28.9A;~~

~~(c) the process that AEMO must follow when it receives a Consumption Deviation Application submitted under clause 4.28.9A; and~~

~~(d) the criteria that AEMO must consider when deciding whether to accept or reject a Consumption Deviation Application submitted under clause 4.28.9A.~~

~~4.28.9F. If it considers it reasonably necessary to assess the Consumption Deviation Application, AEMO may request clarification or further information of any aspect of the Consumption Deviation Application submitted under clause 4.28.9A. Any clarification or information received is deemed to be part of the Consumption Deviation Application.~~

4.28.10. [Blank]

4.28.11. For each Capacity Year, a Market Participant may only provide AEMO with the relevant information specified in clause 4.28.8~~clauses 4.28.8, 4.28.8A and 4.28.8C~~ once with respect to each load.

4.28.11A. When undertaking the Adjustment Process for a Trading Week under clause 9.3.5 in accordance with the settlement cycle timeline, if the Trading Week contains the first Trading Day of a Trading Month AEMO must recalculate the Peak Individual Reserve Capacity Requirements applicable for each Trading Day in that Trading Month, using the method described in Appendix 5, and must provide to each Market Participant the recalculated Peak Individual Reserve Capacity Requirements for that Market Participant applicable for each Trading Day in that Trading Month by the Relevant Settlement Statement Date for the Trading Week.

4.28.11B. When undertaking the Adjustment Process for a Trading Week under clause 9.3.5 in accordance with the settlement cycle timeline, if the Trading Week contains the first Trading Day of a Trading Month AEMO must recalculate the Flexible Individual Reserve Capacity Requirements applicable for each Trading Day in that Trading Month, using the method described in Appendix 4, and must provide to each Market Participant the recalculated Flexible Individual Reserve Capacity Requirements for that Market Participant applicable for each Trading Day in that Trading Month by the Relevant Settlement Statement Date for the Trading Week.

~~4.28.11A. When undertaking the Adjustment Process for a Trading Week, which Trading Week contains the first Trading Day of a Trading Month, under clause 9.3.5 in accordance with the settlement cycle timeline, AEMO must recalculate the Individual Reserve Capacity Requirements applicable for each Trading Day in that Trading Month, using~~

~~the methodology described in Appendix 5, and must provide to each Market Participant the recalculated Individual Reserve Capacity Requirements for that Market Participant applicable for each Trading Day in that Trading Month by the Relevant Settlement Statement Date for the Trading Week.~~

4.28.12. AEMO must document the process to be followed in calculating Indicative Individual Reserve Capacity Requirements and Individual Reserve Capacity Requirements in a WEM Procedure.

4.28.13. AEMO must publish on the WEM Website the Total_Ratio values calculated by it in accordance with Step 3 of Appendix 5 when it:

(a) determines the Indicative Peak Individual Reserve Capacity Requirements or the Peak Individual Reserve Capacity Requirements for a Trading Month; or

(b) recalculates the Peak Individual Reserve Capacity Requirements for a Trading Month as required by clause 4.28.11A.

~~4.28.13. AEMO must publish on the WEM Website the following ratios calculated by it when it determines the Indicative Individual Reserve Capacity Requirements or the Individual Reserve Capacity Requirements for a Trading Month, or recalculates the Individual Reserve Capacity Requirements for a Trading Month as required by clause 4.28.11A:~~

~~(a) NTDL_Ratio as calculated in accordance with Step 8A of Appendix 5;~~

~~(b) TDL_Ratio as calculated in accordance with Step 8C of Appendix 5; and~~

~~(c) Total_Ratio as calculated in accordance with Step 10 of Appendix 5.~~

Intermittent Load Refunds

4.28A. Intermittent Load Refunds

4.28A.1. AEMO must determine for each Intermittent Load that is and continues to be deemed to be an Intermittent Load under clause 1.48.2, registered to Market Participant p the amount of the refund ("**Intermittent Load Refund**") to be applied for each Trading Day d in respect of that Intermittent Load as the sum over all Trading Intervals t of Trading Day d of the product of:

(a) the IML_Trading Interval Refund Rate for Trading Interval t for the Intermittent Load as determined in clause 4.28A.1A; and

(b) [Blank]

(c) the capacity shortfall for Trading Interval t of Trading Day d which is the greater of zero and:

i. double the MWh of the Intermittent Load metered during that Trading Interval, where for the purpose of this calculation the metered amount should be defined at the meter rather than being Loss Factor adjusted so as to be measured at the Reference Node, less;

ii. if the Energy Producing System described in clause 2.30B.2(a) is subject to a Planned Outage in the Trading Interval that would affect the energy production capability of the Energy Producing System, the quantity nominated for that Intermittent Load by its Market Participant in accordance with clause 4.28.8~~clause 4.28.8(c)~~; less

iii. 3% of the quantity nominated for that Intermittent Load by its Market Participant in accordance with clause 4.28.8~~clause 4.28.8(c)~~; less

iv. for Trading Intervals where the temperature data described in clause 4.28A.2 shows a temperature in excess of 41oC and the Energy Producing System described in clause 2.30B.2(a) is not subject to a Planned Outage or Forced Outage in the Trading Interval that would affect the energy production capability of the Energy Producing System, the capacity reduction, if any, specified in accordance with clause 2.30B.3(b)(i).

4.28A.1A. The IML Trading Interval Refund Rate for an Intermittent Load f in the Trading Interval t is determined as follows:

IML Trading Interval Refund Rate(f,t)=RF(f,t) × Y(f,t)

where:

(a) IML Trading Interval Refund Rate (f,t) is the IML Trading Interval Refund Rate for Intermittent Load f in Trading Interval t;

(b) RF(f,t) is the refund factor for Intermittent Load f in Trading Interval t, which is the lesser of:

i. six; and

ii. the greater of 1 and the Peak Capacity dynamic refund factor RF dynamic(t) as determined under clause 4.26.1(d); and

(c) Y(f,t) is the per Trading Interval Peak Capacity price associated with Intermittent Load f in Trading Interval t, which equals the Floating Daily Peak Reserve Capacity Price for the relevant Reserve Capacity Cycle divided by 48.

~~4.28A.1A. The Trading Interval Refund Rate for an Intermittent Load f in the Trading Interval t is determined as follows:~~

~~Trading Interval Refund Rate(f,t)=RF(f,t) × Y(f,t)~~

~~where:~~

~~(a) Trading Interval Refund Rate (f,t) is the Trading Interval Refund Rate for Intermittent Load f in Trading Interval t;~~

~~(b) RF(f,t) is the refund factor for Intermittent Load f in Trading Interval t, which is the lesser of:~~

~~i. six; and~~

ii. the greater of 1 and the dynamic refund factor RF dynamic(t) as determined under clause 4.26.1(d); and

(c) Y(f,t) is the per Trading Interval capacity price associated with Intermittent Load f in Trading Interval t, which equals the Floating Daily Peak Reserve Capacity Price for the relevant Reserve Capacity Cycle divided by 48.

4.28A.2. To support the implementation of clause 4.28A.1(c)(iv):

(a) AEMO must record the following temperature data for Energy Producing Systems in respect of which this section 4.28A applies and for which, in accordance with clause 2.30B.3(b)(ii), a valid method for measuring ambient temperature was indicated:

i. the publicly available maximum daily temperature associated with those Energy Producing Systems for which temperature is defined in accordance with clause 2.30B.3(b)(ii)(1); and

ii. temperatures measured by the SCADA system for those Energy Producing Systems for which temperature is defined in accordance with clause 2.30B.3(b)(ii)(2).

(b) [Blank]

4.28B. [Blank]

Early Certification of Reserve Capacity

4.28C. Early Certification of Reserve Capacity

4.28C.1. This section 4.28C is applicable to Facilities to which the following conditions apply:

(a) the Facility is a new Facility;

(b) the Facility is an Energy Producing System;

(c) the Facility is deemed by AEMO to be committed.; and

(d) AEMO is satisfied that:

i. the construction of the Facility cannot be achieved within the Reserve Capacity Cycle for which Capacity Credits are being sought for the Facility; and

ii. the Commissioning Tests for the Facility cannot be achieved before the commencement of the Capacity Year for which Capacity Credits are being sought for the Facility.

4.28C.1A. In forming its opinion under clause 4.28C.1(d), AEMO may have regard to the type of Energy Producing System for which Capacity Credits are being sought for the Facility, and any required augmentation of the SWIS or construction of other infrastructure.

4.28C.2. A Market Participant with a Facility that meets the criteria in clause 4.28C.1 may apply to AEMO, at any time, but no earlier than two years, before 1 January of Year 1 of the Reserve Capacity Cycle to which the application relates, for certification of Reserve Capacity and Capacity Credits for that Facility.

4.28C.2A. AEMO must acknowledge receipt of an application made under clause 4.28C.2 within five Business Days of receiving the application.

4.28C.2B. If AEMO considers that the Facility does not meet the criteria in clause 4.28C.1, AEMO must reject an application made under clause 4.28C.2 in respect of the Facility and must notify the relevant Market Participant of the rejection and AEMO's reasons for the rejection as soon as practicable.

4.28C.3. Each application for Early Certified Reserve Capacity must relate to a single future Reserve Capacity Cycle. AEMO must not accept more than one application for certification of Reserve Capacity per Facility per calendar year.

4.28C.4. An application under clause 4.28C.2 must state that the applicant intends to trade all assigned Certified Reserve Capacity bilaterally as defined in clause 4.14.2.

4.28C.5. An application made under clause 4.28C.2 must include:

(a) the nomination required by clause 4.4.1(d)(vi) of whether the Facility is expected to be classified as a Network Augmentation Funding Facility; and

(b) the information specified in section 4.10 that is required to be provided for the appropriate type of Facility Technology Type and Facility Class for the Facility to which the application relates to, including whether the application relates to Peak Early Certified Reserve Capacity or both Peak Early Certified Reserve Capacity and Flexible Early Certified Reserve Capacity.

4.28C.6. AEMO must process each application made in accordance with clause 4.28C.2 so as to determine the Early Certified Reserve Capacity for the Facility.

4.28C.7. If AEMO has received an application under clause 4.28C.2 prior to the date and time under clause 4.1.11, AEMO must set Peak Early Certified Reserve Capacity and Flexible Early Certified Reserve Capacity for the Facility:

(a) to the quantities it would normally grant the Facility if processing an application for Certified Reserve Capacity in accordance with section 4.11; and

(b) at the time AEMO next processes applications for Certified Reserve Capacity in accordance with section 4.11.

4.28C.7A. If AEMO has received an application under clause 4.28C.2, AEMO must determine an Indicative Network Access Quantity for the Facility in accordance with Appendix 3 at the time AEMO next determines Network Access Quantities for Facilities under section 4.15.

4.28C.7AA. If AEMO has previously determined an Indicative Network Access Quantity for a Facility in accordance with Appendix 3, and at the time AEMO next determines Network Access Quantities in accordance with Appendix 3 it does not determine a Final Network Access Quantity for that Facility, then AEMO must revise the Indicative Network Access Quantity in accordance with Appendix 3.

4.28C.7B. By 5:00 PM on the last Business Day falling on or before 31 October of the year in which AEMO sets the Peak Early Certified Reserve Capacity and Flexible Early Certified Reserve Capacity for the Facility under clause 4.28C.7 and determines the Indicative Network Access Quantity for the Facility under clause 4.28C.7A, AEMO must notify the applicant of the Indicative Network Access Quantity determined for the Facility under clause 4.28C.7A.

4.28C.7C. By 5:00 PM on the last Business Day falling on or before 31 October of the year in which AEMO determines the revised Indicative Network Access Quantity under clause 4.28C.7AA, AEMO must notify the applicant of the Indicative Network Access Quantity determined for the Facility under clause 4.28C.7AA.

4.28C.7D. AEMO must publish the following information on the WEM Website by the date and time specified in clause 4.1.16A(d):

(a) the name of each Facility for which an Indicative Network Access Quantity has been determined for a Facility under clause 4.28C.7A and the Indicative Network Access Quantity determined for the Facility; and

(b) the name of each Facility for which a revised Indicative Network Access Quantity has been determined for a Facility under clause 4.28C.7AA and the revised Network Access Quantity determined for the Facility.

4.28C.8. Within 30 Business Days of the applicant receiving notification by AEMO under clause 4.1.12 of the quantity of Peak Early Certified Reserve Capacity and Flexible Early Certified Reserve Capacity assigned to the Facility under clause 4.28C.7 the applicant must ensure that AEMO holds the benefit of a Reserve Capacity Security equal to the amount specified in clause 4.28C.9.

4.28C.8A. If a Market Participant does not comply with clause 4.28C.8 in full by the time specified in clause 4.28C.8, the Peak Early Certified Reserve Capacity and Flexible Early Certified Reserve Capacity assigned to that Facility under clause 4.28C.7 and the Indicative Network Access Quantity determined for that Facility will lapse.

4.28C.9. The amount for the purposes of clauses 4.28C.8 and 4.28C.12 is 25 percent of the Peak Benchmark Reserve Capacity Price included in the most recent Request for Expressions of Interest at the time and date associated with clause 4.28C.8 or 4.28C.12 as applicable, multiplied by an amount equal to the Peak Early Certified Reserve Capacity assigned to the Facility under clause 4.28C.7.

4.28C.10. [Blank]

4.28C.11. [Blank]

4.28C.12. Prior to the time and date specified in clause 4.1.13, in Year 1 of the first Reserve Capacity Cycle specified in clause 4.10.1(b) in which the Facility will enter service, AEMO must recalculate the amount of Reserve Capacity Security to be provided by each Market Participant in accordance with clause 4.28C.9 and:

(a) If an additional amount of Reserve Capacity Security is required, the Market Participant must ensure that AEMO holds the benefit of the additional Reserve Capacity Security by the time and date specified in clause 4.1.13; and

(b) If a reduced amount of Reserve Capacity Security is required, the Market Participant may request AEMO to return any additional Reserve Capacity Security, in accordance with clause 4.13.14, provided that at all times AEMO holds a Reserve Capacity Security to the level determined in accordance with this clause 4.28C.12.

4.28C.12A From the time and date specified in clause 4.1.13 of Year 1 of the first Reserve Capacity Cycle in which the Facility will enter service, all of the provisions of section 4.13 apply equally to the Reserve Capacity Security of Facilities with Early Certified Reserve Capacity.

4.28C.13. [Blank]

4.28C.14. [Blank]

4.28C.15. AEMO must document the process for the application of this section 4.28C and the matters AEMO will have regard to in forming its opinion under clause 4.28C.1(d) in a WEM Procedure.

Settlement Data

4.29. Settlement Data

4.29.1. The Reserve Capacity Prices for a Reserve Capacity Cycle to apply during the period specified in clause 4.1.29 are to be calculated as follows:

(a) for a Reserve Capacity Cycle from the 2019 Reserve Capacity Cycle to the 2024 Reserve Capacity Cycle, the value calculated using the following formula:

$$\max(\text{Segment 1}, \text{Segment 2}, 0) * \text{BRCP}$$

where:

$$\text{Segment 1} = \frac{\text{EZ BRCP Factor} - \text{BRCP Cap Factor}}{\text{EZ}} \times \text{surplus} + \text{BRCP Cap Factor}$$

$$\text{Segment 2} = \frac{\text{EZ BRCP Factor}}{\text{EZ} - \text{AZ}} \times (\text{surplus} - \text{AZ})$$

BRCP is the Peak Benchmark Reserve Capacity Price determined in accordance with section 4.16;

BRCP Cap Factor is 1.3;

EZ BRCP Factor is 0.5;

EZ is 0.1;

AZ is 0.3; and

surplus is the pro rata excess capacity calculated as follows:

$$\text{surplus} = [\max(0, (\frac{\text{CC}-\text{RCR}}{\text{RCR}})]$$

where:

CC is the total number of Peak Capacity Credits assigned by AEMO in accordance with clause 4.20.5A for the Reserve Capacity Cycle; and

RCR is the Peak Reserve Capacity Requirement for the Reserve Capacity Cycle.

(b) for a Reserve Capacity Cycle from the 2025 Reserve Capacity Cycle onwards, the values calculated using the following formulas:

i. The Peak Reserve Capacity Price is:

$$\text{PRCP} = \begin{cases} \text{if PRatio} \leq 0.85, & \text{PBRCP} \times 1.5 \\ \text{if } 0.85 < \text{PRatio} \leq 0.95, & \text{PBRCP} \times (1 + (0.95 - \text{PRatio}) \times \text{PRCPSlope}) \\ \text{if } 0.95 < \text{PRatio} \leq 1.05, & \text{PBRCP} \\ \text{if } 1.05 < \text{PRatio} \leq 1.15, & \text{PBRCP} \times (1 + (1.05 - \text{PRatio}) \times \text{PRCPSlope}) \\ \text{if PRatio} > 1.15, & \text{PBRCP} \times 0.5 \end{cases}$$

where:

1. PRatio is $\frac{\text{PCC}}{\text{PRCR}}$
2. PCC is the total number of Peak Capacity Credits assigned by AEMO in accordance with clause 4.20.5A for the Reserve Capacity Cycle;
3. PRCR is the Peak Reserve Capacity Requirement for the Reserve Capacity Cycle;
4. PBRCP is the Peak Benchmark Reserve Capacity Price determined in accordance with section 4.16; and
5. PRCPSlope is $\frac{1.5-1}{0.95-0.85}$

ii. The Flexible Reserve Capacity Price is:

$$FRCP = \begin{cases} if\ FRatio \leq 0.85 & FBRCP \times 1.6 \\ if\ 0.85 < FRatio\ < 1 & FBRCP \times (1 + (1 - FRatio) \times FRCPSlope1) \\ if\ FRatio = 1 & FBRCP \\ if\ 1 < FRatio < 1.15 & FBRCP \times (1 + (1 - FRatio) \times FRCPSlope2) \\ if\ FRatio \geq 1.15 & FBRCP \times 0.5 \end{cases}$$

where:

1. FRatio is $\frac{\text{FCC}}{\text{FRCR}}$
2. FCC is the total number of Flexible Capacity Credits assigned by AEMO in accordance with clause 4.20.5A for the Reserve Capacity Cycle;
3. FRCR is the Flexible Reserve Capacity Requirement for the Reserve Capacity Cycle;
4. FBRCP is the Flexible Benchmark Reserve Capacity Price determined in accordance with section 4.16;
5. FRCPSlope1 is $\frac{1.6-1}{1-0.85}$; and
6. FRCPSlope2 is $\frac{1-0.5}{1.15-1}$.

4.29.1A. AEMO must set:

(a) for a Reserve Capacity Cycle from the 2019 Reserve Capacity Cycle to the 2023 Reserve Capacity Cycle, the Facility Monthly Peak Reserve Capacity Price for a Reserve Capacity Cycle to apply during the period specified in clause 4.1.29 for a Facility, which is equal to:

i. [Blank]

ii. for a Transitional Facility during a Transitional Reserve Capacity Cycle, the value determined in accordance with clause 4.29.1B;

iii. for a Fixed Price Facility during a Fixed Price Reserve Capacity Cycle for that Fixed Price Facility, the value determined in accordance with clause 4.29.1D for that Fixed Price Facility; or

iv. for all other Facilities, the Reserve Capacity Price for the Reserve Capacity Cycle divided by 12; and

(b) [Blank]

(c) for a Reserve Capacity Cycle from the 2024 Reserve Capacity Cycle onwards, the Entity Daily Peak Reserve Capacity Price to apply during the period specified in clause 4.1.29 for a Facility or a Separately Certified Component, which is equal to:

i. for a Non-Scheduled Facility that is a Transitional Facility during a Transitional Reserve Capacity Cycle, the Transitional Daily Peak Reserve Capacity Price;

ii. for a Non-Scheduled Facility that is a Fixed Price Facility during a Peak Fixed Price Reserve Capacity Cycle for that Non-Scheduled Facility, the Fixed Daily Peak Reserve Capacity Price for that Facility;

iii. for a Non-Scheduled Facility not covered by clause 4.29.1A(c)(i) or clause 4.29.1A(c)(ii), the Floating Daily Peak Reserve Capacity Price;

iv. for a Transitional Component during a Transitional Reserve Capacity Cycle, the Transitional Daily Peak Reserve Capacity Price;

v. for a Fixed Price Component during a Peak Fixed Price Reserve Capacity Cycle for that Fixed Price Component, the Fixed Daily Peak Reserve Capacity Price for that Fixed Price Component;

vi. for a Separately Certified Component not covered by clause 4.29.1A(c)(iv) or clause 4.29.1A(c)(v), the Floating Daily Peak Reserve Capacity Price; and

vii. for all Demand Side Programmes, the Floating Daily Peak Reserve Capacity Price.

4.29.1AA. The Floating Daily Peak Reserve Capacity Price for a Reserve Capacity Cycle is the Peak Reserve Capacity Price divided by the number of Trading Days in the relevant Capacity Year for the Reserve Capacity Cycle.

4.29.1B. AEMO must set:

(a) for a Reserve Capacity Cycle from the 2019 Reserve Capacity Cycle to the 2023 Reserve Capacity Cycle, the Facility Monthly Peak Reserve Capacity Price for a Transitional Facility, which is the value calculated using the formula below:

$$\mathrm{TFMRCP_{cy}} = \frac{\min(\max(\mathrm{PRCP_{cy}}, \mathrm{Trans_Floor_{cy}}), \mathrm{Trans_Ceiling_{cy}})}{12}$$

where:

i. $\mathrm{PRCP_{cy}}$ is the Peak Reserve Capacity Price as determined in accordance with clause 4.29.1(a);

ii. $\mathrm{Trans_Ceiling_{cy}}$ equals $140,000 for the 2019 Reserve Capacity Cycle and for each subsequent Transitional Reserve Capacity Cycle, the value as escalated in accordance with clause 4.29.1C(a); and

iii. $\mathrm{Trans_Floor_{cy}}$ equals $114,000 for the 2019 Reserve Capacity Cycle and for each subsequent Transitional Reserve Capacity Cycle, the value as escalated in accordance with clause 4.29.1C(b); and

(b) [Blank]

(c) for a Reserve Capacity Cycle from the 2024 Reserve Capacity Cycle onwards, the Transitional Daily Peak Reserve Capacity Price for a Transitional Facility or Transitional Component during a Transitional Reserve Capacity Cycle, which is the value calculated using the formula below:

$$\mathrm{TDPRCP_{cy}} = \frac{\min(\max(\mathrm{PRCP_{cy}}, \mathrm{Trans_Floor_{cy}}), \mathrm{Trans_Ceiling_{cy}})}{\mathrm{TDCY_{cy}}}$$

where:

i. $PRCP_{cy}$ is the Peak Reserve Capacity Price as determined in accordance with clause 4.29.1(b)(i) for the Reserve Capacity Cycle;

ii. $Trans_Ceiling_{cy}$ equals $140,000 for the 2019 Reserve Capacity Cycle and for each subsequent Transitional Reserve Capacity Cycle, the value as escalated in accordance with clause 4.29.1C(a);

iii. $Trans_Floor_{cy}$ equals $114,000 for the 2019 Reserve Capacity Cycle and for each subsequent Transitional Reserve Capacity Cycle, the value as escalated in accordance with clause 4.29.1C(b); and

iv. $TDCY_{cy}$ is the number of Trading Days in the relevant Capacity Year.

4.29.1C. The escalation factors used in clause 4.29.1B are calculated as follows:

(a) Trans_Ceiling in Capacity Year cy is:

$$\begin{aligned}\text{Trans_Ceiling}_{cy} &= \text{Trans_Ceiling}_{cy-1} \\ &\times \left(1 + \max\left(0, \text{ForecastCPI}_{cy}\right) + \max\left(0, \text{ActualCPI}_{cy-2}\right)\right. \\ &\left. - \max\left(0, \text{ForecastCPI}_{cy-2}\right)\right)\end{aligned}$$

(b) Trans_Floor in Capacity Year cy is:

$$\begin{aligned}\text{Trans_Floor}_{cy} &= \text{Trans_Floor}_{cy-1} \\ &\times \left(1 + \max\left(0, \text{ForecastCPI}_{cy}\right) + \max\left(0, \text{ActualCPI}_{cy-2}\right)\right. \\ &\left. - \max\left(0, \text{ForecastCPI}_{cy-2}\right)\right)\end{aligned}$$

(c) $Trans_Ceiling_{cy-1}$ is the value of Trans_Ceiling published for the previous Reserve Capacity Cycle;

(d) $Trans_Floor_{cy-1}$ is the value of Trans_Floor published for the previous Transitional Reserve Capacity Cycle;

(e) $ForecastCPI_{cy}$ is the value determined under clause 4.29.2(a);

(f) $ForecastCPI_{cy-2}$ is the value determined under clause 4.29.2(b); and

(g) $ActualCPI_{cy-2}$ is the value determined under clause 4.29.2(c).

4.29.1CA. AEMO must publish on the WEM Website:

(a) the values determined for Trans_Ceiling and Trans_Floor in accordance with clause 4.29.1C;

(b) the Peak Capacity values for Transitional Facilities or Transitional Components determined in clause 4.29.1B; and

(c) the Flexible Capacity values for Transitional Facilities or Transitional Components determined in clause 4.29.1G.

4.29.1D. AEMO must set:

(a) for a Reserve Capacity Cycle from the 2019 Reserve Capacity Cycle to the 2023 Reserve Capacity Cycle, the Facility Monthly Peak Reserve Capacity

Price for a Fixed Price Facility during a Peak Fixed Price Reserve Capacity Cycle, which for the Fixed Price Facility is:

i. for the first Reserve Capacity Cycle for which a Facility is classified as a Fixed Price Facility, the Reserve Capacity Price divided by 12; and

ii. for each subsequent Fixed Price Reserve Capacity Cycle for the Fixed Price Facility, the value calculated in accordance with the following formula divided by 12:

$FRCP = FRCP_{[previous]} \times \max(1, (1 + CPI))$

where:

1. FRCP is the Facility Monthly Peak Reserve Capacity Price for the Fixed Price Facility in the current Peak Fixed Price Reserve Capacity Cycle for that Fixed Price Facility;

2. $FRCP_{[previous]}$ is the Facility Monthly Peak Reserve Capacity Price for the Fixed Price Facility in the previous Peak Fixed Price Reserve Capacity Cycle for that Fixed Price Facility; and

3. CPI is the latest decimal value of the published annual percentage change in the Reserve Bank of Australia's Statement of Monetary Policy for the Australian Consumer Price Index forecast for June of Year 3 of the relevant Fixed Price Reserve Capacity Cycle, or if that value is not available, the mid-point of the Reserve Bank of Australia's latest decimal value of the published target range of inflation, at the time AEMO undertakes the calculation in clause 4.29.2A;

(b) for the 2024 Reserve Capacity Cycle, the Fixed Daily Peak Reserve Capacity Price for a Fixed Price Facility or Fixed Price Component during a Peak Fixed Price Reserve Capacity Cycle for the Fixed Price Facility or Fixed Price Component, which is the Floating Daily Peak Reserve Capacity Price; and

(c) for a Reserve Capacity Cycle from the 2025 Reserve Capacity Cycle onwards the Fixed Daily Peak Reserve Capacity Price for a Fixed Price Facility or a Fixed Price Component during a Peak Fixed Price Reserve Capacity Cycle for the Fixed Price Facility or Fixed Price Component, which is:

i. for the first Reserve Capacity Cycle for which a Facility is classified as a Fixed Price Facility or a Separately Certified Component is classified as a Fixed Price Component, the Floating Daily Peak Reserve Capacity Price; and

ii. for the second and third Peak Fixed Price Reserve Capacity Cycles for the Fixed Price Facility or Fixed Price Component:

$$FDPRCP_{cy} = \frac{FDPRCP_{cy-1} \times TDCY_{cy-1}}{TDCY_{cy}} \times (1 + max(0, ForecastCPI_{cy}))$$

where:

1. $FDPRCP_{cy-1}$ is Fixed Daily Peak Reserve Capacity Price for the Fixed Price Facility or Fixed Price Component in the previous Reserve Capacity Cycle;
2. $TDCY_{cy-1}$ is the number of Trading Days in the relevant Capacity Year for the previous Reserve Capacity Cycle;
3. $ForecastCPI_{cy}$ is the value determined in accordance with clause 4.29.2(a); and
4. $TDCY_{cy}$ is the number of Trading Days in the relevant Capacity Year for the current Reserve Capacity Cycle.

iii. for each subsequent Peak Fixed Price Reserve Capacity Cycle for the Fixed Price Component:

$$FDPRCP_{cy} = \frac{FDPRCP_{cy-1} \times TDCY_{cy-1}}{TDCY_{cy}} \times \left(1 + max(0, ForecastCPI_{cy}) + max(0, ActualCPI_{cy-2}) - max(0, ForecastCPI_{cy-2})\right)$$

where:

1. $FDPRCP_{cy-1}$ is the Fixed Daily Peak Reserve Capacity Price for the Fixed Price Facility or Fixed Price Component in the previous Reserve Capacity Cycle;
2. $TDCY_{cy-1}$ is the number of Trading Days in the relevant Capacity Year for the previous Reserve Capacity Cycle;
3. $ForecastCPI_{cy}$ is the value determined in accordance with clause 4.29.2(a);
4. $ActualCPI_{cy-2}$ is the value determined in accordance with clause 4.29.2(c);
5. $ForecastCPI_{cy-2}$ is the value determined in accordance with clause 4.29.2(b); and
6. $TDCY_{cy}$ is the number of Trading Days in the relevant Capacity Year for the current Reserve Capacity Cycle.

4.29.1E. The Entity Daily Flexible Reserve Capacity Price for a Reserve Capacity Cycle to apply during the period specified in clause 4.1.29 for a Facility or a Separately Certified Component is:

(a) for a Transitional Component during a Transitional Reserve Capacity Cycle, the Transitional Daily Flexible Reserve Capacity Price;

(b) for a Fixed Price Component during a Flexible Fixed Price Reserve Capacity Cycle for that Fixed Price Component, the Fixed Daily Flexible Reserve Capacity Price for that Fixed Price Component;

(c) for a Fixed Price Component during a Peak Fixed Price Reserve Capacity Cycle, that is not assigned Flexible Capacity Credits in the same Reserve Capacity Cycle, the greater of:

i. zero, and

ii. the Floating Daily Flexible Reserve Capacity Price plus the Floating Daily Peak Reserve Capacity Price, less the Fixed Daily Peak Reserve Capacity Price for that Fixed Price Component;

(d) for all other Separately Certified Components, the Floating Daily Flexible Reserve Capacity Price; or

(e) for a Demand Side Programme the Floating Daily Flexible Reserve Capacity Price.

4.29.1F. The Floating Daily Flexible Reserve Capacity Price for a Reserve Capacity Cycle is the greater of:

(a) zero; and

(b) the Flexible Reserve Capacity Price divided by the number of Trading Days in the relevant Capacity Year for the Reserve Capacity Cycle less the Floating Daily Peak Reserve Capacity Price.

4.29.1G. The Transitional Daily Flexible Reserve Capacity Price for Capacity Year cy is:

$$\mathrm{TDFRCP_{cy}} = \max(0, \frac{\mathrm{FRCP_{cy}}}{\mathrm{TDCY_{cy}}} - \mathrm{TDPRCP_{cy}})$$

where:

(a) $\mathrm{FRCP_{cy}}$ is the Flexible Reserve Capacity Price as determined in accordance with clause 4.29.1(b)(ii) for the Reserve Capacity Cycle;

(b) $\mathrm{TDCY_{cy}}$ is the number of Trading Days in the relevant Capacity Year; and

(c) $\mathrm{TDPRCP_{cy}}$ is the Transitional Daily Peak Reserve Capacity Price for the current Transitional Reserve Capacity Cycle, as determined under clause 4.29.1B.

4.29.1H. The Fixed Daily Flexible Reserve Capacity Price for a Fixed Price Component during a Flexible Fixed Price Reserve Capacity Cycle for the Fixed Price Component is:

(a) for the first Reserve Capacity Cycle for which a Separately Certified Component is classified as a Fixed Price Component, the Floating Daily Flexible Reserve Capacity Price; and

(b) for the second and third Flexible Fixed Price Reserve Capacity Cycles for the Fixed Price Component:

$$FDFRCP_{cy} = \frac{FDFRCP_{cy-1} \times TDCY_{cy-1}}{TDCY_{cy}} \times (1 + max(0, ForecastCPI_{cy}))$$

where:

i. $FDFRCP_{cy-1}$ is the Fixed Daily Flexible Reserve Capacity Price for the Fixed Price Component in the previous Reserve Capacity Cycle;

ii. $TDCY_{cy-1}$ is the number of Trading Days in the relevant Capacity Year for the previous Reserve Capacity Cycle;

iii. $ForecastCPI_{cy}$ is the consumer price index value determined in accordance with clause 4.29.2(a); and

iv. $TDCY_{cy}$ is the number of Trading Days in the relevant Capacity Year for the current Reserve Capacity Cycle; and

(c) for each subsequent Flexible Fixed Price Reserve Capacity Cycle for the Fixed Price Component:

$$FDFRCP_{cy} = \frac{FDFRCP_{cy-1} \times TDCY_{cy-1}}{TDCY_{cy}} \times (1 + max\ (0, ForecastCPI_{cy}) + max(0, ActualCPI_{cy-2}) - max(0, ForecastCPI_{cy-2}))$$

where:

i. $FDFRCP_{cy-1}$ is the Fixed Daily Flexible Reserve Capacity Price for the Fixed Price Component in the previous Reserve Capacity Cycle;

ii. $TDCY_{cy-1}$ is the number of Trading Days in the relevant Capacity Year for the previous Reserve Capacity Cycle;

iii. $ForecastCPI_{cy}$ is the value determined in accordance with clause 4.29.2(a);

iv. $ActualCPI_{cy-2}$ is the value determined in accordance with clause 4.29.2(c);

v. $ForecastCPI_{cy-2}$ is the value determined in accordance with clause 4.29.2(b); and

vi. $TDCY_{cy}$ is the number of Trading Days in the relevant Capacity Year for the current Reserve Capacity Cycle.

4.29.2. The Consumer Price Index values to be used for the purpose of clauses 4.29.1C, 4.29.1D and 4.29.1H are:

(a) $ForecastCPI_{cy}$ is the latest decimal value of the published annual percentage change in the Reserve Bank of Australia's Statement of Monetary Policy for the Australian Consumer Price Index forecast for June of Year 3 of the relevant Reserve Capacity Cycle, or if that value is not available, the mid-point of the Reserve Bank of Australia's latest decimal value of the published target range of inflation, at the time AEMO determines the information required under clause 4.29.2B;

(b) $ForecastCPI_{cy-2}$ is the value of ForecastCPI used for the Capacity Year two years before Capacity Year cy; and

(c) $ActualCPI_{cy-2}$ is the latest decimal value of the published annual percentage change in the Australian Bureau of Statistics quarterly Consumer Price Index for the Australian all groups (not seasonally adjusted), for June of Year 1 of the Reserve Capacity Cycle for Capacity Year cy or, if that value is not available, the latest available decimal value of the percentage change value in the Australian Bureau of Statistics quarterly Consumer Price Index for the Australian all groups (not seasonally adjusted).

4.29.2A. AEMO must determine the information specified in clause 4.29.2B by the date and time specified in clause 4.1.16A.

4.29.2B. For each Reserve Capacity Cycle AEMO must determine the following information in accordance with this section 4.29:

(a) for a Reserve Capacity Cycle from the 2019 Reserve Capacity Cycle to the 2023 Reserve Capacity Cycle:

i. the Facility Monthly Peak Reserve Capacity Price for a Transitional Facility if the Reserve Capacity Cycle is a Transitional Reserve Capacity Cycle;

ii. the Facility Monthly Peak Reserve Capacity Price for each Fixed Price Facility for which the Reserve Capacity Cycle is a Peak Fixed Price Reserve Capacity Cycle;

iii. the Facility Monthly Peak Reserve Capacity Price for all other Facilities;

(b) for the 2024 Reserve Capacity Cycle:

i. the Entity Daily Peak Reserve Capacity Price for each Transitional Facility or Transitional Component;

ii. the Fixed Daily Peak Reserve Capacity Price for each Fixed Price Facility and each Fixed Price Component for which the Reserve Capacity Cycle is a Peak Fixed Price Reserve Capacity Cycle;

iii. the Entity Daily Peak Reserve Capacity Price for all other Facilities and Separately Certified Components;

(c) for a Reserve Capacity Cycle from the 2025 Reserve Capacity Cycle onwards:

i. if the Reserve Capacity Cycle is a Transitional Reserve Capacity Cycle, the Entity Daily Peak Reserve Capacity Price for each Transitional Facility or Transitional Component;

ii. the Fixed Daily Peak Reserve Capacity Price for each Fixed Price Facility and each Fixed Price Component for which the Reserve Capacity Cycle is a Peak Fixed Price Reserve Capacity Cycle;

iii. the Entity Daily Peak Reserve Capacity Price for all other Facilities and Separately Certified Components;

iv. if the Reserve Capacity Cycle is a Transitional Reserve Capacity Cycle, the Entity Daily Flexible Reserve Capacity Price for each Transitional Component;

v. the Fixed Daily Flexible Reserve Capacity Price for each Fixed Price Component for which the Reserve Capacity Cycle is a Flexible Fixed Price Reserve Capacity Cycle;

vi. the Entity Daily Flexible Reserve Capacity Price for all other Separately Certified Components; and

vii. the Entity Daily Flexible Reserve Capacity Price for all Demand Side Programmes.

4.29.3. AEMO must determine the following information in time for settlement of each Trading Day d:

(a) the Entity Daily Peak Reserve Capacity Price for each Demand Side Programme, Non-Scheduled Facility, and Separately Certified Component applying during Trading Day d;

~~(a) the Entity Daily Peak Reserve Capacity Price for each Demand Side Programme, Non-Scheduled Facility, and Separately Certified Component applying during Trading Day d;~~

(aA) the Entity Daily Flexible Reserve Capacity Price for each Demand Side Programme and Separately Certified Component applying during Trading Day d;

~~(aA) [Blank]~~

(b) the Peak Targeted Reserve Capacity Cost for Trading Day d as defined in clause 4.28.3;

(bA) the Flexible Targeted Reserve Capacity Cost for Trading Day d as defined in clause 4.28.3A;

(c) the Peak Shared Reserve Capacity Cost for Trading Day d as defined in clause 4.28.4;

(cA) the Flexible Shared Reserve Capacity Cost for Trading Day d as defined in clause 4.28.4B;

(cB) the Reserve Capacity Security Compensation Amount for Trading Day d as defined in clause 4.28.4D;

(d) for each Market Participant p and for Trading Day d:

i. the quantity of Peak Capacity Credits (including Peak Capacity Credits from Facilities subject to NCESS Contracts) for each Facility acquired by AEMO;

iA. the quantity of Peak Capacity Credits (including Capacity Credits from Facilities subject to NCESS Contracts) for each Separately Certified Component acquired by AEMO;

iB. the quantity of Flexible Capacity Credits (including Capacity Credits from Facilities subject to NCESS Contracts) for each Facility acquired by AEMO;

iC. the quantity of Flexible Capacity Credits (including Capacity Credits from Facilities subject to NCESS Contracts) for each Separately Certified Component acquired by AEMO;

ii. the quantity of Peak Capacity Credits for each Demand Side Programme;

iii. the quantity of Flexible Capacity Credits for each Demand Side Programme;

~~iii. [Blank]~~

iv. the quantity of Peak Capacity Credits for each Facility traded bilaterally in accordance with section 4.30;

ivA. the quantity of Peak Capacity Credits for each Separately Certified Component traded bilaterally in accordance with section 4.30;

ivB. the quantity of Flexible Capacity Credits for each Facility traded bilaterally in accordance with section 4.30;

ivC. the quantity of Flexible Capacity Credits for each Separately Certified Component traded bilaterally in accordance with section 4.30;

v. the Peak Individual Reserve Capacity Requirement for the Trading Month in which Trading Day d falls;

vA. the Flexible Individual Reserve Capacity Requirement for the Trading Month in which Trading Day d falls;

~~v. the Individual Reserve Capacity Requirement for each Market Participant for that Trading Month in which Trading Day d falls; and~~

vi. the total Peak Capacity Cost Refund to be paid by Market Participant p to AEMO for all Trading Intervals in Trading Day d; and

vii. the total Flexible Capacity Cost Refund to be paid by Market Participant p to AEMO for all Trading Intervals in Trading Day d;

~~vi. the total Capacity Cost Refund to be paid by the Market Participant to AEMO for all Trading Intervals in Trading Day d;~~

(dA) for each Market Participant, the sum over all of Market Participant p's Intermittent Loads, deemed to be Intermittent Loads under clause 1.48.2, of the Intermittent Load Refund payable to AEMO by Market Participant p in respect of each of its Intermittent Loads for Trading Day d; and

(e) for each Supplementary Capacity Contract:

i. the net payment to be made by AEMO under that contract for the Trading Day d;

ii. to whom the payment is to be made; and

iii. whether that contract relates to a shortfall of solely Peak Capacity, both Peak Capacity and Flexible Capacity, or solely Flexible Capacity.

~~(e) for each Supplementary Capacity Contract:~~

~~i. the net payment to be made by AEMO under that contract for the Trading Day d; and~~

~~ii. to whom the payment is to be made.~~

4.29.4. [Blank]

4.29.5. If a Facility first enters service prior to 1 October of Year 3 of a Reserve Capacity Cycle and Reserve Capacity Obligations apply to the relevant Facility in accordance with clause 4.1.26, then for the period between commencement of the Reserve Capacity Obligations for the Facility and up to the start of the Trading Day on 1 October of Year 3 of that Reserve Capacity Cycle;

(a) the Entity Daily Peak Reserve Capacity Price for the Facility or a Separately Certified Component of the Facility for that period is equal to the Floating Daily Peak Reserve Capacity Price for the Capacity Year immediately preceding 1 October of Year 3 of that Reserve Capacity Cycle; and

(b) the Entity Daily Flexible Reserve Capacity Price for the Facility or a Separately Certified Component of the Facility for that period is equal to the Floating Daily Flexible Reserve Capacity Price for the Capacity Year immediately preceding 1 October of Year 3 of that Reserve Capacity Cycle.

~~4.29.5. Where a Facility first enters service prior to 1 October of Year 3 of a Reserve Capacity Cycle and Reserve Capacity Obligations apply to the Facility in accordance with clause 4.1.26, then for the period between commencement of the Reserve Capacity Obligations for the Facility and up to the start of the Trading Day on 1 October of Year 3 of that Reserve Capacity Cycle, the Entity Daily Peak Reserve Capacity Price for the Facility or a Separately Certified Component of the Facility for that period is equal to the Floating Daily Peak Reserve Capacity Price for the Capacity Year immediately preceding 1 October of Year 3 of the Reserve Capacity Cycle.~~

4.30. Daily Capacity Credit Allocation Process

4.30.1. A Market Participant may submit one or more Capacity Credit Allocation Submissions in respect of a Facility or a Separately Certified Component that is registered to them on a Trading Day by 5:00PM on the Scheduling Day for that Trading Day.

4.30.2. A Capacity Credit Allocation Submission must be submitted in the form specified by AEMO and must include the information specified in clause 4.31.1.

4.30.3. Within one Business Day following receipt of a Capacity Credit Allocation Submission, AEMO must:

(a) decide whether to approve or reject the Capacity Credit Allocation Submission;

(b) notify the submitting Market Participant of the decision;

(c) if the decision is to reject the Capacity Credit Allocation Submission, notify the submitting Market Participant of the reason for the rejection; and

(d) if the decision is to approve the Capacity Credit Allocation Submission, notify the Market Participant specified as the receiver of the Capacity Credits of the details of the Capacity Credit Allocation Submission.

4.30.4. AEMO must reject a Capacity Credit Allocation Submission in respect of a Facility or a Separately Certified Component if the sum of the Peak Capacity Credits:

(a) proposed to be allocated in the Capacity Credit Allocation Submission; and

(b) proposed to be allocated in any other Capacity Credit Allocation Submission for that Facility or Separately Certified Component by that Market Participant for the relevant Trading Day,

exceeds the number of Peak Capacity Credits that are able to be traded bilaterally for that Facility or Separately Certified Component by that Market Participant under the ESM Rules for the Trading Day.

4.30.4A. AEMO must reject a Capacity Credit Allocation Submission in respect of a Facility or a Separately Certified Component if the sum of the Flexible Capacity Credits:

(a) proposed to be allocated in the Capacity Credit Allocation Submission; and

(b) proposed to be allocated in any other Capacity Credit Allocation Submission for that Facility or Separately Certified Component by that Market Participant for the relevant Trading Day,

exceeds the number of Flexible Capacity Credits that are able to be traded bilaterally for that Facility or Separately Certified Component by that Market Participant under the ESM Rules for the Trading Day.

4.30.5. AEMO must approve a Capacity Credit Allocation Submission if the Capacity Credit Allocation Submission is not rejected in accordance with clauses 4.30.4 or 4.30.4A~~clause 4.30.4~~.

4.30.6. A Market Participant may withdraw a Capacity Credit Allocation Submission in respect of a Facility or Separately Certified Component that is registered to them on a Trading Day at any time before 5:00 PM on the Scheduling Day for that Trading Day.

4.30.7. By submitting or withdrawing a Capacity Credit Allocation Submission a Market Participant acknowledges that it is acting with the permission of all affected Market Participants.

4.30.8. Within one Trading Day after a Market Participant has withdrawn a Capacity Credit Allocation Submission in respect of a Facility or Separately Certified Component under clause 4.30.6, AEMO must notify the Market Participant specified as the receiver of the Capacity Credits that the Capacity Credit Allocation Submission for that Facility or Separately Certified Component has been withdrawn.

4.30.9. If the termination of a Capacity Credit in respect of a Facility or Separately Certified Component results in the number of Capacity Credits allocated by a Market Participant in Capacity Credit Allocations for that Facility or Separately Certified Component for a Trading Day exceeding the number of Capacity Credits held for that Facility or Separately Certified Component for that Trading Day by the Market Participant that are allowed to be traded bilaterally under the ESM Rules, then AEMO must notify the Market Participant within one Trading Day after the notification of the termination.

4.30.10. Following receipt of a notice provided under clause 4.30.9, a Market Participant may reduce the number of Capacity Credits allocated in respect of the relevant Facility or Separately Certified Component by withdrawing Capacity Credit Allocations and submitting Capacity Credit Allocation Submissions in accordance with clauses 4.30.6 and 4.30.1, respectively.

4.30.11. If, at 5:00 PM on the Scheduling Day, the number of Peak Capacity Credits allocated in Capacity Credit Allocations for a Market Participant with respect to a Facility or Separately Certified Component that is registered to them exceeds the number of Peak Capacity Credits held for the Facility or Separately Certified Component, AEMO must, by 5:00 PM on the Trading Day for which the Capacity Credit Allocation relates:

(a) amend all of the relevant Capacity Credit Allocations proportionally, to ensure that the sum of the Peak Capacity Credit Allocations in respect of the relevant Facility or Separately Certified Component for the Market Participant for the Trading Day equal the number of Peak Capacity Credits held for that Facility or Separately Certified Component; and

(b) for each amended Capacity Credit Allocation, notify each affected Market Participant of the details of the amendment.

4.30.11A. If, at 5:00 PM on the Scheduling Day, the number of Flexible Capacity Credits allocated in Capacity Credit Allocations for a Market Participant with respect to a Facility or Separately Certified Component that is registered to them exceeds the number of Flexible Capacity Credits held for the Facility or Separately Certified Component, AEMO must, by 5:00 PM on the Trading Day for which the Capacity Credit Allocation relates:

(a) amend all of the relevant Capacity Credit Allocations proportionally, to ensure that the sum of the Flexible Capacity Credit Allocations in respect of the relevant Facility or Separately Certified Component for the Market Participant for the Trading Day equal the number of Flexible Capacity Credits held for that Facility or Separately Certified Component; and

(b) for each amended Capacity Credit Allocation, notify each affected Market Participant of the details of the amendment.

4.30.12. AEMO must develop a WEM Procedure dealing with:

(a) Capacity Credit Allocations; and

(b) other matters relating to sections 4.30 and 4.31.

4.31. Format of Capacity Credit Allocation Submissions

4.31.1. A Capacity Credit Allocation Submission must set out:

(a) the identity of the submitting Market Participant, which must be the holder of the Capacity Credits;

(b) the identity of the Facility from which the Capacity Credits are to be allocated for settlement purposes;

(bA) where applicable, the identity of the Separately Certified Component from which the Capacity Credits are to be allocated for settlement purposes;

(c) the identity of the Market Participant to which the Capacity Credits are to be allocated for settlement purposes, which may be the submitting Market Participant; ~~and~~

(cA) whether the Capacity Credit Allocation Submission relates to Peak Capacity Credits or Flexible Capacity Credits; and

(d) the number of Peak Capacity Credits or Flexible Capacity Credits to be allocated for settlement purposes from the Market Participant which was the holder of the Capacity Credits to the Market Participant which was allocated Capacity Credits, which may be the same Market Participant.

4.31.2. A Capacity Credit Allocation Submission in respect of a Facility may allocate part of a Capacity Credit for that Facility provided that the number of Capacity Credits allocated is specified to a precision of 0.001 MW.

4.32. Capacity Credit Allocation Timeline

4.32.1. AEMO must publish the Capacity Credit Allocation Submission timeline for a Financial Year at least one calendar month prior to the commencement of that Financial Year. The Capacity Credit Allocation Submission timeline must include:

(a) the earliest date and time at which Capacity Credit Allocation Submissions for a Trading Day can be submitted, where this is to be not less than 10 Business Days prior to the start of the relevant Trading Day; and

(b) the latest date and time at which Capacity Credit Allocation Submissions for a Trading Day can be submitted, where this is to be no later than 5:00 PM on the Scheduling Day.

5 Obligations for NCESS Contract Holders

5.1. [Blank]

5.2. [Blank]

5.2A Registration and Certification

5.2A.1. [Blank]

5.2A.2 Where a Market Participant enters into an NCESS Contract for a Facility, and the Facility Technology Type for the Facility would ordinarily be capable of being assigned Certified Reserve Capacity, then the Market Participant must apply to AEMO for Certified Reserve Capacity, must meet the requirements of clause 4.8A.3(c) where applicable, and use best endeavours to meet the requirements of clause 4.10.1, in respect of the Facility, in respect of each Reserve Capacity Cycle that the Facility would be eligible to participate in over the period of the NCESS Contract.

5.2A.3. Clause 5.2A.2 does not require a Market Participant to apply for Certified Reserve Capacity for a Facility for a Reserve Capacity Cycle where the Market Participant has entered into an NCESS Contract in respect of the Facility after the date and time specified under clause 4.1.11 for that relevant Reserve Capacity Cycle.

5.3. Variations to NCESS Contract

5.3.1. Where a Market Participant, that has entered into an NCESS Contract in respect of a Facility, is assigned Capacity Credits for the Facility in a Reserve Capacity Cycle that coincides with the period of the NCESS Contract, then:

(a) where the NCESS Contract was entered into with AEMO, AEMO must vary the payment terms of the NCESS Contract such that the total payment under the NCESS Contract is reduced by the value of the total amount of the expected Capacity Credit payments for the Facility- to be paid to the relevant Market Participant for that Reserve Capacity Cycle; or

(b) where the NCESS Contract was entered into with a Network Operator, AEMO must provide the value of the total amount of expected Capacity Credit payments to the Network Operator, and the Network Operator must vary the payment terms of the NCESS Contract such that the total payment under the NCESS Contract is reduced by the value of the total amount of the expected Capacity Credit payments for the Facility- to be paid to the relevant Market Participant for that Reserve Capacity Cycle.

5.3.2. Where the NCESS Contract payment terms are varied in accordance with clause 5.3.1(a), AEMO must apply the revised payment terms in the immediate next Settlement Statement.

5.3A Information required from the Network Operator

5.3A.1. When a Network Operator has entered into an NCESS Contract with a Market Participant, the Network Operator must as soon as practicable and not less than 20 Business Days prior to the NCESS Contract taking effect, provide AEMO with:

(a) the identity of the Market Participant or the service provider that intends to become registered as a Rule Participant in the Market Participant class;

(b) the identity of the facility or equipment providing the NCESS;

(c) a unique identifier for the NCESS Contract;

(d) the period over which the NCESS is to be provided by the NCESS Contract;

(e) where applicable, the arrangements for scheduling and dispatch of the Facility or equipment to enable or dispatch the NCESS; and

(f) unless AEMO has already been provided with a copy of the final NCESS Contract pursuant to clause 3.11B.13, a copy of the signed NCESS Contract.

5.3A.2 When any change occurs to the details of an NCESS Contract listed in clause 5.3A.1 the Network Operator must inform AEMO as soon as practicable.

5.4. [Blank]

5.5. [Blank]

5.6. [Blank]

5.7. NCESS Dispatch

5.7.1. [Blank]

5.7.2. AEMO may call upon the relevant facility or equipment to provide the NCESS under a NCESS Contract in accordance with the terms of the contract, or as advised to it by the Network Operator in accordance with clause 5.3A.1, whether or not AEMO is a counterparty to the NCESS Contract.

5.7.3. Where applicable, AEMO must formulate Constraint Equations in accordance with the WEM Procedure referred to in clause 2.27A.10(c) to reflect the terms of the NCESS Contract for use in the Dispatch Algorithm.

5.7.4. Where the terms of an NCESS Contract cannot be expressed as a Constraint Equation, AEMO must record the following details of any instruction to the Facility or equipment in respect of the provisions of the NCESS:

(a) the date, time and duration of the instruction;

(b) the nature of the instruction;

(c) the type of NCESS instructed to be provided;

(d) any required quantity of the NCESS to be provided; and

(e) any specific equipment configuration required to be applied.

Settlement Data

5.8. [Blank]

5.9. Settlement Data

5.9.1. AEMO must provide the following information to the settlement system for each NCESS Contract for each Dispatch Interval in a Trading Week:

(a) the Market Participant that has entered into the NCESS Contract;

(b) the set of Registered Facilities providing services under the NCESS Contract whose EOI Quantity is higher than it otherwise would have been as a result of a binding Constraint Equation applied under clause 7.2.4(iA) relating to the NCESS Contract; and

(c) the payment to be made by AEMO for services provided under the NCESS Contract.

5.9.2. AEMO must provide Network Operators with details of any quantities dispatched or otherwise instructed by AEMO to be provided under their NCESS Contracts in a Trading Week by 5:00 PM on the Invoicing Date for Settlement Statements for that Trading Week.

5.9.3. The information provided by AEMO to a Network Operator under clause 5.9.2 must include, for each relevant NCESS Contract, Facility and Dispatch Interval:

(a) the unique identifier of the NCESS Contract;

(b) the NCESS dispatched or directed to be provided (which may be energy or another service);

(c) insofar as the terms of the NCESS Contract are expressed in a Constraint Equation under clause 5.7.3:

i. the information recorded by AEMO for each Dispatch Instruction under clause 7.6.8;

ii. the unique identifier for each relevant Constraint Equation that bound in the Dispatch Interval;

(d) insofar as the terms of the NCESS Contract cannot be expressed in a Constraint Equation, the information recorded by AEMO under clause 5.7.4; and

(e) any other information reasonably required for the Network Operator to determine the quantity of service provided by the Facility under the NCESS Contract.

6. The Short Term Energy Market

Energy Scheduling Timetable and Process

6.1. [Blank]

6.2. Bilateral Submission Timetable and Process

6.2.1. A Market Participant may submit Bilateral Submission data for a Trading Day to AEMO between:

(a) 8:00 AM on the day that is seven days prior to the start of the Scheduling Day for the Trading Day; and

(b) the Bilateral Submission Cutoff for the Trading Day.

6.2.2. Where, at the time specified in clause 6.2.1(a) for a Trading Day:

(a) AEMO holds a Standing Bilateral Submission applicable to the Trading Day for a Market Participant; and

(b) the Standing Bilateral Submission conforms to the requirements of section 6.7 at that time,

AEMO must make the Standing Bilateral Submission the Bilateral Submission for the Trading Day for the Market Participant as at the time specified in clause 6.2.1(a).

6.2.2A. Where AEMO receives Bilateral Submission data from a Market Participant under clause 6.2.1, AEMO must, as soon as practicable after receiving the Bilateral Submission data:

(a) if the Bilateral Submission data complies with section 6.7 and was provided during the period described in clause 6.2.1, make the Bilateral Submission data the Bilateral Submission for the Trading Day; and

(b) notify the Market Participant which submitted the Bilateral Submission data under clause 6.2.1, that:

i. the Bilateral Submission data has been made the Bilateral Submission for the Trading Day to which the Bilateral Submission data submitted under clause 6.2.1 relates; or

ii. AEMO rejects the Bilateral Submission data as it does not comply with section 6.7, or was not received during the period described in clause 6.2.1 for the Trading Day to which the Bilateral Submission data submitted under clause 6.2.1 relates.

6.2.3. AEMO must maintain and provide to each Market Participant the Bilateral Submission quantities associated with that Market Participant for each Trading

Interval in the Bilateral Submission Results Window, including the party supplying, or being supplied by, the Market Participant. AEMO must update this information whenever AEMO:

(a) makes a Bilateral Submission under clause 6.2.2;

(b) accepts Bilateral Submission data under clause 6.2.2A(a); or

(c) disregards cancelled Bilateral Submission data from a Bilateral Submission under clause 6.2.5(a).

6.2.4. [Blank]

6.2.4A. [Blank]

6.2.4B. A Market Participant may cancel Bilateral Submission data held by AEMO for any Trading Interval during the period described in clause 6.2.1 for the Trading Day to which the cancelled Bilateral Submission data relates.

6.2.5. Where any Bilateral Submission data is cancelled in accordance with clause 6.2.4B, AEMO must, as soon as practicable:

(a) disregard the cancelled Bilateral Submission data from the Bilateral Submission; and

(b) notify the Market Participant which cancelled the Bilateral Submission that the data has been disregarded from the Bilateral Submission for the Trading Interval of the Trading Day to which the cancelled Bilateral Submission data relates.

6.2.6. [Blank]

6.2.7. By submitting Bilateral Submission data, a Market Participant acknowledges that it is acting with the permission of all affected Market Participants.

6.2A. Standing Bilateral Submission Timetable and Process

6.2A.1. A Market Participant may submit Standing Bilateral Submission data to AEMO at any time.

6.2A.2. AEMO must, as soon as practicable after receiving Standing Bilateral Submission data under clause 6.2A.1:

(a) accept the Standing Bilateral Submission data provided it complies with section 6.7 and revise the Standing Bilateral Submission to reflect the Standing Bilateral Submission data; and

(b) notify the Market Participant which submitted the Standing Bilateral data under clause 6.2A.1 that:

i. AEMO accepts the Standing Bilateral Submission data and has revised the Standing Bilateral Submission to reflect the Standing Bilateral Submission data; or

ii. AEMO rejects the Standing Bilateral Submission data as it does not comply with section 6.7.

6.2A.2A. Standing Bilateral Submission data accepted by AEMO under clause 6.2A.2 will apply from the next time that AEMO is required to use Standing Bilateral Submissions to make Bilateral Submissions under clause 6.2.2.

6.2A.3. Standing Bilateral Submission data must be associated with a day of the week and when used as Bilateral Submission data will only apply to Trading Days commencing on that day of the week.

6.2A.4. A Market Participant may at any time cancel Standing Bilateral Submission data accepted by AEMO under clause 6.2A.2(a) for Trading Intervals starting at a specified time on Trading Days starting on a specified day of the week.

6.2A.5. Where any Standing Bilateral Submission data is cancelled in accordance with clause 6.2A.4, AEMO must, as soon as practicable:

(a) disregard the cancelled Standing Bilateral Submission data from the Standing Bilateral Submission; and

(b) notify the Market Participant which cancelled the Standing Bilateral Submission data under clause 6.2A.4, that the cancelled Standing Bilateral Submission data has been disregarded from the Standing Bilateral Submission,

for the Trading Intervals to which the cancelled Standing Bilateral Submission data relates.

6.3. Determination of Mid Peak Electric Storage Resource Obligation Intervals

6.3.1. AEMO must, in accordance with the WEM Procedure referred to in clause 4.11.3A, determine and record the following information by 6:50 AM on each Scheduling Day:

(a) the Mid Peak Electric Storage Resource Obligation Interval that will apply during the Trading Day for the Scheduling Day; and

(b) the Mid Peak Electric Storage Resource Obligation Intervals that AEMO expects will apply during each of the seven following Trading Days.

6.3A. Information to Support the Bilateral and STEM Submission Process

6.3A.1. AEMO must publish the total energy, in MWh, as measured at the Reference Node, scheduled with AEMO under Bilateral Contracts for each Trading Interval in

the Bilateral Submission Results Window. AEMO must update this information whenever AEMO:

(a) makes a Bilateral Submission under clause 6.2.2;

(b) accepts Bilateral Submission data under clause 6.2.2A(a); or

(c) disregards cancelled Bilateral Submission data from a Bilateral Submission under clause 6.2.5(a).

6.3A.2. AEMO must publish the following information by 6:50 AM on each Scheduling Day:

(a) the Peak Electric Storage Resource Obligation Intervals that will apply to each Electric Storage Resource for the Trading Day for the Scheduling Day, as determined by AEMO using the Mid Peak Electric Storage Resource Obligation Interval determined under clause 6.3.1(a); and

(b) the Peak Electric Storage Resource Obligation Intervals that AEMO expects will apply to each Electric Storage Resource for each of the seven Trading Days following the Trading Day for the Scheduling Day, as determined by AEMO using the Mid Peak Electric Storage Resource Obligation Intervals determined under clause 6.3.1(b).

6.3A.3. Between 7:30 AM and 8:30 AM each Scheduling Day, AEMO must:

(a) identify and record the details of each approved Commissioning Test Plan that includes one or more Dispatch Intervals in the STEM Submission Information Window;

(b) identify and record the details of each Planned Outage or Forced Outage for energy recorded by AEMO for a Scheduled Facility, Semi-Scheduled Facility or Non-Scheduled Facility with a duration that includes one or more Dispatch Intervals in the STEM Submission Information Window;

(c) determine the Maximum Facility Supply Capability for each Scheduled Facility, Semi-Scheduled Facility and Non-Scheduled Facility f for each Dispatch Interval DI in the STEM Submission Information Window as:

$$MFSC(f,DI) = MinAvail(f,DI) \times LF(f,DI) / 12$$

where:

i. MinAvail(f,DI) is:

1. where no Planned Outages or Forced Outages for Facility f with a duration that includes Dispatch Interval DI were identified under clause 6.3A.3(b), the maximum sent out capacity of Facility f as recorded in Standing Data for Dispatch Interval DI; and

2. otherwise, the minimum Remaining Available Capacity for energy recorded for Facility f in Dispatch Interval DI for the

Planned Outages and Forced Outages identified under clause 6.3A.3(b); and

ii. LF(f,DI) is the Loss Factor for Facility f in Dispatch Interval DI;

(d) determine the Maximum Facility Supply Capability for each Scheduled Facility, Semi-Scheduled Facility and Non-Scheduled Facility f for each Trading Interval t in the STEM Submission Information Window as:

$$MFSC(f,t)=\sum_{DI\in t} MFSC(f,DI)$$

where:

i. MFSC(f,DI) is the Maximum Facility Supply Capability determined by AEMO for Facility f for Dispatch Interval DI under clause 6.3A.3(c); and

ii. DI∈t denotes all Dispatch Intervals DI in Trading Interval t;

(e) determine the Maximum Supply Capability for each Market Participant p for each Trading Interval t in the STEM Submission Information Window as:

$$MSC(p,t)=\max\left(0.001, \sum_{f\in Facilities(p,t)} MFSC(f,t)\right)$$

where:

i. MFSC(f,t) is the Maximum Facility Supply Capability determined by AEMO for Facility f for Trading Interval t under clause 6.3A.3(d); and

ii. f∈Facilities(p,t) denotes all Scheduled Facilities, Semi-Scheduled Facilities and Non-Scheduled Facilities f registered to Market Participant p in Trading Interval t;

(f) determine the Maximum Consumption Capability for each Market Participant p for each Trading Interval t in the STEM Submission Information Window as:

$$MCC(p,t)=\max(0.001, StandingMCC(p,t))$$

where:

i. StandingMCC(p,t) is the maximum Loss Factor adjusted quantity of energy, in units of MWh, that could be consumed during Trading Interval t by Market Participant p's Registered Facilities and Non-Dispatchable Loads, as specified in Standing Data;

(g) using the assumptions specified in clause 6.3A.4, determine and record an estimate of the Peak Capacity Adjusted Forced Outage Quantity and Peak Capacity Adjusted Planned Outage Quantity for each Scheduled Facility or Semi-Scheduled Facility, and each Separately Certified Component of a Scheduled Facility or Semi-Scheduled Facility, for each Dispatch Interval

and each Trading Interval in the STEM Submission Information Window; and

(h) using the assumptions specified in clause 6.3A.4, determine and record an estimate of the Peak Reserve Capacity Obligation Quantity and the Flexible Reserve Capacity Obligation Quantity for each Scheduled Facility or Semi-Scheduled Facility, and each Separately Certified Component of a Scheduled Facility or Semi-Scheduled Facility, for each Dispatch Interval in the STEM Submission Information Window.

6.3A.4. When determining Peak Capacity Adjusted Planned Outage Quantity, Peak Capacity Adjusted Forced Outage Quantity, Peak Reserve Capacity Obligation Quantity and Flexible Reserve Capacity Obligation Quantity estimates on a Scheduling Day under clauses 6.3A.3(g) and 6.3A.3(h), AEMO must assume that:

(a) the Peak Electric Storage Resource Obligation Intervals for each Electric Storage Resource for the Trading Days in the STEM Submission Information Window are the same as those determined by AEMO on the Scheduling Day using the Mid Peak Electric Storage Resource Obligation Intervals determined under clause 6.3.1;

(b) the Commissioning Test Plan details for each Facility for each Dispatch Interval in the STEM Submission Information Window are the same as those identified by AEMO on the Scheduling Day under clause 6.3A.3(a);

(c) the Planned Outage and Forced Outage details for each Separately Certified Component for each Dispatch Interval in the STEM Submission Information Window are the same as those identified by AEMO on the Scheduling Day under clause 6.3A.3(b);

(d) the maximum daily temperature at the site of each relevant Facility does not exceed 41 degrees Celsius on any Trading Day in the STEM Submission Information Window; and

(e) the Peak Reserve Capacity Obligation Quantity and Flexible Reserve Capacity Obligation Quantity of an Electric Storage Resource are not reduced under clauses 4.12.5(g) or 4.12.5(h) for any Dispatch Interval in the STEM Submission Information Window.

~~(e) the Reserve Capacity Obligation Quantity of an Electric Storage Resource is not reduced under clause 4.12.5(g) for any Dispatch Interval in the STEM Submission Information Window.~~

6.3A.5. By 8:30 AM on each Scheduling Day, AEMO must make available to each Market Participant the following parameters for information in forming its STEM Submissions:

(a) for each Trading Interval in the STEM Submission Information Window:

i. the Maximum Facility Supply Capability determined on the Scheduling Day under clause 6.3A.3(d) for each Scheduled Facility, Semi-Scheduled Facility and Non-Scheduled Facility registered to the Market Participant in the Trading Interval;

ii. the Maximum Supply Capability determined on the Scheduling Day under clause 6.3A.3(e) for the Market Participant; and

iii. the Maximum Consumption Capability determined on the Scheduling Day under clause 6.3A.3(f) for the Market Participant;

(b) for each Trading Interval in the STEM Submission Information Window, for each Separately Certified Component of a Scheduled Facility or Semi-Scheduled Facility for which the Market Participant holds Capacity Credits in the Trading Interval:

i. the Peak Capacity Adjusted Forced Outage Quantity estimate determined on the Scheduling Day under clause 6.3A.3(g); and

ii. the Peak Capacity Adjusted Planned Outage Quantity estimate determined on the Scheduling Day under clause 6.3A.3(g); and

(c) for each Dispatch Interval in the STEM Submission Information Window, for each Separately Certified Component of a Scheduled Facility or Semi-Scheduled Facility for which the Market Participant holds Capacity Credits in the Dispatch Interval:

i. the Peak Capacity Adjusted Forced Outage Quantity estimate determined on the Scheduling Day under clause 6.3A.3(g);

ii. the Peak Capacity Adjusted Planned Outage Quantity estimate determined on the Scheduling Day under clause 6.3A.3(g);

iii. the Peak Reserve Capacity Obligation Quantity estimate determined on the Scheduling Day under clause 6.3A.3(h); and

iv. the Flexible Reserve Capacity Obligation Quantity estimate determined on the Scheduling Day under clause 6.3A.3(h).

~~(c) for each Dispatch Interval in the STEM Submission Information Window, for each Separately Certified Component of a Scheduled Facility or Semi-Scheduled Facility for which the Market Participant holds Capacity Credits in the Dispatch Interval:~~

~~i. the Capacity Adjusted Forced Outage Quantity estimate determined on the Scheduling Day under clause 6.3A.3(g);~~

~~ii. the Capacity Adjusted Planned Outage Quantity estimate determined on the Scheduling Day under clause 6.3A.3(g); and~~

~~iii. the Reserve Capacity Obligation Quantity estimate determined on the Scheduling Day under clause 6.3A.3(h).~~

6.3B. STEM Submissions Timetable and Process

6.3B.1. A Market Participant may submit STEM Submission data for a Trading Day to AEMO between:

(a) 8:30 AM on the day that is seven days prior to the start of the Scheduling Day for the Trading Day; and

(b) the STEM Submission Cutoff for the Trading Day.

6.3B.1A. Where, at 8:30 AM on the Scheduling Day for a Trading Day:

(a) AEMO does not hold a STEM Submission applicable to the Trading Day for the Market Participant;

(b) AEMO holds a Standing STEM Submission applicable to the Trading Day for a Market Participant; and

(c) the Standing STEM Submission conforms to the requirements of section 6.6 at that time,

AEMO must, subject to clause 6.3B.1B, make the Standing STEM Submission the STEM Submission for the Trading Day for the Market Participant as at 8:30 AM on the Scheduling Day for the Trading Day.

6.3B.1B. If AEMO is required to use a Standing STEM Submission to make a STEM Submission for a Trading Day under clause 6.3B.1A, but the Standing STEM Submission does not comply with section 6.6, then AEMO must, using the process specified in clause 6.3B.2, adjust the Standing STEM Submission to make it a valid STEM Submission with respect to each Trading Interval in the Trading Day.

6.3B.1C. Between 8:30 AM and 9:00 AM each Scheduling Day, AEMO must use the process specified in clause 6.3B.2 to review and where necessary adjust each STEM Submission it holds for a Trading Interval in the STEM Submission Information Window.

6.3B.2. AEMO must use the following process to adjust a Standing STEM Submission to make a valid STEM Submission for a Trading Interval under clause 6.3B.1B and to review and adjust a STEM Submission for a Trading Interval under clause 6.3B.1C:

(a) If the cumulative MWh quantity over all Price-Quantity Pairs in the Portfolio Supply Curve is greater than the Maximum Supply Capability for the Market Participant for the Trading Interval which was determined on the current Scheduling Day under clause 6.3A.3(e), the Price-Quantity Pairs must be adjusted downward so that the cumulative MWh quantity over all the Price-Quantity Pairs equals the Maximum Supply Capability. This must be achieved by deleting successively or reducing the highest price Price-Quantity Pairs until the cumulative MWh quantity over all remaining Price-Quantity Pairs equals the Maximum Supply Capability.

(b) If the cumulative MWh quantity over all Price-Quantity Pairs in the Portfolio Demand Curve is greater than the Maximum Consumption Capability for the Market Participant for the Trading Interval which was determined on the current Scheduling Day under clause 6.3A.3(f), the Price-Quantity Pairs must be adjusted downward so that the cumulative MWh quantity over all the Price-Quantity Pairs equals the Maximum Consumption Capability. This must be achieved by deleting successively or reducing the highest price Price-Quantity Pairs until the cumulative MWh quantity over all remaining Price-Quantity Pairs equals the Maximum Consumption Capability.

(c) If the price in any Price-Quantity Pair in the Portfolio Supply Curve or Portfolio Demand Curve is greater than the Energy Offer Price Ceiling which will apply (or which AEMO expects will apply) in the Trading Interval, the price in the Price-Quantity Pair must be replaced by the Energy Offer Price Ceiling which will apply (or which AEMO expects will apply) in the Trading Interval.

(d) If the price in any Price-Quantity Pair in the Portfolio Supply Curve or Portfolio Demand Curve is less than the Energy Offer Price Floor which will apply (or which AEMO expects will apply) in the Trading Interval, the price in the Price-Quantity Pair must be replaced by the Energy Offer Price Floor which will apply (or which AEMO expects will apply) in the Trading Interval.

(e) [Blank]

(f) If multiple Price-Quantity Pairs in the Portfolio Supply Curve share the same price, they must be replaced with a single Price-Quantity Pair for that price with a MWh quantity equal to the sum of the MWh quantities in the Price-Quantity Pairs which are being replaced.

(g) If multiple Price-Quantity Pairs in the Portfolio Demand Curve share the same price, they must be replaced with a single Price-Quantity Pair for that price with a MWh quantity equal to the sum of the MWh quantities in the Price-Quantity Pairs which are being replaced.

To avoid doubt, the process steps specified in this clause 6.3B.2 must be performed in the order listed, and a reference to a Portfolio Supply Curve or Portfolio Demand Curve in those clauses is a reference to the Portfolio Supply Curve or Portfolio Demand Curve as adjusted by any earlier steps in the process.

6.3B.3. Where AEMO receives STEM Submission data from a Market Participant under clause 6.3B.1, AEMO must, as soon as practicable after receiving the STEM submission data:

(a) if the STEM Submission data complies with section 6.6, make the STEM Submission data the STEM Submission for that Trading Day; and

(b) notify the Market Participant which submitted the STEM Submission data under clause 6.3B.1, that:

i. the STEM Submission data has been made the STEM Submission for that Trading Day; or

ii. AEMO has rejected the STEM Submission data as it did not comply with section 6.6.

6.3B.4. AEMO must maintain and provide to each Market Participant full details of the Market Participant's STEM Submissions, as adjusted under clauses 6.3B.1B and 6.3B.1C, for each Trading Interval in the STEM Submission Results Window. AEMO must update this information whenever AEMO:

(a) makes a STEM Submission from a Standing STEM Submission under clause 6.3B.1A;

(b) accepts STEM Submission data under clause 6.3B.3(a);

(c) adjusts STEM Submission data under clause 6.3B.1C; or

(d) disregards cancelled STEM Submission data under clause 6.3B.6(a).

6.3B.5. A Market Participant may cancel any STEM Submission data held by AEMO for a Trading Interval in a Trading Day during the time interval specified for the Trading Day in clause 6.3B.1.

6.3B.6. Where any STEM Submission data is cancelled in accordance with clause 6.3B.5, AEMO must, as soon as practicable:

(a) disregard the cancelled STEM Submission data from the STEM Submission; and

(b) notify the Market Participant which cancelled the STEM Submission data under clause 6.3B.5, that the cancelled STEM Submission data has been disregarded from the STEM Submission,

for the Trading Interval of the Trading Day to which the cancelled Standing STEM Submission data relates.

6.3C. Standing STEM Submission Timetable and Process

6.3C.1. A Market Participant may submit Standing STEM Submission data to AEMO at any time.

6.3C.2. [Blank]

6.3C.3. AEMO must, as soon as practicable after receiving Standing STEM Submission data under clause 6.3C.1:

(a) accept the Standing STEM Submission data provided it complies with section 6.6 and revise the Standing STEM Submission to reflect the Standing STEM Submission data; and

(b) notify the Market Participant which submitted the Standing STEM Submission data under clause 6.3C.1 that:

i. AEMO accepts the Standing STEM Submission data and has revised the Standing STEM Submission to reflect the Standing STEM Submission data; or

ii. AEMO rejects the Standing STEM Submission data as it does not comply with section 6.6.

6.3C.4. Standing STEM Submission data accepted by AEMO under clause 6.3C.3 will apply from the next time that AEMO is required to use Standing STEM Submissions to make STEM Submissions under clause 6.3B.1A.

6.3C.5. [Blank]

6.3C.6. [Blank]

6.3C.6A. Standing STEM Submission data must be associated with a day of the week and when used as STEM Submission data will only apply to Trading Days commencing on that day of the week.

6.3C.6B. A Market Participant may cancel Standing STEM Submission data accepted by AEMO under clause 6.3C.3(a) for any Trading Interval of a day of the week at any time.

6.3C.6C. Where any Standing STEM Submission data is cancelled under clause 6.3C.6B, AEMO must, as soon as practicable:

(a) remove the cancelled Standing STEM Submission data from the Standing STEM Submission; and

(b) notify the Market Participant which cancelled the Standing STEM Submission data under clause 6.3C.6B, that the cancelled Standing STEM Submission data has been removed from the Standing STEM Submission,

for the Trading Interval of the day of the week to which the cancelled Standing STEM Submission data relates.

6.3C.7. [Blank]

6.3C.8. [Blank]

6.3C.9. If a Market Participant's ability to consume or supply energy in any Trading Interval of a Trading Day is less than the maximum level of its STEM supply or consumption as indicated by its current Standing STEM Submission then that Market Participant must either:

(a) submit to AEMO Standing STEM Submission data so as to revise its Standing STEM Submission to comply with this clause 6.3C.9; or

(b) for each Trading Interval for which the current Standing STEM Submission over-states the Market Participant's supply or consumption capabilities, submit STEM Submission data that complies with section 6.6 to AEMO.

6.4. The STEM Auction Timetable and Process

6.4.1. AEMO must undertake the process described in section 6.9 and determine the STEM Auction results for a Trading Day after the STEM Submission Cutoff and before the STEM Results Deadline.

6.4.2. AEMO must determine the total quantity of energy scheduled to be supplied under Bilateral Contracts and in the STEM Auction, by each Market Participant, for each Trading Interval of a Trading Day by the STEM Results Deadline.

6.4.3. AEMO must make available to each Market Participant the following information in relation to a Trading Day by the STEM Results Deadline:

(a) the Trading Intervals, if any, in which the STEM Auction was suspended;

(b) the STEM Clearing Price in all Trading Intervals for which the STEM Auction was not suspended;

(c) the quantities scheduled in respect of that Market Participant in the STEM Auction for each Trading Interval; and

(d) the Net Contract Position of the Market Participant in each Trading Interval, as determined in accordance with clause 6.9.13.

6.4.4. [Blank]

6.4.5. [Blank]

6.4.6. In the event of a failure of AEMO's software systems or supporting infrastructure, or any delay in AEMO publishing a Pre-Dispatch Schedule which includes all Trading Intervals in the relevant Trading Day, or AEMO preparing information under clauses 6.2.3, 6.3.1, 6.3A.1, 6.3A.2, 6.3A.3, 6.3A.5 or 6.3B.4, which prevents AEMO from completing the relevant processes, AEMO may extend one or more of the timelines prescribed in sections 6.2, 6.3, 6.3A, 6.3B and this section 6.4, subject to any such extension:

(a) not resulting in more than a two-hour delay to any of the timelines prescribed in sections 6.2, 6.3, 6.3A, 6.3B and this section 6.4;

(b) maintaining a window of at least 120 minutes between AEMO making available the data referred to in clause 6.3A.2 and the Bilateral Submission Cutoff;

(c) [Blank]

(d) maintaining a window of at least 20 minutes between AEMO making available the data referred to in clause 6.3A.5 and the Bilateral Submission Cutoff; and

(e) maintaining a window of at least 110 minutes between each of the following events and the STEM Submission Cutoff:

i. AEMO making available to Market Participants the first Pre-Dispatch Schedule that includes all Trading Intervals in the relevant Trading Day;

ii. AEMO making available to Market Participants the data referred to in clause 6.2.3 as at the Bilateral Submission Cutoff; and

iii. AEMO making available to Market Participants the data referred to in clause 6.3A.5.

6.4.6A. If AEMO becomes aware of an error in any of the information contained in a Pre-Dispatch Schedule or made available to Market Participants under clauses 6.2.3, 6.3A.1, 6.3A.2, 6.3A.5 or 6.3B.4 at any time before the publication of the relevant STEM Auction results under clause 6.4.3 or a suspension of the STEM under clause 6.10.1, AEMO may:

(a) publish or release (as applicable) corrected or updated versions of the information it has published or released under clauses 6.2.3, 6.3A.1, 6.3A.2, 6.3A.5 or 6.3B.4; and

(b) extend any of the relevant timelines prescribed in sections 6.2, 6.3, 6.3A, 6.3B and this section 6.4 to address the error, subject to any such extension:

i. not resulting in more than a two-hour delay to any of the timelines prescribed in sections 6.2, 6.3, 6.3A, 6.3B and this section 6.4;

ii. maintaining a window of at least 120 minutes between AEMO making available to Market Participants the data referred to in clause 6.3A.2 and the Bilateral Submission Cutoff;

iii. [Blank]

iv. maintaining a window of at least 20 minutes between AEMO making available to Market Participants the data referred to in clause 6.3A.5 and the Bilateral Submission Cutoff; and

v. maintaining a window of at least 110 minutes between each of the following events and the STEM Submission Cutoff:

1. AEMO making available to Market Participants the first error-free Pre-Dispatch Schedule that includes all Trading Intervals in the relevant Trading Day;

2. AEMO making available to Market Participants the data referred to in clause 6.2.3 as at the Bilateral Submission Cutoff; and

3. AEMO making available to Market Participants the data referred to in clause 6.3A.5.

6.4.6B. If AEMO extends one or more of the timelines in sections 6.2, 6.3, 6.3A, 6.3B and this section 6.4 under clauses 6.4.6 or 6.4.6A or publishes or releases corrected information under clause 6.4.6A(a), AEMO must notify Rule Participants of any extension and any amended timelines and any corrected information as soon as possible.

6.4.6C. If AEMO considers that extending one or more of the timelines in sections 6.2, 6.3, 6.3A, 6.3B and this section 6.4 under clauses 6.4.6 or 6.4.6A would not provide enough time to allow AEMO to undertake the process described in section 6.9 and publish a valid STEM Auction result under clauses 6.4.3(b), 6.4.3(c) and 6.4.3(d) by 1:30 PM on the relevant Scheduling Day, AEMO must suspend the STEM Auction under clause 6.10.1.

6.4.7. Once published under clause 6.4.3, STEM Clearing Prices cannot be altered, either through disagreement under clause 9.16.8, or through dispute under section 9.17.

6.5. [Blank]

STEM Submission and Bilateral Submission Formats

6.6. Format of STEM Submission and Standing STEM Submission Data

6.6.1. A Market Participant submitting STEM Submission data or a Standing STEM Submission data must include the following information in the applicable submission:

(a) the identity of the Market Participant making the submission;

(b) for STEM Submission data, for each Trading Interval included in the submission:

i. a Fuel Declaration;

ii. a Portfolio Supply Curve; and

iii. a Portfolio Demand Curve;

(c) for Standing STEM Submission data, the day of the week to which the submission relates, where data provided for a day of the week relates to the Trading Day commencing on that day, and for each Trading Interval included in the submission:

i. a Fuel Declaration;

ii. a Portfolio Supply Curve; and

iii. a Portfolio Demand Curve.

6.6.2. [Blank]

6.6.2A. For:

(a) a Fuel Declaration the Market Participant must declare which of its Liquid Fuel capable Registered Facilities are assumed to be operating on Liquid Fuel in forming the Portfolio Supply Curve;

(b) [Blank]

(c) [Blank]

(d) a Portfolio Supply Curve:

i. one or more Price-Quantity Pairs may be specified; and

ii. the cumulative MWh quantity over all Price-Quantity Pairs must not exceed the Maximum Supply Capability determined under clause 6.3A.3(e); and

(e) a Portfolio Demand Curve:

i. one or more Price-Quantity Pairs may be specified; and

ii. the cumulative quantity included in the Price-Quantity Pairs must not exceed the Maximum Consumption Capability determined under clause 6.3A.3(f).

6.6.3. [Blank]

6.6.4. The maximum number of Price-Quantity Pairs which a Market Participant may include in a Portfolio Supply Curve is 30.

6.6.5. For Price-Quantity Pairs in Portfolio Supply Curves:

(a) each Price-Quantity Pair must comprise one price and one quantity;

(b) each Price-Quantity Pair price must be:

i. in units of $/MWh expressed to a precision of $0.01/MWh;

ii. [Blank]

iii. greater than or equal to the Energy Offer Price Floor;

iv. less than or equal to the Energy Offer Price Ceiling; and

v. set such that no two Price-Quantity Pairs in a Portfolio Supply Curve have the same price;

(c) each Price-Quantity Pair quantity must be

i. in units of MWh expressed to a precision of 0.001 MWh;

ii. Loss Factor adjusted; and

(d) a Price-Quantity Pair means that the Market Participant is prepared to sell a quantity of energy into the STEM for that Price-Quantity Pair equal to:

i. 0 MWh if the STEM Clearing Price is less than the Price-Quantity Pair price;

ii. the Price-Quantity Pair quantity if the STEM Clearing Price is greater than the Price-Quantity Pair price; and

iii. an amount between 0 MWh and the Price-Quantity Pair quantity if the STEM Clearing Price equals the Price-Quantity Pair price.

6.6.6. [Blank]

6.6.7. The maximum number of Price-Quantity Pairs to be included in a Portfolio Demand Curve is 30.

6.6.8. For Price-Quantity Pairs in Portfolio Demand Curves:

(a) each Price-Quantity Pair price must be:

i. in units of $/MWh expressed to a precision of $0.01/MWh;

ii. less than or equal to the Energy Offer Price Ceiling;

iii. greater than or equal to the Energy Offer Price Floor; and

iv. set such that no two Price-Quantity Pairs in a Portfolio Demand Curve have the same price;

(b) each Price-Quantity Pair quantity must be:

i. in units of MWh expressed to a precision of 0.001 MWh; and

ii. Loss Factor adjusted; and

(c) a Price-Quantity Pair means that the Market Participant is prepared to buy a quantity of energy from the STEM for that Price-Quantity Pair equal to:

i. 0 MWh if the STEM Clearing Price is greater than the Price-Quantity Pair price;

ii. the Price-Quantity Pair quantity if the STEM Clearing Price is less than the Price-Quantity Pair price; and

iii. an amount between 0 MWh and the Price-Quantity Pair quantity if the STEM Clearing Price equals the Price-Quantity Pair price.

6.7. Format of Bilateral Submission Data

6.7.1. A Market Participant submitting Bilateral Submission data or Standing Bilateral Submission data must include in the submission:

(a) the identity of the Market Participant making the submission;

(b) in the case of:

i. Bilateral Submission data, the Trading Day to which the submission relates; and

ii. Standing Bilateral Submission data, the day of the week to which the submission relates, where data provided for a day of the week relates to the Trading Day commencing on that day; and

(c) for each Trading Interval included in the submission:

i. the net quantity of energy to be sold by the submitting Market Participant;

ii. the identity of each Market Participant purchasing the energy covered by the Bilateral Submission;

iii. the net quantity of energy sold to each Market Participant identified in clause 6.7.1(c)(ii); and

iv. the sum of the quantities in clauses 6.7.1(c)(i) and 6.7.1(c)(iii) must be zero.

6.7.2. All quantities specified in a Bilateral Submission or a Standing Bilateral Submission:

(a) must be in units of MWh;

(b) must equal or exceed 0 MWh for net supply (that is, sold) by the relevant Market Participant;

(c) must be less than 0 MWh for net consumption (that is, purchased) from the relevant Market Participant;

(d) must be expressed to a precision of 0.001 MWh; and

(e) must be Loss Factor adjusted.

6.7.3. A Market Participant must not specify quantities in a Bilateral Submission or a Standing Bilateral Submission which exceed the quantity of energy that the Market Participant is contracted to supply to the relevant Market Participant.

6.7.4. A Market Participant must not significantly over-state its consumption as indicated by its Net Contract Position with a regularity that cannot be explained by a reasonable allowance for forecast uncertainty or the impact of Loss Factors.

6.8. [Blank]

The STEM Auction Process

6.9. The STEM Auction

6.9.1. AEMO must undertake the process described in this clause 6.9 for each Trading Interval in a Trading Day.

6.9.2. The Net Bilateral Position for Market Participant p in Trading Interval t is:

(a) the sum of the quantities of energy referred to in clauses 6.7.1(c)(i) and 6.7.1(c)(iii) for the Market Participant in all Bilateral Submissions for Trading Interval t; or

(b) zero if no Bilateral Submissions for Trading Interval t refer to the Market Participant.

6.9.3. Subject to clause 6.9.4, AEMO must determine STEM Offers and STEM Bids for each Market Participant for each Trading Interval in accordance with Appendix 6 using the valid STEM Submissions and Bilateral Submissions relating to that Trading Interval.

6.9.4. Where AEMO does not hold a STEM Submission for a Market Participant for a Trading Interval, AEMO must not determine STEM Offers or STEM Bids for that Market Participant in that Trading Interval.

6.9.5. AEMO must determine an aggregate STEM bid curve for each Trading Interval from the STEM Bids where this aggregate STEM bid curve:

(a) describes the quantity that Market Participants in aggregate wish to purchase from AEMO through the STEM at every price between, and including, the Energy Offer Price Floor and the Energy Offer Price Ceiling; and

(b) passes through the point indicating zero consumption at the Energy Offer Price Ceiling.

6.9.6. AEMO must determine an aggregate STEM offer curve for each Trading Interval from the STEM Offers where this aggregate STEM offer curve:

(a) describes the quantity that Market Participants in aggregate wish to sell to AEMO through the STEM at every price between, and including, the Energy Offer Price Floor and the Energy Offer Price Ceiling; and

(b) passes through the point indicating zero supply at the Energy Offer Price Floor.

6.9.7. AEMO will determine the STEM Clearing Price for a Trading Interval as the lowest price at which the STEM offer curve for a Trading Interval intersects the STEM bid curve for the Trading Interval.

6.9.8. AEMO will determine the STEM Clearing Quantity for a Trading Interval as the greatest quantity at which the STEM offer curve for the Trading Interval intersects the STEM bid curve for the Trading Interval.

6.9.9. All STEM Bid Price-Quantity Pairs for the Trading Interval with a price greater than the STEM Clearing Price for the Trading Interval must be scheduled by AEMO.

6.9.10. A STEM Bid Price-Quantity Pair with a price equal to the STEM Clearing Price for the Trading Interval must be scheduled by AEMO up to the Price-Quantity Pair quantity multiplied by:

(a) the STEM Clearing Quantity less the total quantity for STEM Bid Price-Quantity Pairs scheduled by AEMO in accordance with clause 6.9.9; divided by

(b) the total quantity for all STEM Bid Price-Quantity Pairs with a price equal to the STEM Clearing Price.

6.9.11. All STEM Offer Price-Quantity Pairs for a Trading Interval with a price less than the STEM Clearing Price for the Trading Interval must be scheduled by AEMO.

6.9.12. A STEM Offer Price-Quantity Pair for a Trading Interval with a price equal to the STEM Clearing Price for the Trading Interval must be scheduled by AEMO up to the Price-Quantity Pair quantity multiplied by:

(a) the STEM Clearing Quantity less the total quantity for STEM Offer Price-Quantity Pairs scheduled by AEMO in accordance with clause 6.9.11; divided by

(b) the total quantity for all STEM Offer Price-Quantity Pairs with a price equal to the STEM Clearing Price.

6.9.13. The Net Contract Position for Market Participant p in Trading Interval t is:

(a) the Net Bilateral Position for Market Participant p in Trading Interval t; minus,

(b) the amount of energy purchased by the Market Participant from AEMO through the STEM at the STEM Clearing Price, which is the total quantity associated with Price-Quantity Pairs for Market Participant p scheduled by AEMO under clause 6.9.9 or 6.9.10 for Trading Interval t where this energy purchased is represented as a positive value; plus

(c) the amount of energy sold by the Market Participant to AEMO through the STEM at the STEM Clearing Price, which is the total quantity associated with Price-Quantity Pairs for Market Participant p scheduled by AEMO

under clause 6.9.11 or 6.9.12 for Trading Interval t where this energy sold is represented as a positive value.

6.10. Suspension of the STEM

6.10.1. AEMO must suspend the STEM Auction for a Trading Interval if AEMO considers that it will not be in a position to undertake the process described in section 6.9 and publish a valid STEM Auction result under clauses 6.4.3(b), 6.4.3(c) and 6.4.3(d) for that Trading Interval by the STEM Results Deadline.

6.10.2. In the event that the STEM Auction for a Trading Interval is suspended under clause 6.10.1, no Market Participant can purchase energy from or sell energy to AEMO through the STEM for that Trading Interval and no STEM Clearing Price is to be declared for that Trading Interval.

6.10.3. No compensation is due or payable to any Market Participant in the event that the STEM Auction for a Trading Interval is suspended under clause 6.10.1.

6.11. [Blank]

6.12. [Blank]

6.13. [Blank]

6.14. [Blank]

6.15. [Blank]

6.16. [Blank]

6.17. [Blank]

6.18. [Blank]

6.19. [Blank]

6.20. [Blank]

Settlement Data

6.21. Settlement Data

6.21.1. AEMO must provide the following information to the settlement system for each STEM Auction:

(a) a flag for each Trading Interval indicating if the STEM Auction was suspended for that Trading Interval;

(b) the STEM Clearing Price in each Trading Interval in units of $/MWh; and

(c) for each Market Participant participating in the STEM Auction, the STEM quantity scheduled in each Trading Interval, in units of MWh, where this amount must be positive for a sale of energy to AEMO and negative for a purchase of energy from AEMO.

6.21.2. [Blank]

6.22. STEM Data

6.22.1. AEMO must publish on the WEM Website the following STEM summary information:

(a) for each Trading Interval in each completed Trading Day in the previous 12 calendar months:

i. the total STEM Offer quantity;

ii. the total STEM Bid quantity;

iii. whether the STEM was suspended in relation to the relevant Trading Interval;

iv. where the STEM was not suspended, the STEM quantity purchased by AEMO; and

v. where the STEM was not suspended, the STEM Clearing Price;

(b) for each Trading Interval in each Trading Day during the 12 calendar months, before the end of the seventh day from the start of the Trading Day:

i. the STEM Offers by Market Participant;

ii. the STEM Bids by Market Participant;

iii. the quantity bought or sold in the STEM by Market Participant; and

iv. the Fuel Declaration made by Market Participant; and

(c) the STEM Price for each Trading Interval of the current Trading Month for which STEM Auction results have been released to Market Participants.

7 Real-Time Market Operation and Dispatch

7.1. Real-Time Market

7.1.1. AEMO must establish and, subject to clause 7.11D.5, operate the Real-Time Market.

7.1.2. AEMO must:

(a) document the Real-Time Market Timetable in a WEM Procedure; and

(b) operate the Real-Time Market according to the Real-Time Market Timetable.

7.1.3. The Real-Time Market Timetable must include:

(a) timelines for:

i. the submission of Real-Time Market Submissions and DSP Profile Submissions, including any subsequent or replacement submissions;

ii. the calculation and provision to Market Participants of the following information in a Dispatch Interval for the next Dispatch Interval:

1. Market Clearing Prices;

2. Dispatch Targets;

3. Dispatch Caps; and

4. Essential System Service Enablement Quantities;

iii. the calculation and provision to Market Participants of a Dispatch Schedule at least once each Dispatch Interval;

iv. the calculation and provision to Market Participants of a Pre-Dispatch Schedule at least once each Pre-Dispatch Interval;

v. the calculation and provision to Market Participants of a DSP Pre-Dispatch Schedule at least once each Pre-Dispatch Interval;

vi. the calculation and provision to Market Participants of a Week-Ahead Schedule at least once each Trading Day;

vii. the calculation and provision to Market Participants of a DSP Week-Ahead Schedule at least once each Trading Day; and

viii. the publication of the information referred to in clauses 7.1.3(a)(ii) to 7.1.3(a)(vii) on the WEM Website; and

(b) any other information that AEMO considers relevant to the operation of the Real-Time Market Timetable.

7.2. Central Dispatch Process

7.2.1. AEMO must establish and operate the Central Dispatch Process to dispatch Registered Facilities in order to balance electricity supply and demand, using its reasonable endeavours to maintain Power System Security and Power System Reliability in accordance with Chapter 3.

7.2.2. Subject to clause 7.11D.5, AEMO must use its reasonable endeavours to maximise the value of Real-Time Market trading:

(a) within the parameters for maintaining Power System Security and Power System Reliability in accordance with Chapter 3; and

(b) on the basis of Real-Time Market Submissions.

7.2.2A. If AEMO has suspended the Real-Time Market under clause 7.11D.1, AEMO must use its reasonable endeavours to maximise what it considers would likely be the value of Real-Time Market trading if the Real-Time Market were not suspended:

(a) within the parameters for maintaining Power System Security and Power System Reliability in accordance with Chapter 3; and

(b) where they are available, and to the extent that is practicable, taking into account Real-Time Market Submissions.

7.2.3. Where AEMO reasonably determines that an urgent change to the Dispatch Algorithm is required to maintain Power System Security and Power System Reliability in accordance with Chapter 3, AEMO may implement the change. Where AEMO makes a change to the Dispatch Algorithm in accordance with this clause 7.2.3, AEMO must:

(a) publish the change on the WEM Website, and the reasons the change was required in order for AEMO to maintain Power System Security and Power System Reliability in accordance with Chapter 3; and

(b) if the Power System Security and Power System Reliability issue that is being addressed by the change is not temporary, AEMO must as soon as practicable, submit a Procedure Change Proposal for revisions to the WEM Procedure referred to in clause 7.2.5.

7.2.4. Subject to clause 7.11D.5, the Dispatch Algorithm must seek to maximise the value of Real-Time Market trading by maximising:

(a) the value of dispatched Load based on Real-Time Market Bids; less

(b) the cost of dispatched energy and Frequency Co-optimised Essential System Services based on Real-Time Market Offers,

subject to:

(c) respecting the quantities, Ramp Rate Limits and other limits specified in Real-Time Market Submissions;

(cA) the Unconstrained Injection Forecasts and Unconstrained Withdrawal Forecasts specified in Real-Time Market Submissions, or any alternative forecast quantities determined by AEMO under clause 7.2.4A;

(d) dispatching sufficient energy to meet the Forecast Unscheduled Operational Demand, Unconstrained Withdrawal Forecast quantities for Non Scheduled Facilities and scheduled Withdrawal quantities for Scheduled Facilities and Semi-Scheduled Facilities;

(e) respecting Network Constraints, as reflected in the Constraint Equations developed by AEMO in accordance with section 2.27A;

(f) meeting Power System Security and Power System Reliability requirements as reflected in Constraint Equations developed by AEMO having regard to the WEM Procedures referred to in clauses 3.2.7 and 3.3.2, including any limits on maximum ramp rates;

(g) Transmission Loss Factors and Distribution Loss Factors;

(h) current levels of Injection and Withdrawal;

(i) meeting the Essential System Service Standards as reflected in the Essential System Service requirements determined by AEMO in accordance with the WEM Procedure referred to in clause 3.11.7 and in Constraint Equations developed by AEMO having regard to that WEM Procedure;

(iA) implementing the terms of NCESS Contracts as reflected in Constraint Equations formulated by AEMO under clause 5.7.3;

(j) energy Injection and Withdrawal capabilities as they vary by Charge Level;

(k) respecting Oscillation Control Constraint Equations;

(l) accounting for all relevant Contingency Lower Offsets, Contingency Raise Offsets and Facility Performance Factors in determining scheduled and dispatched quantities of Contingency Reserve;

(m) accounting for all Facilities that are Inflexible;

(n) taking into account the Largest Credible Supply Contingency relative to the scheduled or dispatched quantity of Contingency Reserve Raise;

(nA) taking into account the Largest Credible Load Contingency relative to the scheduled or dispatched quantity of Contingency Reserve Lower; and

(o) arrangements for dispatch of tied Real-Time Market Bids and tied Real-Time Market Offers.

7.2.4A. AEMO may determine and use as an input to the Dispatch Algorithm alternative forecast quantities to the Unconstrained Injection Forecast and Unconstrained Withdrawal Forecast provided in a Real-Time Market Submission if AEMO

reasonably considers that the alternative forecast quantities are likely to be more accurate.

7.2.5. AEMO must develop and document in a WEM Procedure:

(a) the Dispatch Algorithm used by AEMO for the purpose of the Central Dispatch Process and setting Market Clearing Prices and the mathematical formulation of the Dispatch Algorithm, including:

i. the conversion of Facility Speed Factors into Facility Performance Factors;

ii. the calculation of Minimum RoCoF Control Requirement and Additional RoCoF Control Requirement;

iii. the calculation of the required quantity of Contingency Reserve Raise; and

iv. the maximum number of Price-Quantity Pairs that may be included in a Real-Time Market Submission for a Dispatch Interval for each Market Service,

in a form that:

v. sets out the form, scope and construction of each type of Constraint Equation;

vi. describes and quantifies the mechanism by which different Constraints are taken into account and prioritised, including in accordance with clauses 3.12.2 and 7.6.25; and

vii. AEMO reasonably considers will enable a third party, such as the Market Auditor or the Economic Regulation Authority, to replicate the results of the Dispatch Algorithm by using the same inputs;

(b) the methodology it uses to determine:

i. Contingency Raise Offsets;

ii. Contingency Lower Offsets;

iii. Facility Performance Factors;

iv. the Minimum RoCoF Control Requirement;

v. the Additional RoCoF Control Requirement;

vi. the RoCoF Control Requirement; and

vii. the RoCoF Upper Limit;

(c) the processes to be followed by AEMO and Market Participants in accounting for Inflexible Facilities; and

(d) any methodology for replacement of erroneous input data or substitution for missing input data.

7.2.6. AEMO may relax the Constraints referred to in clause 7.2.4 in order to resolve infeasible dispatch solutions provided that any relaxation of a Constraint:

(a) achieves a feasible dispatch outcome;

(b) meets AEMO's obligations to maintain Power System Security and Power System Reliability in accordance with the ESM Rules;

(c) would not endanger the safety of any person, damage equipment, or breach any applicable law;

(d) meets the pricing principles listed in clause 7.11A.1; and

(e) meets AEMO's obligations to maximise the value of Real-Time Market trading under clause 7.2.4.

7.2.7. AEMO must:

(a) as soon as practicable after the start of the Dispatch Interval, publish on the WEM Website details of any Constraints relaxed under clause 7.2.6 for that Dispatch Interval; and

(b) as soon as practicable after the end of each quarter, publish on the WEM Website a report summarising the total number, frequency and type of Constraints that were relaxed under clause 7.2.6 during that quarter.

7.2.8. AEMO must document in a WEM Procedure the processes to be followed by AEMO for the relaxation of Constraints under clause 7.2.6.

7.3. Forecast Unscheduled Operational Demand

7.3.1. AEMO must prepare a Forecast Unscheduled Operational Demand for:

(a) each Pre-Dispatch Interval within each Week-Ahead Schedule Horizon; and

(b) each Dispatch Interval within each Dispatch Schedule Horizon.

7.3.2. The Forecast Unscheduled Operational Demand must represent AEMO's best estimate of the total demand, in MW, to be served in the Pre-Dispatch Interval or Dispatch Interval, excluding:

(a) any Withdrawal by Non-Scheduled Facilities; and

(b) any Withdrawal quantities scheduled by the Dispatch Algorithm for Scheduled Facilities or Semi-Scheduled Facilities.

7.3.3. For each Trading Day in each Week-Ahead Schedule Horizon, AEMO must identify the Trading Interval in which the highest Four-Hour Demand Increase is expected to occur, and the size of that Four-Hour Demand Increase.

~~7.3.3. [Blank]~~

7.3.4. AEMO must document in a WEM Procedure the method and processes it follows for determining and publishing the Forecast Unscheduled Operational Demand and the forecast highest Four-Hour Demand Increase under this section 7.3.

~~7.3.4. AEMO must document in a WEM Procedure the methodology and processes it follows for determining and publishing the Forecast Unscheduled Operational Demand under this section 7.3.~~

7.4. Real-Time Market Submissions

Real-Time Market Submissions – Obligations and meaning

7.4.1. A Market Participant must ensure that it has made a Real-Time Market Submission or Standing Real-Time Market Submission in accordance with this section 7.4 for each Dispatch Interval in the Week-Ahead Schedule Horizon:

(a) for energy, for each of its Scheduled Facilities, Semi-Scheduled Facilities and Non-Scheduled Facilities; and

(b) for each Frequency Co-optimised Essential System Service, for each of its Registered Facilities that is accredited to provide that Frequency Co-optimised Essential System Service.

7.4.1A. If AEMO has not accepted a Real-Time Market Submission for a Registered Facility, Market Service and Dispatch Interval under clause 7.4.49(a)(i), but has accepted an applicable Standing Real-Time Market Submission, then the Standing Real-Time Market Submission is deemed to be the Real-Time Market Submission for the Registered Facility, Market Service and Dispatch Interval.

7.4.1B. A Real-Time Market Submission for a Registered Facility, Market Service and Dispatch Interval that AEMO accepts under clause 7.4.49(a)(i) replaces any previously accepted Real-Time Market Submission for, and has effect in relation to, the Registered Facility, Market Service and Dispatch Interval.

7.4.1C. If:

(a) AEMO has not yet accepted a Real-Time Market Submission for a Registered Facility, Market Service and Dispatch Interval under clause 7.4.49(a)(i); and

(b) AEMO accepts a Standing Real-Time Market Submission for the Registered Facility and Market Service that is applicable to the Dispatch Interval,

then the Standing Real-Time Market Submission replaces any previously accepted Standing Real-Time Market Submission as the deemed Real-Time Market Submission for the Registered Facility, Market Service and Dispatch Interval.

7.4.2. Subject to clause 7.4.37, a Market Participant must make reasonable endeavours to ensure that its Real-Time Market Submission for each of its Scheduled Facilities, Semi-Scheduled Facilities and Interruptible Loads for each Dispatch Interval accurately reflects:

(a) for Dispatch Intervals in the Week-Ahead Schedule Horizon:

i. the Market Participant's reasonable expectation of the capability of its Registered Facility to be dispatched in the Real-Time Market;

ii. any applicable tests required under these ESM Rules, including tests for Reserve Capacity under section 4.25;

iii. any Outage Plans applicable to the Dispatch Interval that have not been rejected, withdrawn or subjected to an Outage Recall Direction that affects the Dispatch Interval; and

iv. any applicable Forced Outages applying to the Dispatch Interval;

(b) for Dispatch Intervals in the Pre-Dispatch Schedule Horizon, all information reasonably available to the Market Participant, including:

i. the Market Participant's intentions for commitment, control and decommitment;

ii. the Market Participant's intentions for providing Frequency Co-optimised Essential System Services; and

iii. in the case of a Semi-Scheduled Facility, any changes to the Market Participant's Unconstrained Injection Forecast or Unconstrained Withdrawal Forecast that exceed the Tolerance Range or Facility Tolerance Range applicable to the Semi-Scheduled Facility; and

(c) the prices at which the Market Participant intends the Registered Facility will participate in the Real-Time Market for:

i. Injections;

ii. Withdrawals; and

iii. providing a Frequency Co-optimised Essential System Service for which the Registered Facility is accredited,

as applicable.

7.4.2A. In meeting the requirements of clause 7.4.2, a Market Participant must make reasonable endeavours to take into account information available in Market Schedules made available to the Market Participant by AEMO, including estimates of cleared energy and Essential System Service Enablement Quantities.

7.4.2B. Subject to clause 7.4.37A, a Market Participant must make Real-Time Market Submissions for each of its Non-Scheduled Facilities that reflect, for each Dispatch Interval in the Week-Ahead Schedule Horizon:

(a) the Market Participant's reasonable expectation of the Injection and Withdrawal capability of the Non-Scheduled Facility, allowing for any known tests or Outages of the Non-Scheduled Facility;

(b) the Market Participant's Unconstrained Injection Forecast for the Non-Scheduled Facility; and

(c) the Market Participant's Unconstrained Withdrawal Forecast for the Non-Scheduled Facility.

7.4.2C. Subject to clause 7.4.2D, if:

(a) a Market Participant offers capacity as Available Capacity in a Real-Time Market Submission for energy;

(b) the Reference Scenario for the Dispatch Interval in the last Pre-Dispatch Schedule or Dispatch Schedule provided to the Market Participant before the Start Decision Cutoff for the quantity of the Available Capacity predicts a real-time shortfall in energy, Contingency Reserve Raise or Regulation Raise; and

(c) the shortfall identified under clause 7.4.2C(b) relates to a lack of energy capacity being offered as In-Service Capacity in the Dispatch Interval,

then the Market Participant must, as soon as practicable, update the Real-Time Market Submission for the Dispatch Interval to convert the Available Capacity to In-Service Capacity.

7.4.2D. Clause 7.4.2C does not apply to capacity offered as Available Capacity that:

(a) is not subject to Reserve Capacity Obligations;

(b) would not assist in alleviating the predicted shortfall if it was converted to In-Service Capacity;

(c) is held by a Market Participant in excess of the quantity required to resolve the predicted shortfall; or

(d) has a Start Decision Cutoff that is more than four hours before the start of the Dispatch Interval.

7.4.3. A Real-Time Market Submission is deemed to constitute a declaration by an Authorised Officer of the Market Participant.

7.4.4. Where a Market Participant holds a SESSM Award for a Registered Facility, without limiting any other obligation or requirement under this section 7.4, the Market Participant must make Real-Time Market Submissions for the Registered Facility in accordance with the SESSM Award.

7.4.5. For the purpose of a Real-Time Market Submission under clause 7.4.4, a Market Participant must:

(a) for all Dispatch Intervals within the SESSM Service Timing and the Week-Ahead Schedule Horizon:

i. offer a quantity of the relevant Frequency Co-optimised Essential System Service greater than or equal to the lower of:

1. the sum of the relevant Base ESS Quantity and SESSM Availability Quantity; and

2. the lowest Remaining Available Capacity for that Frequency Co-optimised Essential System Service under any Outage applying to the Registered Facility in the Dispatch Interval, or, if there are no applicable Outages, the relevant maximum accredited quantity of that Frequency Co-optimised Essential System Service for the Registered Facility,

in Price-Quantity Pairs; and

ii. specify an offer price in Price-Quantity Pairs relating to the SESSM Availability Quantity not exceeding the SESSM Offer Cap for the SESSM Award;

(b) where the Available Capacity Scenario for a Pre-Dispatch Interval projects a shortfall in an awarded Frequency Co-optimised Essential System Service, ensure that the Real-Time Market Submissions for the Registered Facility and Frequency Co-optimised Essential System Service for that Pre-Dispatch Interval are offering a quantity of the relevant Frequency Co-optimised Essential System Service greater than or equal to the lowest Remaining Available Capacity for that Frequency Co-optimised Essential System Service under any Outage applying to the Registered Facility in the Pre-Dispatch Interval, or, if there are no applicable Outages, the relevant maximum accredited quantity of the Frequency Co-optimised Essential System Service for the Registered Facility; and

(c) where the Available Capacity Scenario for a Pre-Dispatch Interval or Dispatch Interval projects that the Registered Facility will be enabled to provide an awarded Frequency Co-optimised Essential System Service, ensure that the Real-Time Market Submissions for the Registered Facility for that Pre-Dispatch Interval or Dispatch Interval:

i. present the relevant Essential System Service Enablement Quantity as In-Service Capacity; and

ii. offer sufficient capacity as In-Service Capacity for energy to allow the Registered Facility to be dispatched for energy between any relevant Enablement Limits.

7.4.6. Subject to clause 7.4.7, a Market Participant must, in respect of each Facility accredited for RoCoF Control Service, offer the largest quantity of RoCoF Control Service in each Dispatch Interval that is capable of being provided by the Facility in each Real-Time Market Submission.

7.4.7. Clause 7.4.6 does not require a Market Participant to offer a Facility in a Real-Time Market Submission in a manner that is inconsistent with the Frequency Co-optimised Essential System Service Accreditation Parameters of the Facility.

7.4.8. A Market Participant must ensure that each Real-Time Market Submission for energy for its Non-Scheduled Facility includes:

(a) if the Market Participant intends the Non-Scheduled Facility to be Injecting at the end of the Dispatch Interval, a single Price-Quantity Pair with:

i. a quantity equal to the intended maximum Injection MW level for the Dispatch Interval; and

ii. a price equal to the Energy Offer Price Floor when converted into a Loss Factor Adjusted Price; and

(b) otherwise, a single Price-Quantity Pair with:

i. a quantity equal to the intended maximum Withdrawal MW level for the Dispatch Interval; and

ii. a price equal to the Energy Offer Price Ceiling when converted into a Loss Factor Adjusted Price.

7.4.9. [Blank]

7.4.10. A Market Participant must ensure that a Real-Time Market Submission for an Interruptible Load for a Dispatch Interval:

(a) is for Contingency Reserve Raise only; and

(b) includes zero MW in respect of any Associated Load of the Interruptible Load that is also an Associated Load of a Demand Side Programme that has been issued a Dispatch Instruction with a non-zero MW quantity for the same Dispatch Interval.

7.4.11. Where a Registered Facility has been accredited in accordance with section 2.34A to provide Contingency Reserve Raise subject to a Maximum Contingency Reserve Block Size, the quantities in each Price-Quantity Pair in the Real-Time Market Submissions for Contingency Reserve Raise for the Registered Facility must not exceed the applicable Maximum Contingency Reserve Block Size.

7.4.12. A Market Participant must not specify a Start Decision Cutoff for a quantity of Available Capacity in a Real-Time Market Submission that exceeds the sum of:

(a) 10 minutes; and

(b) the greater of:

i. the sum of:

1. the number of minutes between Gate Closure for the Dispatch Interval and the start of the Dispatch Interval; and

2. 5 minutes; and

ii. the minimum time needed to carry out any requisite physical activities to make the relevant quantity of Available Capacity ready for dispatch in the Dispatch Interval, given the Market Participant's reasonable expectation of the state of the Facility.

7.4.13. [Blank]

7.4.14. [Blank]

7.4.15. [Blank]

7.4.16. [Blank]

7.4.17. [Blank]

7.4.18. [Blank]

7.4.19. [Blank]

7.4.20. [Blank]

Real-Time Market Submissions – Timing

7.4.21. AEMO must specify a Real-Time Market Submission Acceptance Horizon in a WEM Procedure.

7.4.22. The Real-Time Market Submission Acceptance Horizon must not be less than four weeks before the relevant Dispatch Interval.

7.4.23. Subject to clause 7.4.35, a Market Participant may submit a Real-Time Market Submission for a Dispatch Interval at any time:

(a) on or after the Real-Time Market Submission Acceptance Horizon for the Dispatch Interval; and

(b) before the start of the Dispatch Interval.

7.4.24. [Blank]

7.4.25. [Blank]

7.4.26. Where a Market Participant makes a Real-Time Market Submission for a Registered Facility and Market Service for a Dispatch Interval in the Pre-Dispatch Schedule Horizon (including by submitting a new Standing Real-Time Market Submission for the Registered Facility and Market Service), the Market Participant must:

(a) specify the reason for the revision in the subsequent Real-Time Market Submission, and

(b) create and maintain adequate detailed records (that are capable of independent verification) of the reasons for submitting the subsequent Real-Time Market Submission, including details of any changed circumstances, the time at which the Market Participant became aware of those changed circumstances and the impact of those circumstances that gave rise to the subsequent Real-Time Market Submission.

7.4.27. Where a Real-Time Market Submission specifies an Enablement Minimum, Enablement Maximum, Low Breakpoint, High Breakpoint, Maximum Upwards Ramp Rate or Maximum Downwards Ramp Rate, that is different to the Standing Enablement Minimum, Standing Enablement Maximum, Standing Low Breakpoint, Standing High Breakpoint, Standing Maximum Upwards Ramp Rate or Standing Maximum Downwards Ramp Rate value, as applicable, specified in the Standing Data for the Registered Facility, the Market Participant must:

(a) specify the reason for the difference in the Real-Time Market Submission, and

(b) create and maintain adequate detailed records (that are capable of independent verification) of the reasons for the differences between the relevant values specified in the Real-Time Market Submission and the corresponding values specified in the Standing Data.

7.4.28. Where a Market Participant makes a Real-Time Market Submission that meets the conditions specified in clauses 7.4.26 or 7.4.27, the Economic Regulation Authority may request the Market Participant to provide further information about the reasons provided under clauses 7.4.26(a) or 7.4.27(a) (as applicable), including any records created under clauses 7.4.26(b) or 7.4.27(b) (as applicable).

7.4.29. A Market Participant must respond to a request by the Economic Regulation Authority under clause 7.4.28 by the time specified in the request, which must not be less than five Business Days.

7.4.30. AEMO must determine and publish the Gate Closure on the WEM Website. In determining the Gate Closure, AEMO must take into account the extent to which the Gate Closure is, in its reasonable opinion, required to prevent a significant and quantifiable risk to AEMO maintaining Power System Security and Power System Reliability in accordance with Chapter 3.

7.4.31. The Gate Closure determined by AEMO in accordance with clause 7.4.30:

(a) must be as close as possible to the start of the relevant Dispatch Interval, subject to any significant and quantifiable risk identified by AEMO under clause 7.4.30; and

(b) must not be more than 15 minutes before the start of the relevant Dispatch Interval.

7.4.32. AEMO may, from time to time, but subject to clauses 7.4.30 and 7.4.31, revise the Gate Closure by:

(a) publishing on the WEM Website the revised Gate Closure and the date and time from which the revised Gate Closure will take effect; and

(b) issuing a Market Advisory noting that AEMO has revised the Gate Closure.

7.4.33. Where a revised Gate Closure is closer to the start of the Dispatch Interval than the existing Gate Closure, AEMO must give at least three months' notice of the revision.

7.4.34. Where AEMO revises the Gate Closure under clause 7.4.32, AEMO must publish a report on the WEM Website stating:

(a) its reasons for revising the Gate Closure; and

(b) its assessment of any change in quantifiable risks to Power System Security or Power System Reliability that may result from the revision.

7.4.35. A Market Participant must not make a Real-Time Market Submission for a Dispatch Interval after Gate Closure for the Dispatch Interval, except where the Real-Time Market Submission is made for the sole purpose of:

(a) adjusting the Unconstrained Injection Forecast or Unconstrained Withdrawal Forecast for a Semi-Scheduled Facility or Non-Scheduled Facility;

(b) adjusting Available Capacity, In-Service Capacity and quantities in Price-Quantity Pairs for a Registered Facility that has suffered a Forced Outage, to reflect the Registered Facility's Remaining Available Capacity under that Forced Outage;

(c) adjusting the Dispatch Inflexibility Profile of a Scheduled Facility or Semi-Scheduled Facility to reflect a delay in starting the Facility;

(d) complying with clause 7.6.31(a) in respect of a Registered Facility that has become Inflexible; or

(e) complying with a direction issued by AEMO.

7.4.36. AEMO must use the most recent Real-Time Market Submissions (as determined in accordance with clauses 7.4.1A, 7.4.1B and 7.4.1C) in the scheduling and dispatch of Registered Facilities in accordance with this Chapter 7.

7.4.37. A Market Participant, for a Scheduled Facility, Semi-Scheduled Facility or Interruptible Load:

(a) is only required to review, and if necessary update, Real-Time Market Submissions for Dispatch Intervals outside the Pre-Dispatch Schedule Horizon once per day; and

(b) is not required to review and update Real-Time Market Submissions for Dispatch Intervals for which Gate Closure has passed, except for events referred to in clauses 7.4.35(b), 7.4.35(c) or 7.4.35(d).

7.4.37A. A Market Participant is not required to review or revise a Real-Time Market Submission for a Non-Scheduled Facility except where the Market Participant:

(a) is intending to take controlled action to vary the Injection or Withdrawal of the Non-Scheduled Facility; or

(b) has revised the information used to develop the Real-Time Market Submission for the Non-Scheduled Facility,

for a Dispatch Interval in the Pre-Dispatch Schedule Horizon, in which case the Market Participant must make reasonable endeavours to update the Real-Time Market Submission to reflect the revised information.

Real-Time Market Submissions – Format

7.4.38. AEMO must document in a WEM Procedure the format and methodology to be followed by Market Participants for making Real-Time Market Submissions, including the options to submit multiple Real-Time Market Submissions to AEMO in a single electronic submission, any relevant minimum tranche size for offers, the maximum allowable number of Price-Quantity Pairs for a Dispatch Interval and any specific requirements for Registered Facilities that offer Essential System Services and not energy.

7.4.39. A Real-Time Market Submission must specify:

(a) the Registered Facility;

(b) the Market Service;

(c) the Dispatch Interval;

(d) the reason for revision of the Real-Time Market Submission, if required under clause 7.4.26(a);

(e) the reason for any difference between the values provided in the Real-Time Market Submission and the corresponding Standing Data values, if required under clause 7.4.27(a);

(f) the information specified in clauses 7.4.40 to 7.4.42 as applicable; and

(g) any other information specified in the WEM Procedure to be documented by AEMO under clause 7.4.38.

7.4.40. A Real-Time Market Submission for energy must, in addition to the matters listed in clause 7.4.39, specify, as applicable:

(a) the In-Service Capacity for Injection in MW;

(b) the Available Capacity for Injection in MW;

(c) the In-Service Capacity for Withdrawal in MW;

(d) the Available Capacity for Withdrawal in MW;

(e) the Maximum Upwards Ramp Rate in MW per minute;

(f) the Maximum Downwards Ramp Rate in MW per minute;

(g) up to the number of Price-Quantity Pairs specified in the WEM Procedure referred to in clause 7.4.38, where:

i. for each Price-Quantity Pair:

1. the price is to be stated in dollars and whole cents per MWh;

2. the quantity is to be identified as either Available Capacity or In-Service Capacity; and

3. if the quantity is classified as Available Capacity, the Start Decision Cutoff for the quantity is to be provided in minutes;

ii. the sum of all positive MW quantities is to equal the total of Available Capacity and In-Service Capacity for Injection; and

iii. the sum of all negative MW quantities is to equal the total of Available Capacity and In-Service Capacity for Withdrawal;

(h) if the Registered Facility is Inflexible; and

(i) for a Semi-Scheduled Facility or Non-Scheduled Facility:

i. the Unconstrained Injection Forecast; and

ii. the Unconstrained Withdrawal Forecast.

7.4.41. A Real-Time Market Submission for a Registered Facility to supply Regulation or Contingency Reserve must, in addition to the matters listed in clause 7.4.39, specify:

(a) the total available quantity of Regulation or Contingency Reserve, where this quantity is less than or equal to the maximum accredited capacity for Regulation or Contingency Reserve for that Dispatch Interval;

(b) the In-Service Capacity for the relevant Frequency Co-optimised Essential System Service;

(c) the Available Capacity for the relevant Frequency Co-optimised Essential System Service;

(d) the Enablement Minimum of the relevant Frequency Co-optimised Essential System Service;

(e) the Low Breakpoint of the relevant Frequency Co-optimised Essential System Service;

(f) the High Breakpoint of the relevant Frequency Co-optimised Essential System Service;

(g) the Enablement Maximum of the relevant Frequency Co-optimised Essential System Service; and

(h) a ranking of Price-Quantity Pairs with MW quantities summing to the total of Available Capacity and In-Service Capacity for the Frequency Co-optimised Essential System Service where the prices are to be stated in dollars and whole cents per MW per hour.

7.4.42. A Real-Time Market Submission for a Registered Facility to supply RoCoF Control Service must, in addition to the matters listed in clause 7.4.39, specify:

(a) the total available quantity of RoCoF Control Service where this value is less than or equal to the maximum accredited capacity for RoCoF Control Service for that Dispatch Interval;

(b) the Enablement Minimum of the RoCoF Control Service;

(c) the Low Breakpoint of the RoCoF Control Service;

(d) the High Breakpoint of the RoCoF Control Service;

(e) the Enablement Maximum of the RoCoF Control Service; and

(f) a ranking of Price-Quantity Pairs with MWs quantities summing to the total of Available Capacity and In-Service Capacity for the RoCoF Control Service where the prices are to be stated in dollars and whole cents per MWs per hour.

7.4.43. A Market Participant may include a Dispatch Inflexibility Profile in a Real-Time Market Submission for energy for a Fast Start Facility in accordance with clause 7.4.44.

7.4.44. A Dispatch Inflexibility Profile for a Fast Start Facility must contain the following parameters to indicate its MW capacity and time related Inflexibilities at the time it is included in the Real-Time Market Submission:

(a) the time, T1, in minutes, that the Registered Facility requires following the receipt of a Dispatch Instruction for the Registered Facility to start varying its level of Injection or Withdrawal from 0 MW in accordance with the Dispatch Instruction;

(b) the time, T2, in minutes, that the Registered Facility requires after T1 (as specified in clause 7.4.44(a)) to reach a specified minimum level of Injection or Withdrawal;

(c) the time, T3, in minutes, that the Registered Facility requires to be operated at or beyond its minimum level of Injection or Withdrawal before the Registered Facility can be safely and securely returned to Injection or Withdrawal of zero;

(d) the time, T4, in minutes, following the receipt of a Dispatch Instruction to return its Injection or Withdrawal from the minimum level specified in clause 7.4.44(b) to zero, that the Registered Facility requires to fully comply with the Dispatch Instruction; and

(e) the quantity, in MW, of Injection or Withdrawal that the Registered Facility must be operated at or beyond during the period in clause 7.4.44(c).

7.4.45. For a Fast Start Facility:

(a) T1, T2, T3 and T4 must all be equal to or greater than zero;

(b) the sum of (T1 + T2) must be less than or equal to 30 minutes; and

(c) the sum of (T1 + T2 + T3 + T4) must be less than 60 minutes.

Real-Time Market Submissions – Construction

7.4.46. A Market Participant must ensure that a Real-Time Market Submission for a Registered Facility for energy specifies Price-Quantity Pairs for all Injection and Withdrawal for the Registered Facility where:

(a) the negative quantities in Price-Quantity Pairs for energy represent bids for Withdrawal; and

(b) the positive quantities in Price-Quantity Pairs for energy represent offers for Injection.

7.4.46A. A Market Participant is not required to specify Price-Quantity Pairs for Withdrawals in its Real-Time Market Submission, where the Real-Time Market Submission is made in respect of a Registered Facility containing an Intermittent Load.

7.4.47. The prices in Price-Quantity Pairs in a Real-Time Market Submission:

(a) apply at the Measurement Point or Electrical Location, as applicable, for the Registered Facility;

(b) must increase monotonically with an increase in the available quantity for each Market Service; and

(c) for Withdrawal must be lower than the prices in Price-Quantity Pairs for Injection.

Real-Time Market Submissions - Validation of Dispatch Bids and Offers

7.4.48. On receipt of an electronic submission containing one or more Real-Time Market Submissions in accordance with this section 7.4, AEMO must as soon as practicable:

(a) acknowledge receipt of the electronic submission to the submitting Market Participant; and

(b) determine whether the Real-Time Market Submissions in the electronic submission comply with the following requirements, as applicable:

i. the content requirements in clauses 7.4.10(a), 7.4.39, 7.4.40, 7.4.41, 7.4.42, 7.4.44, 7.4.45, 7.4.47(b) and 7.4.47(c);

ii. the pricing requirements in clause 7.4.8;

iii. the quantity requirements in clause 7.4.11; and

iv. the timing requirements in clause 7.4.23.

7.4.49. Where AEMO:

(a) determines that an electronic submission complies with the requirements in clause 7.4.48(b), AEMO must:

i. accept the Real-Time Market Submissions and notify the submitting Market Participant that the Real-Time Market Submissions have been accepted, and

ii. make available to the Market Participant the data contained in the Real-Time Market Submissions as they will be used by AEMO in the Central Dispatch Process, including Loss Factor Adjusted Prices and non-Loss Factor Adjusted Prices; or

(b) determines that the electronic submission, or any part of it, does not comply with the requirements referred to in clause 7.4.48(b), AEMO must:

i. reject the electronic submission and notify the submitting Market Participant that it has been rejected, and

ii. provide details of the reasons the electronic submission was rejected.

Real-Time Market Submissions – Processing

7.4.50. AEMO must convert the prices in a Real-Time Market Submission for energy into Loss Factor Adjusted Prices, and must subject to clause 7.4.51, use those Loss Factor Adjusted Prices in the Dispatch Algorithm.

7.4.51. If a Loss Factor Adjusted Price determined in accordance with clause 7.4.50 is outside the relevant Energy Offer Cap, AEMO must:

(a) deem the price in the Real-Time Market Submission to be equal to the product of the relevant Energy Offer Cap and the applicable Loss Factor; and

(b) use the relevant Energy Offer Cap for the Real-Time Market Submission as the Loss Factor Adjusted Price in the Dispatch Algorithm.

7.4.51A. If a price in a Real-Time Market Submission for a Frequency Co-optimised Essential System Service:

(a) is greater than the relevant FCESS Offer Price Ceiling, AEMO must use the relevant FCESS Offer Price Ceiling in the Dispatch Algorithm; and

(b) is less than zero, AEMO must use a price of zero in the Dispatch Algorithm.

7.4.52. Where AEMO determines, based on the information available to it at the relevant time, that the capability of a Registered Facility to Inject, Withdraw or provide an Essential System Service differs from the quantities and technical parameters specified in the most recently submitted Real-Time Market Submission for the Registered Facility for the relevant Dispatch Interval, AEMO may adjust the following inputs to reflect the information available to it at that time, for use in the Dispatch Algorithm:

(a) Enablement Minimum;

(b) Enablement Maximum;

(c) Low Breakpoint;

(d) High Breakpoint;

(e) Maximum Upwards Ramp Rate; and

(f) Maximum Downwards Ramp Rate.

7.4.52A. Where AEMO adjusts inputs under clause 7.4.52, AEMO must, as soon as practicable, make the adjusted inputs and the reasons for the adjustment available to the Market Participant.

7.4.53. AEMO must document in a WEM Procedure:

(a) the information and processes, including the application of any formulae, AEMO will use in making a determination under clause 7.4.52; and

(b) the circumstances in which AEMO will adjust the inputs specified in clause 7.4.52.

Real-Time Market Submissions – Standing Submissions

7.4.54. A Market Participant may submit Standing Real-Time Market Submissions for a Registered Facility and Market Service at any time before Gate Closure for the first Dispatch Interval to which the submissions apply.

7.4.55. The Standing Real-Time Market Submissions in an electronic submission to AEMO for a Registered Facility and Market Service must, in combination, uniquely specify the default Real-Time Market Submission to apply for each Dispatch Interval in a generic Trading Week.

7.4.56. An electronic submission containing Standing Real-Time Market Submissions must specify the first Dispatch Interval to which the submissions apply.

7.4.57. Subject to clause 7.4.55, a Market Participant may specify the type of Trading Day to which a Standing Real-Time Market Submission applies as:

(a) all Trading Days starting on a specific day of the week;

(b) all Trading Days starting on a weekday;

(c) all Trading Days starting on a weekend;

(d) all Trading Days starting on a Business Day;

(e) all Trading Days starting on a non-Business Day; or

(f) all Trading Days.

7.4.57A. AEMO must document in a WEM Procedure the format and methodology to be followed by Market Participants for making Standing Real-Time Market Submissions, including the options to submit Standing Real-Time Market Submissions for multiple Registered Facilities and Market Services in a single electronic submission.

7.4.58. On receipt of an electronic submission containing one or more Standing Real-Time Market Submissions, AEMO must, as soon as practicable:

(a) acknowledge receipt of the electronic submission to the submitting Market Participant; and

(b) determine whether the Standing Real-Time Market Submissions in the electronic submission comply with the following requirements:

i. the content requirements in clauses 7.4.55, 7.4.56 and 7.4.57;

ii. the timing requirement in clause 7.4.54; and

iii. for each Standing Real-Time Market Submission in the electronic submission, as applicable:

1. the content requirements in clauses 7.4.10(a), 7.4.39, 7.4.40, 7.4.41, 7.4.42, 7.4.44, 7.4.45, 7.4.47(b) and 7.4.47(c);

2. the pricing requirements in clause 7.4.8; and

3. the quantity requirements in clause 7.4.11.

7.4.59. Where AEMO:

(a) determines that an electronic submission complies with the requirements in clause 7.4.58(b), AEMO must:

i. accept the Standing Real-Time Market Submissions and notify the submitting Market Participant that the Standing Real-Time Market Submissions have been accepted, and

ii. make available to the Market Participant the data contained in the Standing Real-Time Market Submissions as it will be used by AEMO in the Central Dispatch Process; or

(b) determines that the electronic submission, or any part of it, does not comply with the requirements referred to in clause 7.4.58(b), AEMO must:

i. reject the electronic submission and notify the submitting Market Participant that it has been rejected, and

ii. provide details of the reasons the electronic submission was rejected.

7.4.59A. A Standing Real-Time Market Submission for a Registered Facility and Market Service that AEMO accepts under clause 7.4.59(a) replaces any previously accepted Standing Real-Time Market Submission for Dispatch Intervals from the Dispatch Interval specified in clause 7.4.56.

7.4.60. When AEMO uses a Standing Real-Time Market Submission in the Dispatch Algorithm, AEMO must:

(a) subject to clause 7.4.60(b), convert the prices in a Standing Real-Time Market Submission for energy into Loss Factor Adjusted Prices, and use those Loss Factor Adjusted Prices in the Dispatch Algorithm;

(b) where a Loss Factor Adjusted Price determined under clause 7.4.60(a) is outside the relevant Energy Offer Cap, use the relevant Energy Offer Cap in the Dispatch Algorithm;

(c) where a price in a Standing Real-Time Market Submission for a Frequency Co-optimised Essential System Service is greater than the relevant FCESS Offer Price Ceiling, use the relevant FCESS Offer Price Ceiling in the Dispatch Algorithm; and

(d) where a price in a Standing Real-Time Market Submission for a Frequency Co-optimised Essential System Service is less than zero, use a price of zero in the Dispatch Algorithm.

7.4.61. It is the responsibility of each Market Participant to check that the data contained in its Standing Real-Time Market Submissions as it will be used by AEMO in the Central Dispatch Process is correct.

Real-Time Market Submissions and Standing Real-Time Market Submissions – Process Documentation

7.4.62. AEMO must document in a WEM Procedure the processes it must follow when:

(a) acknowledging receipt of a Real-Time Market Submission under clause 7.4.48(a) or a Standing Real-Time Market Submission under clause 7.4.58(a);

(b) validating a Real-Time Market Submission in accordance with clause 7.4.48(b) or a Standing Real-Time Market Submission in accordance with clause 7.4.58(b); and

(c) accepting or rejecting a Real-Time Market Submission in accordance with clause 7.4.49 or a Standing Real-Time Market Submission in accordance with clause 7.4.59.

7.4A. DSP Profile Submissions

7.4A.1. A Market Participant must ensure that it has made a DSP Profile Submission or Standing DSP Profile Submission in accordance with this section 7.4A for each Dispatch Interval in the Week-Ahead Schedule Horizon for each of its Demand Side Programmes.

7.4A.2. If AEMO has not accepted a DSP Profile Submission for a Demand Side Programme and Dispatch Interval under clause 7.4A.15(a), but has accepted an applicable Standing DSP Profile Submission, then the Standing DSP Profile Submission is deemed to be the DSP Profile Submission for the Demand Side Programme and Dispatch Interval.

7.4A.3. A DSP Profile Submission for a Demand Side Programme and Dispatch Interval that AEMO accepts under clause 7.4A.15(a) replaces any previously accepted DSP Profile Submission for, and has effect in relation to, the Demand Side Programme and Dispatch Interval.

7.4A.4. If:

(a) AEMO has not yet accepted a DSP Profile Submission for a Demand Side Programme and Dispatch Interval under clause 7.4A.15(a); and

(b) AEMO accepts a Standing DSP Profile Submission for the Demand Side Programme that is applicable to the Dispatch Interval,

then the Standing DSP Profile Submission replaces any previously accepted Standing DSP Profile Submission as the deemed DSP Profile Submission for the Demand Side Programme and Dispatch Interval.

7.4A.5. If AEMO identifies a Demand Side Programme in a Market Advisory under clause 7.11.6(cA)(i), then the relevant Market Participant must:

(a) as soon as practicable review, and if necessary update, the DSP Profile Submissions for the Demand Side Programme for, subject to clause 7.4A.9A, each future Dispatch Interval before the end of the Trading Day in which the period specified under clause 7.11.6(cA)(ii) falls; and

(b) for the purposes of determining DSP Constrained Quantities, assume the Demand Side Programme will be subject to Dispatch Instructions that restricts its DSP Energy Level by the maximum quantity consistent with its Peak Reserve Capacity Obligation Quantity or Flexible Reserve Obligation Quantity (as relevant) for the period specified under clause 7.11.6(cA)(ii).

~~(b) for the purposes of determining DSP Constrained Quantities, assume the Demand Side Programme will be subject to Dispatch Instructions that restricts its DSP Energy Level by the maximum quantity consistent with its Reserve Capacity Obligation Quantity for the period specified under clause 7.11.6(cA)(ii).~~

7.4A.6. If AEMO issues a Dispatch Instruction with a non-zero MW quantity to a Demand Side Programme under clause 7.6.15, then the Market Participant must:

(a) as soon as practicable, review, and if necessary update, the DSP Profile Submissions for the Demand Side Programme for, subject to clause 7.4A.9A, each future Dispatch Interval before the end of the Trading Day in which the Dispatch Interval specified under clause 7.6.11A(c) falls; and

(b) for the purposes of determining the applicable DSP Constrained Quantities, take into account the timeframes and quantities in the Dispatch Instructions that have been issued to the Demand Side Programme and assume that AEMO will issue a Dispatch Instruction with a zero MW quantity that will apply from the Dispatch Interval specified under clause 7.6.11A(e).

7.4A.7. If AEMO issues a Dispatch Instruction with a zero MW quantity to a Demand Side Programme under clause 7.6.15, then the Market Participant must:

(a) as soon as practicable, review, and if necessary update, the DSP Profile Submissions for the Demand Side Programme for, subject to clause 7.4A.9A, each future Dispatch Interval in the Trading Day in which the Dispatch Interval specified under clause 7.6.11A(c) falls; and

(b) for the purposes of determining the applicable DSP Constrained Quantities, take into account the time from which the Dispatch Instruction will apply.

7.4A.8. If a Market Participant receives a notification relating to a Reserve Capacity Test of a Demand Side Programme under clause 4.25.9(h), the Market Participant must:

(a) as soon as practicable and, in the case of a Reserve Capacity Test under clauses 4.25.2(b)(ii), 4.25.4 or 4.25.6(b)(i), no later than one hour before the Reserve Capacity Test is due to commence, review and update the DSP Profile Submissions for the Demand Side Programme for, subject to clause 7.4A.9A, each future Dispatch Interval in the Trading Day in which the Reserve Capacity Test will be conducted; and

(b) take the information provided in the notification under clause 4.25.9(h) into account in determining the relevant DSP Constrained Quantities.

7.4A.9. A Market Participant must make reasonable endeavours to ensure that when any of the conditions specified in clauses 7.4A.5, 7.4A.6, 7.4A.7 or 7.4A.8 apply the DSP Unconstrained Quantities and DSP Constrained Quantities in its DSP Profile Submissions for the Demand Side Programme accurately reflect the Market Participant's reasonable expectation of the DSP Energy Level of the Demand Side Programme during the applicable Dispatch Intervals under the required assumptions.

7.4A.9A. For the purposes of updating DSP Profile Submissions under clauses 7.4A.5, 7.4A.6, 7.4A.7 or 7.4A.8, a Market Participant must not include a future Dispatch Interval in its updated DSP Profile Submissions, where the Market Participant reasonably determines that despite its best endeavours, its updated DSP Profile Submissions for the Dispatch Interval will not be received by AEMO before the start of the Dispatch Interval.

DSP Profile Submissions – Timing

7.4A.10. A Market Participant may submit a DSP Profile Submission for a Dispatch Interval at any time:

(a) on or after the Real-Time Market Submission Acceptance Horizon for the Dispatch Interval; and

(b) before the start of the Dispatch Interval.

7.4A.11. AEMO must use the most recent DSP Profile Submission (as determined in accordance with clauses 7.4A.2, 7.4A.3 and 7.4A.4) in the scheduling and dispatch of Demand Side Programmes in accordance with this Chapter 7.

DSP Profile Submissions – Format

7.4A.12. AEMO must document in a WEM Procedure the format and methodology to be followed by Market Participants for making DSP Profile Submissions, including the

options to submit multiple DSP Profile Submissions to AEMO in a single electronic submission.

7.4A.13. A DSP Profile must specify:

(a) the Demand Side Programme;

(b) the Dispatch Interval;

(c) a DSP Unconstrained Quantity;

(d) a DSP Constrained Quantity; and

(e) any other information specified in the WEM Procedure to be documented by AEMO under clause 7.4A.12.

DSP Profile Submissions – Validation

7.4A.14. On receipt of an electronic submission containing one or more DSP Profile Submissions in accordance with this section 7.4A, AEMO must as soon as practicable:

(a) acknowledge receipt of the electronic submission to the submitting Market Participant; and

(b) determine whether the DSP Profile Submissions in the electronic submission comply with the following requirements, as applicable:

i. the content requirements in clause 7.4A.13; and

ii. the timing requirements in clause 7.4A.10.

7.4A.15. Where AEMO:

(a) determines that an electronic submission complies with the requirements in clause 7.4A.14(b), AEMO must accept the DSP Profile Submissions and notify the submitting Market Participant that the DSP Profile Submissions have been accepted, or

(b) determines that the electronic submission, or any part of it, does not comply with the requirements referred to in clause 7.4A.14(b), AEMO must:

i. reject the electronic submission and notify the submitting Market Participant that it has been rejected, and

ii. provide details of the reasons the electronic submission was rejected.

DSP Profile Submissions – Standing Submissions

7.4A.16. A Market Participant may submit Standing DSP Profile Submissions for a Demand Side Programme at any time up to two hours before the first Dispatch Interval to which the submissions apply.

7.4A.17. The Standing DSP Profile Submissions in an electronic submission to AEMO for a Demand Side Programme must, in combination, uniquely specify the default DSP Profile Submission to apply for each Dispatch Interval in a generic Trading Week.

7.4A.18. An electronic submission containing Standing DSP Profile Submissions must specify the first Dispatch Interval to which the submissions apply.

7.4A.19. Subject to clause 7.4A.17, a Market Participant may specify the type of Trading Day to which a Standing DSP Profile Submission applies as:

(a) all Trading Days starting on a specific day of the week;

(b) all Trading Days starting on a weekday;

(c) all Trading Days starting on a weekend;

(d) all Trading Days starting on a Business Day;

(e) all Trading Days starting on a non-Business Day; or

(f) all Trading Days.

7.4A.20. AEMO must document in a WEM Procedure the format and methodology to be followed by Market Participants for making Standing DSP Profile Submissions, including the options to submit Standing DSP Profile Submissions for multiple Demand Side Programmes in a single electronic submission.

7.4A.21. On receipt of an electronic submission containing one or more Standing DSP Profile Submissions, AEMO must, as soon as practicable:

(a) acknowledge receipt of the electronic submission to the submitting Market Participant; and

(b) determine whether the Standing DSP Profile Submissions in the electronic submission comply with the following requirements:

i. the content requirements in clauses 7.4A.17, 7.4A.18 and 7.4A.19;

ii. the timing requirement in clause 7.4A.16; and

iii. for each Standing DSP Profile Submission in the electronic submission, the content requirements in clause 7.4A.13.

7.4A.22. Where AEMO:

(a) determines that an electronic submission complies with the requirements in clause 7.4A.21(b), AEMO must accept the Standing DSP Profile Submissions and notify the submitting Market Participant that the Standing DSP Profile Submissions have been accepted; or

(b) determines that the electronic submission, or any part of it, does not comply with the requirements referred to in clause 7.4A.21(b), AEMO must:

i. reject the electronic submission and notify the submitting Market Participant that it has been rejected, and

ii. provide details of the reasons the electronic submission was rejected.

7.4A.23. A Standing DSP Profile Submission for a Demand Side Programme that AEMO accepts under clause 7.4A.22(a) replaces any previously accepted Standing DSP Profile Submission for Dispatch Intervals from the Dispatch Interval specified in clause 7.4A.18.

DSP Profile Submissions and Standing DSP Profile Submissions – Process Documentation

7.4A.24. AEMO must document in a WEM Procedure the processes it must follow when:

(a) acknowledging receipt of a DSP Profile Submission under clause 7.4A.14(a) or a Standing DSP Profile Submission under clause 7.4A.21(a);

(b) validating a DSP Profile Submission in accordance with clause 7.4A.14(b) or a Standing DSP Profile Submission in accordance with clause 7.4A.21(b); and

(c) accepting or rejecting a DSP Profile Submission in accordance with clause 7.4A.15 or a Standing DSP Profile Submission in accordance with clause 7.4A.22.

7.5. Dispatch Algorithm

Network Constraints

7.5.1. For each Dispatch Interval:

(a) AEMO must reasonably determine, based on the latest information available to it, whether a Network Constraint has the potential to affect dispatch in the Dispatch Interval; and

(b) for each Network Constraint identified by AEMO under clause 7.5.1(a), AEMO must select one or more Constraint Equations or Constraint Sets to use in the Dispatch Algorithm for the Dispatch Interval to address the Network Constraints identified.

7.5.2. Without limiting AEMO's obligations under clause 7.5.1, AEMO must use Fully Co-Optimised Network Constraint Equations to reflect the Network Constraints identified under clause 7.5.1(a) unless, in AEMO's reasonable opinion:

(a) a Fully Co-Optimised Network Constraint Equation for the Network Constraint that affects, or is likely to affect, dispatch in the Dispatch Interval is not appropriate;

(b) an Alternative Network Constraint Equation is available to better address the Network Constraint that affects, or is likely to affect, dispatch in the Dispatch Interval; and

(c) if the Alternative Network Constraint Equation is used, AEMO will continue to meet its obligations under section 7.2,

in which case, AEMO may use the Alternative Network Constraint Equation in the Dispatch Algorithm for the expected duration of the relevant Network Constraint.

7.5.3. If the Constraints Library does not contain a Constraint Equation or Constraint Set that accurately reflects the Network Constraint identified under clause 7.5.1, then without limiting AEMO's obligations to formulate Constraint Equations under section 2.27A, AEMO must formulate a new Constraint Equation or Constraint Set for use in the Dispatch Algorithm for the Network Constraint and update the Constraints Library in accordance with clause 2.27A.7.

7.5.4. AEMO must document in a WEM Procedure:

(a) the process to be used by AEMO for selecting, applying, invoking and revoking Constraint Equations or Constraint Sets in response to Network Constraints for use in the Dispatch Algorithm; and

(b) the circumstances in which AEMO will use Fully Co-optimised Network Constraint Equations and Alternative Network Constraint Equations in the Dispatch Algorithm.

Essential System Services Constraints

7.5.5. AEMO must include Constraint Equations for the dispatch of Essential System Services in the Dispatch Algorithm.

7.5.6. Where the WEM Procedure referred to in clause 3.11.7 provides that the quantity of a Frequency Co-optimised Essential System Service is to be determined outside the Dispatch Algorithm, AEMO must include Constraint Equations in the Dispatch Algorithm that, subject to clause 7.4.5(b), ensure the exogenously determined quantity of that Frequency Co-optimised Essential System Service is procured from the Real-Time Market.

7.5.7. Where the WEM Procedure referred to in clause 3.11.7 provides that the quantity of a Frequency Co-optimised Essential System Service is dependent on factors within the Dispatch Algorithm, AEMO must include Constraint Equations in the Dispatch Algorithm that, subject to clauses 3.12.2 and 7.2.4(e), ensure that a sufficient quantity of that Frequency Co-optimised Essential System Service is procured to meet the Essential System Service Standards.

7.5.8. Where a Real-Time Market Submission for a Registered Facility specifies non-zero quantities in its Price-Quantity Pairs for any Frequency Co-optimised Essential System Service, then:

(a) if the Registered Facility is operating between its Enablement Limits at the beginning of a Dispatch Interval or a Pre-Dispatch Interval, AEMO may, in accordance with the WEM Procedure referred to in clause 7.2.5, include Constraint Equations in the Dispatch Algorithm to ensure the Energy Dispatch Target for that Registered Facility will not be less than the Minimum Enablement Limit, and not more than the Maximum Enablement Limit; or

(b) if the Registered Facility is not operating between its Enablement Limits at the beginning of a Dispatch Interval or a Pre-Dispatch Interval, AEMO may, in accordance with the WEM Procedure referred to in clause 7.2.5, exclude the Real-Time Market Offers to provide any Frequency Co-optimised Essential System Service specified in the Real-Time Market Submission for the Registered Facility from the Dispatch Algorithm.

7.5.8A. AEMO may include allowances for droop response and measurement errors when it assesses whether a Registered Facility is operating within its Enablement Limits for the purpose of clause 7.5.8.

Storage Constraints

7.5.9. [Blank]

7.5.10. If required by a Market Participant under Appendix 1(b)(xviA), AEMO must include Constraint Equations for a Scheduled Facility which comprises only an Electric Storage Resource relating to restrictions on the simultaneous dispatch of energy and Frequency Co-optimised Essential System Service, to ensure that Dispatch Targets and Essential System Service Enablement Quantities for the Scheduled Facility are able to be achieved based on the Charge Level, storage capacity, Injection capability and Withdrawal capability for the Scheduled Facility, accounting for relevant losses in the charging or discharging process.

7.5.10A. AEMO must not include Constraint Equations in the Dispatch Algorithm for a Registered Facility under clause 7.5.10 if the responsible Market Participant has not required AEMO to include them under Appendix 1(b)(xviA).

Dynamic parameters

7.5.11. AEMO must determine the Contingency Raise Offset and Contingency Lower Offset for each Dispatch Interval and Pre-Dispatch Interval of each Market Schedule and in making a determination AEMO must have regard to:

(a) System Inertia;

(b) Load Relief;

(c) Droop Response expected from synchronised Registered Facilities;

(d) the size of the Largest Credible Supply Contingency;

(e) the size of the Largest Credible Load Contingency; and

(f) any other relevant factors specified in the WEM Procedure referred to in clause 7.2.5.

7.5.12. AEMO must determine the Minimum RoCoF Control Requirement, the Additional RoCoF Control Requirement and the RoCoF Control Requirement for each Dispatch Interval and Pre-Dispatch Interval of each Market Schedule and in making a determination AEMO must have regard to:

(a) Facility Performance Factors;

(b) System Inertia from sources other than Registered Facilities;

(c) the size of the Largest Credible Supply Contingency;

(d) Contingency Raise Offset;

(e) Contingency Lower Offset; and

(f) any other relevant factors specified in the WEM Procedure referred to in clause 7.2.5.

7.5.13. AEMO must determine a Facility Performance Factor for Contingency Reserve Raise and Contingency Reserve Lower for each Registered Facility that is accredited, in accordance with section 2.34A, to provide that Essential System Service for each Dispatch Interval and Pre-Dispatch Interval of each Market Schedule and in making a determination AEMO must have regard to:

(a) Facility Speed Factors;

(b) System Inertia;

(c) the size of the Largest Credible Supply Contingency;

(d) the size of the Largest Credible Load Contingency; and

(e) any other relevant factors specified in the WEM Procedure referred to in clause 7.2.5.

7.5.14. AEMO must determine and publish on the WEM Website the RoCoF Upper Limit at least annually.

Tiebreaking Constraints

7.5.15. AEMO must configure the Dispatch Algorithm to avoid Degenerate Solutions caused by tied Price-Quantity Pairs for a Market Service in Real-Time Market Submissions. The Dispatch Algorithm must, subject to other constraints, dispatch quantities from tied Price-Quantity Pairs:

(a) for Real-Time Market Submissions for a Frequency Co-optimised Essential System Service, in the following order:

i. quantities from Interruptible Loads, in ascending order of Facility Tiebreak Number; then

ii. quantities from Scheduled Facilities and Semi-Scheduled Facilities with an Enablement Minimum (as specified in the Real-Time Market Submission for the Frequency Co-optimised Essential System Service and adjusted by AEMO, if applicable, under clause 7.4.52) less than or equal to zero, in ascending order of Facility Tiebreak Number; then

iii. quantities from Scheduled Facilities and Semi-Scheduled Facilities with an Enablement Minimum (as specified in the Real-Time Market Submission for the Frequency Co-optimised Essential System Service and adjusted by AEMO, if applicable, under clause 7.4.52) greater than zero, in ascending order of:

1. the estimated energy dispatch cost for the Enablement Minimum, as calculated in accordance with clause 7.5.16; then

2. Facility Tiebreak Number;

(b) for Real-Time Market Offers for energy, in ascending order of Facility Tiebreak Number; and

(c) for Real-Time Market Bids for energy, in descending order of Facility Tiebreak Number.

7.5.16. For the purposes of clause 7.5.15(a)(iii)(1), the estimated energy dispatch cost for Registered Facility f in Dispatch Interval DI for Frequency Co-optimised Essential System Service m is:

$$\text{EstDispatchCost}(m,f,DI) = \sum_{pq \in \text{EnergyOffer}(f,DI)} (\text{EnergyQty}(f,DI,pq) \times \text{LFAOP}(f,DI,pq))$$

where:

(a) $pq \in \text{EnergyOffer}(f,DI)$ denotes all Price-Quantity Pairs pq in the Real-Time Market Offer for energy for Registered Facility f in Dispatch Interval DI that are not excluded in the relevant Scenario;

(b) $\text{EnergyQty}(f,DI,pq)$ is the part of the quantity from Price-Quantity Pair pq that is included in the Enablement Minimum for Registered Facility f in Dispatch Interval DI for Frequency Co-optimised Essential System Service m (as specified in the relevant Real-Time Market Submission and adjusted by AEMO, if applicable, under clause 7.4.52); and

(c) $\text{LFAOP}(f,DI,pq)$ is the Loss Factor Adjusted Price for Price-Quantity Pair pq.

7.5.17. For each Trading Day, AEMO must:

(a) for each Scheduled Facility, Semi-Scheduled Facility and Interruptible Load determine a unique random number (Facility Tiebreak Number); and

(b) use the Facility Tiebreak Numbers determined under clause 7.5.17(a) for the Trading Day in the Dispatch Algorithm as specified in clause 7.5.15 for all Dispatch Intervals and Pre-Dispatch Intervals (as applicable) in the Trading Day.

7.5.18. AEMO must document in a WEM Procedure the method to be used by AEMO to determine Facility Tiebreak Numbers under clause 7.5.17(a).

Facility Raise Contingencies

7.5.19. AEMO must document in a WEM Procedure the method it uses and the factors it takes into account when determining:

(a) Facility Raise Contingencies;

(b) Facility Raise Contingency Risks; and

(c) Single Facility Raise Risks.

7.5.20. AEMO must take the following information into account when determining Facility Raise Contingencies, Facility Raise Contingency Risks and Single Facility Raise Risks for a Facility that contains an Intermittent Load:

(a) any information provided by the Market Participant for the Facility under clause 2.30B.3(g);

(b) the Dispatch Target or Dispatch Forecast for the Facility, if applicable;

(c) for Non-Dispatchable Loads, AEMO's estimate of the Facility's MW Injection or Withdrawal level for the Dispatch Interval; and

(d) the output of each energy producing unit in the Energy Producing System supplying the Intermittent Load, if applicable.

7.5.21. If, when determining Credible Contingency Events in accordance with the WEM Procedure referred to in clause 3.8A.4, AEMO reasonably considers there is a credible risk that:

(a) the consequential response of a CR Facility ("consequent facility") to a Facility Raise Contingency triggered by another CR Facility ("primary facility") increases the Facility Raise Contingency Risk of the primary facility; and

(b) the Facility Raise Contingency Risk of the primary facility could be the Largest Credible Supply Contingency in one or more Dispatch Intervals,

then, unless the SWIS is in an Emergency Operating State or under declared Lack of Reserve Conditions, AEMO must include Constraint Equations in the Dispatch

Algorithm as required to ensure the risk imposed by the consequent facility does not increase the Facility Raise Contingency Risk of the primary facility.

Missing or manifestly incorrect Constraint Equations

7.5.22. AEMO must set the Energy Uplift Override Flag for a Registered Facility in a Dispatch Interval to:

(a) one, if AEMO becomes aware that, due to a missing or manifestly incorrect Constraint Equation in the Dispatch Algorithm, the Registered Facility is ineligible for an Energy Uplift Payment for which it would have been eligible had the correct Constraint Equations been included;

(b) zero, if AEMO becomes aware that, due to a missing or manifestly incorrect Constraint Equation in the Dispatch Algorithm, the Registered Facility is eligible for an Energy Uplift Payment for which it would not have been eligible had the correct Constraint Equations been included; and

(c) minus one, otherwise.

7.5.23. AEMO must set the RCS Uplift Override Flag for a Registered Facility in a Dispatch Interval to:

(a) one, if AEMO becomes aware that, due to a missing or manifestly incorrect Constraint Equation in the Dispatch Algorithm, the Registered Facility is ineligible for an RCS Uplift Payment for which it would have been eligible had the correct Constraint Equations been included;

(b) zero, if AEMO becomes aware that, due to a missing or manifestly incorrect Constraint Equation in the Dispatch Algorithm, the Registered Facility is eligible for an RCS Uplift Payment for which it would not have been eligible had the correct Constraint Equations been included; and

(c) minus one, otherwise.

7.5.24. If AEMO sets the Energy Uplift Override Flag or RCS Uplift Override Flag to zero or one for a Registered Facility in a Dispatch Interval, then AEMO must as soon as practicable publish the following details on the WEM Website:

(a) the Registered Facility;

(b) the Dispatch Interval;

(c) the value of the Energy Uplift Override Flag or RCS Uplift Override Flag (as applicable); and

(d) the reasons for AEMO's setting of the Energy Uplift Override Flag or RCS Uplift Override Flag, including details of the relevant missing or manifestly incorrect Constraint Equation.

7.6. Dispatch

Dispatch Instructions

7.6.1. Subject to clause 7.11D.5, AEMO must centrally dispatch Scheduled Facilities, Semi-Scheduled Facilities and Interruptible Loads based on their Real-Time Market Bids and Real-Time Market Offers using the Dispatch Algorithm.

7.6.2. Subject to clause 7.11D.5, AEMO must use the Dispatch Algorithm to set Dispatch Targets, Dispatch Caps and Essential System Service Enablement Quantities for each Scheduled Facility, Semi-Scheduled Facility and Interruptible Load for each Dispatch Interval.

7.6.3. AEMO must document in a WEM Procedure the processes to be followed by AEMO and Market Participants for the dispatch of Registered Facilities where the Dispatch Algorithm is not able to be successfully run for a Dispatch Interval, including:

(a) where a previous Market Schedule will be used as the basis for issuing Dispatch Instructions; and

(b) where a previous Market Schedule will not be used as the basis for issuing Dispatch Instructions, the basis for dispatch and issuing Dispatch Instructions in those circumstances.

7.6.4. AEMO must set:

(a) the Market Clearing Prices for each Dispatch Interval in accordance with sections 7.11A, 7.11B, 7.11C and 7.11E; and

(b) the Reference Trading Prices for each Trading Interval in accordance with clause 7.11A.1(b).

7.6.5. A Dispatch Instruction is a direction issued by AEMO to a Market Participant in respect of a Registered Facility for the purposes of clause 7.2.1, directing the Market Participant to:

(a) vary the Injection or Withdrawal of the Registered Facility; or

(b) vary the enablement quantity of a Frequency Co-optimised Essential System Service for a Registered Facility.

7.6.5A. AEMO may issue Dispatch Instructions to a Demand Side Programme where AEMO reasonably considers that the dispatch of a Demand Side Programme is required to restore or maintain Power System Security or Power System Reliability.

7.6.5B. AEMO must issue Dispatch Instructions to Demand Side Programmes in accordance with the following principles:

(a) AEMO must not issue Dispatch Instructions to a Demand Side Programme that restrict its DSP Energy Level by more than the Facility's Peak Reserve Capacity Obligation Quantity or Flexible Reserve Capacity Obligation Quantity (as relevant) in a Dispatch Interval, except with the prior agreement of the Market Participant; and

(b) when selecting Demand Side Programmes for dispatch to meet a potential energy shortfall, AEMO must:

i. take into account Market Schedules and any information provided by Market Participants in response to a Market Advisory issued under clause 7.11.5(gA) for the relevant period;

ii. avoid the dispatch of Demand Side Programmes beyond the extent that AEMO considers may reasonably be necessary to restore or maintain Power System Security and Power System Reliability;

iii. where a Demand Side Programme has an Associated Load which is also an Associated Load of an Interruptible Load, and that Interruptible Load is expected to provide an Essential System Service during the relevant period, prefer dispatch of other Demand Side Programmes;

iv. only discriminate between Demand Side Programmes based on response time and availability, except where required under clause 7.6.5B(b)(iii); and

v. subject to clauses 7.6.5B(b)(iii) and 7.6.5B(b)(iv), dispatch Demand Side Programmes in order of the longest time since a Demand Side Programme was last dispatched (outside of a Reserve Capacity Test).

7.6.5C. AEMO must document in a WEM Procedure:

(a) how AEMO will determine that the dispatch of Demand Side Programmes under clause 7.6.5A may be required; and

(b) the process that AEMO will use to select Demand Side Programmes for dispatch, which must be consistent with the principles specified in clause 7.6.5B.

7.6.6. AEMO is not required to issue a Dispatch Instruction for Automatic Generator Control movements where:

(a) AEMO is adjusting the provision of Regulation within the quantity of Regulation enabled;

(b) AEMO has direct control of a Registered Facility under clause 7.6.30 and the adjustments relate to implementation of a previously recorded Dispatch Instruction; or

(c) the Facility is providing a System Restart Service.

7.6.7. AEMO may direct a Network Operator to do, or not do, an act, matter or thing, if it reasonably determines the act, matter or thing is required to support or enable AEMO's operation of the Central Dispatch Process.

7.6.7A. A Network Operator is not required to comply with a direction referred to in clause 7.6.7 if such compliance would endanger the safety of any person, damage equipment, or breach any applicable law.

7.6.8. For each Dispatch Instruction for a Scheduled Facility, Semi-Scheduled Facility or Interruptible Load, AEMO must record:

(a) details of the Registered Facility to which the Dispatch Instruction relates;

(b) the time the Dispatch Instruction was issued;

(c) the Dispatch Interval to which the Dispatch Instruction applies;

(d) for a Scheduled Facility or Semi-Scheduled Facility:

i. the Dispatch Target or Dispatch Cap for the Dispatch Interval, as applicable, under clause 7.6.10 or 7.6.11;

ii. where the Registered Facility is a Semi-Scheduled Facility and the Dispatch Instruction is issued by the Dispatch Algorithm, the Dispatch Forecast for the Dispatch Interval;

iii. where AEMO has agreed to process Dispatch Targets or Dispatch Caps for the Registered Facility on an as-generated basis and the Dispatch Instruction is issued by the Dispatch Algorithm, the equivalent as-generated values for the Dispatch Target, Dispatch Cap or Dispatch Forecast as applicable; and

iv. Essential System Service Enablement Quantities; and

(e) for an Interruptible Load:

i. Essential System Service Enablement Quantities.

7.6.8A. AEMO may record, for a Dispatch Instruction to a Scheduled Facility or Semi-Scheduled Facility, the ramp rate to be maintained by the Registered Facility until the Dispatch Target is reached, which must not exceed the Maximum Upwards Ramp Rate or the Maximum Downwards Ramp Rate of the Registered Facility, as applicable.

7.6.9. At the same time as, or as soon as practicable after, AEMO issues a Dispatch Instruction for a Registered Facility, AEMO must make the information recorded in accordance with clauses 7.6.8 or 7.6.11A available to the Market Participant for the Registered Facility.

7.6.10. Each Dispatch Instruction for a Scheduled Facility must include a Dispatch Target.

7.6.11. Each Dispatch Instruction for a Semi-Scheduled Facility must include:

(a) a Dispatch Cap; or

(b) a Dispatch Target, if:

i. the Registered Facility has a non-zero Essential System Service Enablement Quantity for Contingency Reserve or Regulation; or

ii. Flexible Capacity Credits are associated with the Semi-Scheduled Facility and the Dispatch Instruction is for a Dispatch Interval which is within a Flexible Electric Storage Resource Obligation Interval.

~~(b) a Dispatch Target, where the Registered Facility has a non-zero Essential System Service Enablement Quantity for Contingency Reserve or Regulation.~~

7.6.11A. For each Dispatch Instruction issued for a Demand Side Programme, AEMO must record:

(a) details of the Demand Side Programme to which the Dispatch Instruction relates;

(b) the time the Dispatch Instruction was issued;

(c) the Dispatch Interval from which the Dispatch Instruction applies, where this must be the first Dispatch Interval of a Trading Interval;

(d) the MW quantity representing the required restriction to the Demand Side Programme's DSP Energy Level, where:

i. a non-zero MW quantity represents a required reduction in the DSP Energy Level for the Demand Side Programme; and

ii. a zero MW quantity indicates that the Demand Side Programme is no longer required to restrict its DSP Energy Level; and

(e) if a non-zero MW quantity is specified, the estimated Dispatch Interval from which the Dispatch Instruction may no longer apply, where this must be the first Dispatch Interval of a Trading Interval.

7.6.12. AEMO must not use the Dispatch Algorithm to issue Dispatch Instructions to Non-Scheduled Facilities, but must:

(a) use the Real-Time Market Submissions of Non-Scheduled Facilities as input to the Dispatch Algorithm;

(b) treat Non-Scheduled Facilities as Inflexible for the purposes of the Dispatch Algorithm; and

(c) record the Dispatch Forecast determined by the Dispatch Algorithm for each Non-Scheduled Facility for each Dispatch Interval.

7.6.13. Where AEMO has issued a Dispatch Instruction with a non-zero MW quantity to a Demand Side Programme, the Market Participant must maintain the DSP Energy Level of the Demand Side Programme to less than or equal to the level required in

the Dispatch Instruction from the start of the Dispatch Interval specified under clause 7.6.11A(c) until the start of the Dispatch Interval specified under clause 7.6.11A(c) for the next Dispatch Instruction issued to the Demand Side Programme.

7.6.13A. Where AEMO has issued a Dispatch Instruction with a zero MW quantity to a Demand Side Programme, the Market Participant may, from the start of the Dispatch Interval specified under clause 7.6.11A(c) for the Dispatch Instruction, increase the DSP Energy Level of the Demand Side Programme above the level specified in the previous Dispatch Instruction.

7.6.14. Subject to clause 7.10.14, unless the Dispatch Instruction is issued in accordance with a direction under clauses 3.4.4, 3.5.5 or 7.11D.2A, AEMO must determine the ramp rate in a Dispatch Instruction for a Scheduled Facility or Semi-Scheduled Facility using a linear profile between the Registered Facility's estimated Injection or Withdrawal at the start of the Dispatch Interval and at the end of the Dispatch Interval covered by the Dispatch Instruction.

7.6.15. AEMO must issue a Dispatch Instruction to a Demand Side Programme not more than four hours before the Dispatch Interval from which the Dispatch Instruction applies, and in accordance with the minimum response time specified for the Facility under Appendix 1(f)(iv).

7.6.16. [Blank]

7.6.17. Where AEMO issues a Dispatch Instruction to a Demand Side Programme, AEMO must review and if necessary adjust the Forecast Unscheduled Operational Demand for the relevant period to account for any expected changes to the Withdrawal of the Demand Side Programme's Associated Loads.

7.6.18. AEMO must document in a WEM Procedure:

(a) the processes AEMO and Market Participants must follow in issuing, recording, receiving, confirming and responding to Dispatch Instructions; and

(b) the methodology and data requirements for conversion of sent-out figures to as-generated figures where AEMO agrees to convert sent-out figures to as-generated figures for the purposes of implementing Dispatch Instructions for a Registered Facility.

7.6.19. Where a Market Participant is required to confirm the receipt of a Dispatch Instruction, AEMO must ensure that the communication methods used for issuing Dispatch Instructions allow the Market Participant to confirm the receipt of the Dispatch Instruction before the start of the Dispatch Interval to which the Dispatch Instruction relates in accordance with clause 7.6.20.

7.6.20. A Market Participant must confirm receipt of a Dispatch Instruction that was not issued by AEMO electronically via the Automatic Generation Control System for the Registered Facility in accordance with the WEM Procedure referred to in clause 7.6.18.

7.6.21. AEMO must not issue a Dispatch Instruction for a Dispatch Interval that has already ended.

7.6.22. AEMO must maintain a record of:

(a) each Dispatch Instruction;

(b) each confirmation of receipt of a Dispatch Instruction, where confirmation is required; and

(c) each notification from a Market Participant under clause 7.6.31,

in a consolidated electronic form which enables the Market Auditor to audit the information, and is sufficient for use in settlement.

7.6.22A. AEMO may, for a Dispatch Instruction that was not issued by the Dispatch Algorithm, retrospectively record the required information after the relevant Dispatch Interval has ended, and must make the information recorded available to the Market Participant for the Registered Facility.

Oscillation Control Constraint Equations

7.6.23. [Blank]

7.6.24. AEMO may include Oscillation Control Constraint Equations in the Dispatch Algorithm to reduce the occurrence of:

(a) Degenerate Solutions that result in inconsistent Dispatch Targets between Dispatch Intervals; and

(b) significant changes in Essential System Services Enablement Quantities between Dispatch Intervals.

7.6.25. Where AEMO includes Oscillation Control Constraint Equations in the Dispatch Algorithm in accordance with clause 7.6.24, AEMO must ensure that:

(a) the Dispatch Algorithm firstly takes into account all Constraint Equations other than Constraint Equations used to avoid Degenerate Solutions;

(b) the Dispatch Algorithm violates an Oscillation Control Constraint Equation only in order to take into account other Constraints (according to the formulation specified under clauses 7.2.4(e) and 7.2.4(f)); and

(c) the Constraint Relaxation process in clause 7.2.6 is applied when the Dispatch Algorithm determines that it is necessary to violate an Oscillation Control Constraint Equation.

7.6.26. When setting the parameters of Oscillation Control Constraint Equations, which determine the extent to which Oscillation Control Constraint Equations will bind, AEMO must consider the historic cost of binding Oscillation Control Constraint Equations as published in the Congestion Information Resource and the benefits to Power System Security and Power System Reliability of those Oscillation Control Constraint Equations.

7.6.27. AEMO must document in a WEM Procedure situations that are deemed to be significant for the purposes of clause 7.6.24(b).

AEMO Control of Registered Facilities

7.6.28. AEMO may, where required for a Registered Facility or equipment to participate in the Central Dispatch Process, or to provide an Essential System Service, or otherwise by agreement with a Market Participant, control specified operations of a Registered Facility or equipment, including:

(a) the starting, loading and stopping of one or more of the Market Participant's Scheduled Facilities; and

(b) limiting the Injection or Withdrawal of one or more of the Market Participant's Semi-Scheduled Facilities.

7.6.29. The operational control of a Registered Facility by AEMO pursuant to an agreement referred to in clause 7.6.28:

(a) does not remove AEMO's obligation to record Dispatch Instructions for those Registered Facilities; and

(b) does not affect or modify a Market Participant's rights and obligations in respect of a Registered Facility under these ESM Rules. To avoid doubt, notwithstanding AEMO's operational control, a Market Participant must comply with the obligations in section 7.10.

7.6.30. Where AEMO maintains operational control over a Registered Facility, AEMO must operate the Registered Facility in compliance with Dispatch Instructions recorded for the Registered Facility.

Dispatch Inflexibilities

7.6.31. Where a Market Participant reasonably expects that its Scheduled Facility or Semi-Scheduled Facility will be unable to comply with a Dispatch Instruction for the Registered Facility in a future Dispatch Interval, the Market Participant must immediately:

(a) amend its Real-Time Market Submission for energy for the Registered Facility by specifying:

i. the Registered Facility is Inflexible in the relevant Dispatch Interval; and

ii. a single offer tranche which specifies the fixed level of Injection or Withdrawal at which the Registered Facility must be operated in the Dispatch Interval;

(aA) amend, as required, its Real-Time Market Submissions for Frequency Co-optimised Essential System Services to reflect that the Registered Facility must operate at a fixed level of Injection or Withdrawal in the Dispatch Interval;

(b) provide AEMO with a reason why the Registered Facility is Inflexible which must be able to be independently verified; and

(c) if required, submit any Outages for the Registered Facility in accordance with section 3.21.

7.6.32. AEMO must use reasonable endeavours to issue Dispatch Instructions consistent with:

(a) a Real-Time Market Submission that specifies a Registered Facility as Inflexible; and

(b) a Registered Facility's Dispatch Inflexibility Profile.

7.6.33. AEMO must document in a WEM Procedure the forms of independent verification to be used to support a reason given under clause 7.6.31(b).

7.7. Scarcity and Intervention

7.7.1. To support the Central Dispatch Process and to maintain Power System Security and Reliability, AEMO may direct a Market Participant to operate a Registered Facility in a particular way in accordance with Chapters 3 and 3A.

7.7.2. Where AEMO has entered into a Supplementary Capacity Contract, AEMO may direct the relevant resource to provide an Eligible Service in accordance with the terms of the Supplementary Capacity Contract.

7.7.2A. In the event of a system shutdown or major supply disruption, AEMO may dispatch System Restart Service Providers to provide System Restart Services, and must dispatch facilities in accordance with the System Restart Plan and Local Black Start Procedures.

7.7.3. Where AEMO has issued a Low Reserve Condition Declaration relating to an actual or projected shortfall in Essential System Services, AEMO may direct a Market Participant to make a Real-Time Market Submission for a Registered Facility that has been accredited to provide an Essential System Service in accordance with section 2.34A, that requires a quantity specified by AEMO of Essential System Service to be offered up to the maximum accredited quantity, or the lowest Remaining Available Capacity under any Outage, applying to the

Registered Facility for that Frequency Co-optimised Essential System Service in any of the Dispatch Intervals covered by the Low Reserve Condition Declaration.

7.7.4. Where AEMO has issued a Low Reserve Condition Declaration relating to an actual or projected shortfall in energy and the Short Term PASA, Medium Term PASA or the Available Capacity Scenario for the Pre-Dispatch Schedule projects that a Registered Facility will be needed to provide energy, AEMO may, as applicable:

(a) where the projected energy shortfall will occur within four weeks of the date of the notice:

i. reject one or more Planned Outages for the Registered Facility; or

ii. issue an Outage Recall Direction to the Registered Facility; or

(b) where the projected energy shortfall will occur within one week of the date of the notice, direct the relevant Market Participant to make a Real-Time Market Submission for a Registered Facility offering its full Reserve Capacity Obligation Quantity as In-Service Capacity.

7.7.5. Where AEMO has issued a Low Reserve Condition Declaration and the Short Term PASA or the Available Capacity Scenario for the Pre-Dispatch Schedule projects that a Registered Facility will be needed to provide an Essential System Service, AEMO may direct a Market Participant to synchronise the Registered Facility to provide the Essential System Service.

7.7.5A. If AEMO has issued a Low Reserve Condition Declaration and the Short Term PASA or the Available Capacity Scenario for the Pre-Dispatch Schedule projects that a Registered Facility will be needed to provide energy, AEMO may direct the relevant Market Participant to use the Liquid Fuel nominated under clause 4.10.1(e)(v) in the relevant application for Certified Reserve Capacity for the Registered Facility.

7.7.6. Following a Contingency Event that results in a SWIS Frequency outside the Normal Operating Frequency Excursion Band, AEMO may adjust Essential System Service requirements to allow for an orderly transition back to full Essential System Service Enablement Quantities.

7.7.7. Following a Contingency Event that results in a SWIS Frequency outside the Normal Operating Frequency Excursion Band, if AEMO reasonably determines that the Dispatch Algorithm is not appropriately scheduling Registered Facilities for Essential System Services, AEMO may reduce the quantity of one or more Frequency Co-optimised Essential System Service requirement, including to zero, to reflect the activation of enabled Registered Facilities.

7.7.8. Where AEMO issues a direction to a Market Participant in accordance with this section 7.7 or under clauses 3.4.4, 3.4.5 or 3.5.5, AEMO must, as soon as

practicable, input appropriate Constraint Equations in the Dispatch Algorithm to ensure that the Dispatch Algorithm generates Dispatch Instructions that will allow the Registered Facility to comply with those directions.

7.7.8A. If AEMO includes a Constraint Equation in the Dispatch Algorithm under clause 7.7.8 to facilitate a direction to ensure, during a period subject to a Low Reserve Condition Declaration, a minimum level of Injection from a Registered Facility, then for the purposes of clauses 7.14.1 and 9.9.9, the Constraint Equation is deemed to reflect a Network Constraint.

7.7.8B. If AEMO includes a Constraint Equation in the Dispatch Algorithm under clause 7.7.8 to facilitate a direction to synchronise a Registered Facility to provide a RoCoF Control Service, then the Constraint Equation is deemed to be an RCS Provision Constraint Equation.

7.7.9. A Dispatch Instruction issued by AEMO in accordance with a direction under clauses 3.4.4, 3.4.5, 3.5.5 or 7.11D.2A, must be consistent with the Registered Facility's data held by AEMO, including Standing Data, at the time the Dispatch Instruction is determined.

7.7.10. Where AEMO directs a Market Participant to vary the operation of a Registered Facility in a way that is not fully set out in a Dispatch Instruction, AEMO must record:

(a) the date, time, and duration of the direction;

(b) the name of the Registered Facility;

(c) the nature of the direction (for example, commitment, fuel choice, reactive power output); and

(d) the reason for the direction.

7.7.11. Subject to clause 7.7.12, Market Participants must comply with directions given by AEMO in accordance with this section 7.7.

7.7.12. A Market Participant is not required to comply with a direction referred to in clause 7.7.11 if it would endanger the safety of any person, damage equipment, or breach any applicable law.

7.7.13. Where a Market Participant cannot, in accordance with clause 7.7.12, comply with a direction from AEMO under this section 7.7, the Market Participant must notify AEMO as soon as possible and provide the reasons why it cannot comply, which must be one or more of the reasons specified in clause 7.7.12.

7.7.14. AEMO must document in a WEM Procedure:

(a) the processes AEMO will use to determine which Registered Facility to direct under clauses 7.7.3, 7.7.4, 7.7.5 or 7.7.5A;

(b) the processes AEMO will use to determine which Registered Facility to direct to synchronise to provide a RoCoF Control Service under clause 3.4.4(d); and

(c) the circumstances that must exist for AEMO to issue a direction under clause 7.7.5A.

7.8. Market Schedules

7.8.1. AEMO must determine, make available to Market Participants and publish on the WEM Website the following Market Schedules in accordance with the Real-Time Market Timetable:

(a) Week-Ahead Schedules;

(b) Pre-Dispatch Schedules; and

(c) Dispatch Schedules.

7.8.2. AEMO must use processes that are consistent with the principles in section 7.11A in determining Market Schedules.

7.8.3. AEMO must determine Market Schedules comprising multiple Scenarios.

7.8.4. AEMO must include a Reference Scenario and Available Capacity Scenario in each Market Schedule.

7.8.5. A Reference Scenario for a Dispatch Schedule must:

(a) represent AEMO's best estimate of future dispatch and market outcomes;

(b) take into account:

i. Enablement Minimums;

ii. Low Breakpoints;

iii. High Breakpoints;

iv. Enablement Maximums;

v. whether each Facility is Inflexible; and

vi. Planned Outages and Forced Outages; and

(c) exclude any Available Capacity in Real-Time Market Submissions.

7.8.5A. A Reference Scenario for a Pre-Dispatch Schedule or Week-Ahead Schedule must:

(a) represent AEMO's best estimate of future dispatch and market outcomes; and

(b) exclude any Available Capacity in Real-Time Market Submissions.

7.8.5B. AEMO must use the same inputs and assumptions for the Available Capacity Scenario for a Week-Ahead Schedule, Pre-Dispatch Schedule or Dispatch Schedule as for the corresponding Reference Scenario, except that it must include any capacity offered as Available Capacity in Real-Time Market Submissions for which the relevant Start Decision Cutoff has not yet passed.

7.8.6. In determining Week-Ahead Schedules, AEMO must include Scenarios that:

(a) [Blank]

(b) use the same inputs and assumptions as for the Available Capacity Scenario, other than the inclusion of a higher load forecast; and

(c) use the same inputs and assumptions as for the Available Capacity Scenario, other than the inclusion of a lower load forecast.

7.8.6A. In determining Pre-Dispatch Schedules, AEMO must include Scenarios that:

(a) use the same inputs and assumptions as for the Reference Scenario, other than the inclusion of a higher load forecast; and

(b) use the same inputs and assumptions as for the Reference Scenario, other than the inclusion of a lower load forecast.

7.8.7. All of the inputs for each Market Schedule must be recorded by AEMO in a form which will enable a third party, including the Market Auditor, to audit each Market Schedule.

7.8.8. AEMO may determine and make available to Market Participants any Market Schedule or DSP Schedule more frequently than specified in clauses 7.1.3(a)(iii) to 7.1.3(a)(vii).

7.8.9. AEMO must document in a WEM Procedure the processes for determining Market Schedules, including:

(a) the number and types of Scenarios;

(b) the principles, methodologies and calculations used to determine:

i. input data for each Market Schedule; and

ii. input data for each Scenario; and

(c) how AEMO will apply clause 7.5.10 to each Market Schedule, including:

i. for each type of Market Schedule; and

ii. Dispatch Intervals or Pre-Dispatch Intervals within each Market Schedule.

7.8A. DSP Schedules

7.8A.1. A DSP Pre-Dispatch Schedule or DSP Week-Ahead Schedule is a schedule that includes, for each Demand Side Programme, for each Dispatch Interval in the Pre-Dispatch Schedule Horizon or Week-Ahead Schedule Horizon (as applicable):

(a) the DSP Unconstrained Quantity and DSP Constrained Quantity provided by the Market Participant in its DSP Profile Submission;

(b) AEMO's reasonable estimate based on the information available to AEMO of the greater of:

i. the Peak Reserve Capacity Obligation Quantity of the Demand Side Programme in the Dispatch Interval; and

ii. the Flexible Reserve Capacity Obligation Quantity of the Demand Side Programme in the Dispatch Interval;

(c) the DSP Forecast Capacity, determined by AEMO in accordance with clause 7.8A.3; and

(d) the DSP Forecast Reduction, determined by AEMO in accordance with clause 7.8A.4.

7.8A.2. AEMO must determine, make available to Market Participants and publish on the WEM Website the following DSP Schedules in accordance with the Real-Time Market Timetable:

(a) DSP Week-Ahead Schedules; and

(b) DSP Pre-Dispatch Schedules.

7.8A.3. The DSP Forecast Capacity for a Demand Side Programme in a Dispatch Interval is given by its Peak Reserve Capacity Obligation Quantity in that Dispatch Interval.

7.8A.4. The DSP Forecast Reduction for a Demand Side Programme in a Dispatch Interval is:

DSPForecastReduction = DSPUQ – DSPCQ

where:

(a) DSPUQ is the Unconstrained Quantity provided by the Market Participant in its DSP Profile Submission for the Demand Side Programme and Dispatch Interval; and

(b) DSPCQ is the Constrained Quantity provided by the Market Participant in its DSP Profile Submission for the Demand Side Programme and Dispatch Interval.

7.9. Commitment

7.9.1. Where a Real-Time Market Submission for a Registered Facility does not specify a Dispatch Inflexibility Profile, the Registered Facility must commence the process of starting and synchronising without instruction or direction from AEMO to be eligible for dispatch in a Dispatch Interval covered by the Real-Time Market Submission.

7.9.2. If a Market Participant intends to synchronise a Registered Facility, or any part of it, for which it has not specified a Dispatch Inflexibility Profile, then it must notify AEMO of the expected time of synchronisation by designating the Registered Facility's capacity as In-Service Capacity in the Real-Time Market Submission for the Registered Facility.

7.9.3. If a Market Participant intends to desynchronise a Registered Facility, or any part of it, for which it has not specified a Dispatch Inflexibility Profile, the Market Participant must notify AEMO of the expected time of desynchronisation by updating the Real-Time Market Submission for the Registered Facility to reflect the Registered Facility's Available Capacity and In-Service Capacity.

7.9.4. If a Market Participant intends to synchronise or desynchronise an unregistered Energy Producing System serving an Intermittent Load, the Market Participant to which the Intermittent Load is registered must notify AEMO of the expected time of synchronisation or desynchronisation of the unregistered Energy Producing System.

7.9.5. Clauses 7.9.2 and 7.9.3 do not apply where:

(a) AEMO issues a Dispatch Instruction to the Registered Facility that requires synchronisation or desynchronisation within one hour of the time the Dispatch Instruction is issued; or

(b) AEMO has directed the Registered Facility to synchronise or desynchronise under clause 3.5.5 or section 7.7.

7.9.6. AEMO may request a Market Participant provide further notification to AEMO immediately before synchronising or desynchronising a Registered Facility, or any part of it. A Market Participant must comply with a request under this clause 7.9.6.

7.9.7. AEMO may direct a Market Participant to not synchronise or desynchronise the Registered Facility, or any part of it, as applicable, if:

(a) AEMO reasonably considers that the synchronisation or desynchronisation of a Registered Facility, or any part of it, is required to enable AEMO to maintain Power System Security and Power System Reliability in accordance with Chapter 3;

(b) the synchronisation or desynchronisation of the Registered Facility, or any part of it, is not in accordance with the relevant Dispatch Instruction;

(c) AEMO reasonably considers that it would be unable to operate the Central Dispatch Process or utilise the Dispatch Algorithm in accordance with section 7.2 if synchronisation or desynchronisation were to occur; or

(d) in the case of a Registered Facility undergoing a Reserve Capacity Test or a Commissioning Test, the synchronisation or desynchronisation is not in accordance with the Reserve Capacity Test or Commissioning Test Plan, as applicable, for the Registered Facility approved by AEMO under section 3.21A.

7.9.8. A Market Participant must comply with a direction by AEMO in accordance with clause 7.9.7 unless complying with the direction would endanger the safety of any person, damage equipment, or breach any applicable law.

7.9.9. Where a Market Participant cannot comply with a direction from AEMO under clause 7.9.7, in accordance with clause 7.9.8, the Market Participant must notify AEMO as soon as possible and provide the reasons why it cannot comply, which must be one or more of the reasons specified in clause 7.9.8.

7.9.10. [Blank]

7.9.11. A Market Participant for an Interruptible Load which was activated in response to a Contingency Event must:

(a) obtain approval from AEMO prior to initiating the Restoration Profile for the Interruptible Load; and

(b) notify AEMO if the Restoration Profile for the Interruptible Load is not the same as the Restoration Profile in the Standing Data for the Interruptible Load.

Dispatch Compliance

7.10. Compliance with Dispatch Instructions

7.10.1. Unless otherwise directed by AEMO, a Market Participant must comply with the following in the most recently issued Dispatch Instruction applicable to its Scheduled Facility, Semi-Scheduled Facility or Interruptible Load for the Dispatch Interval:

(a) the Dispatch Target or Dispatch Cap as applicable;

(b) Essential System Service Enablement Quantities; and

(c) ramp rate.

7.10.1A. A Market Participant must comply with the most recently issued Dispatch Instruction applicable to its Demand Side Programme in a Dispatch Interval.

7.10.2. A Market Participant is not required to comply with clause 7.10.1 if:

(a) such compliance would endanger the safety of any person, damage equipment or breach any applicable law;

(b) the actual Injection or Withdrawal of the Registered Facility does not, at any time the Dispatch Instruction applies:

i. vary, by more than the applicable Tolerance Range or Facility Tolerance Range, from a linear profile between the Injection or Withdrawal of the Facility at the start of the Dispatch Interval and the Dispatch Target at:

1. the time at which the Dispatch Target would be reached by ramping at the ramp rate specified in the Dispatch Instruction; or

2. if no ramp rate is specified in the Dispatch Instruction, the end of the Dispatch Interval;

ii. exceed by more than the applicable Tolerance Range or Facility Tolerance Range a linear profile between the Injection or Withdrawal of the Facility at the start of the Dispatch Interval and the Dispatch Cap at:

1. the time at which the Dispatch Cap would be reached by ramping at the ramp rate specified in the Dispatch Instruction; or

2. if no ramp rate is specified in the Dispatch Instruction, the end of the Dispatch Interval;

(c) both of the following apply:

i. the Market Participant notifies AEMO, in accordance with clause 3.21.2(a), that its Registered Facility has been affected by or will be affected by a Forced Outage; and

ii. the quantity of the relevant Remaining Available Capacity for the Forced Outage notified is consistent with the extent to which the Market Participant did not comply with the most recently issued Dispatch Instruction applicable to its Registered Facility for the Dispatch Interval;

(d) the Registered Facility has been granted permission under clause 7.10.14 to ramp at a fixed rate, complies with the Dispatch Target or Dispatch Cap, as relevant, and ramps at the ramp rate specified in the Real-Time Market Submission for the Registered Facility;

(e) AEMO was unable to issue Dispatch Instructions to a Fast Start Facility in accordance with clause 7.6.32(b), and that Facility is responding according to its Dispatch Inflexibility Profile; or

(f) the Market Participant was conducting a Commissioning Test on a Facility as part of an approved Commissioning Test Plan, and was unable to comply with clause 7.10.1 in a Dispatch Interval due to a failure of the Facility's equipment.

7.10.2A. A Market Participant is not required to comply with clause 7.10.1A if such compliance would endanger the safety of any person, damage equipment or breach any applicable law.

7.10.3. Notwithstanding clause 7.10.2(b), a Market Participant must not consistently operate its Registered Facility at the extremes of the Tolerance Range or Facility Tolerance Range applicable to the Registered Facility.

7.10.4. Subject to clause 7.10.6A, if a Semi-Scheduled Facility contains an Electric Storage Resource, a Market Participant must not operate the Electric Storage Resource to increase the deviation of the Semi-Scheduled Facility's Injection or Withdrawal from the Semi-Scheduled Facility's Dispatch Forecast, unless the deviation is:

(a) instructed as part of the delivery of one or more Essential System Services;

(b) to provide a required response as part of the Facility's Registered Generator Performance Standard; or

(c) required to comply with a direction issued by AEMO.

7.10.5. AEMO must document in a WEM Procedure the method for calculating an Electric Storage Resource's contribution to the relevant Semi-Scheduled Facility's deviation from its Dispatch Forecast for the purposes of clause 7.10.4.

7.10.6. Subject to clause 7.10.6A, if a Market Participant can control the Injection or Withdrawal of a Semi-Scheduled Facility, it must not exercise that control so as to increase the deviation of the Semi-Scheduled Facility's Injection or Withdrawal from the Semi-Scheduled Facility's Dispatch Forecast, unless this deviation is:

(a) instructed as part of the delivery of one or more Essential System Services;

(b) to provide a required response as part of the Facility's Registered Generator Performance Standard; or

(c) required to comply with a direction issued by AEMO.

7.10.6A. Clauses 7.10.4 and 7.10.6 do not apply when AEMO issues a Dispatch Instruction for the Semi-Scheduled Facility that does not include a Dispatch Forecast.

7.10.6B. If a Market Participant holds Capacity Credits associated with an Energy Producing System for a Scheduled Facility, Semi-Scheduled Facility or Non-Scheduled Facility that also includes a Load, the Market Participant must not operate the Energy Producing System in a manner that results in, or has the effect of, reducing the Peak Individual Reserve Capacity Requirement or the Flexible Individual Reserve Capacity Requirement for the relevant Facility unless operating pursuant to a Dispatch Instruction or in accordance with a direction from AEMO.

7.10.7. Where a Market Participant becomes aware that it cannot comply or fully comply with a Dispatch Instruction, and that non-compliance is not covered under clause 7.10.2(b) through 7.10.2(e), it must notify AEMO as soon as practicable.

7.10.8. Where a Market Participant has notified AEMO under clause 7.10.7 that it cannot comply or fully comply with a Dispatch Instruction the Market Participant must provide AEMO with the reason it cannot comply or cannot fully comply with the Dispatch Instruction.

7.10.9. Where a Market Participant notifies AEMO under clause 7.10.7 that it cannot comply or fully comply with a Dispatch Instruction, or AEMO observes repeated non-compliance by the Market Participant in accordance with the WEM Procedure referred to in clause 2.15.4:

(a) AEMO may adjust inputs to the Dispatch Algorithm to accurately reflect the capability of the relevant Registered Facility; and

(b) the Market Participant must immediately after notifying AEMO under clause 7.10.7 update its Real-Time Market Submissions to accurately reflect the capability of its Registered Facility.

7.10.10. The Economic Regulation Authority may, at any time, request a Market Participant to provide further information in respect of the reasons that it could not comply or fully comply with a Dispatch Instruction, including further information to clarify any reason provided under clause 7.10.8.

7.10.11. A Market Participant must respond to any request from the Economic Regulation Authority under clause 7.10.10 by the time specified in the request.

7.10.12. Where a Registered Facility is only capable of ramping at a fixed rate, the Market Participant for the Registered Facility may apply to AEMO for permission to ramp at a fixed rate in response to Dispatch Instructions.

7.10.13. A Market Participant must provide evidence in support of an application made under clause 7.10.12, including any information specified in the WEM Procedure referred to in clause 7.10.21.

7.10.14. Where AEMO receives an application under clause 7.10.12 and is satisfied that the relevant Registered Facility is only able to ramp at a fixed rate, AEMO must

permit the Registered Facility to ramp at a fixed rate in response to Dispatch Instructions.

7.10.15. AEMO must notify a Market Participant and the Economic Regulation Authority, in writing, of its decision under clause 7.10.14 to grant permission or not and provide written reasons for its decision.

7.10.16. A Market Participant that has been granted permission in accordance with clause 7.10.14 must immediately notify AEMO if any works to the Registered Facility that is the subject of the permission results in the Facility being capable of ramping with a linear profile to the end of a Dispatch Interval to meet Dispatch Instructions.

7.10.17. In response to a notification under clause 7.10.16, AEMO may, by notice in writing to the Market Participant and the Economic Regulation Authority, revoke permission granted by it under clause 7.10.14.

7.10.18. A Facility accredited to provide Contingency Reserve must be capable of responding according to its accredited capability (including Facility Speed Factor), and sustain the required response for a period of at least 15 minutes following any Contingency Event.

7.10.19. Where a Market Participant receives a Dispatch Instruction to enable a Facility to provide a quantity of Regulation Raise or Regulation Lower in a Dispatch Interval, the Market Participant must ensure that the Facility (subject to the Facility's maximum ramp rates in relation to the provision of the relevant Essential System Service) is able to provide the full enabled MW quantity of response at any time during the Dispatch Interval, according and subject to commands from AEMO's Automatic Generation Control System.

7.10.20. A Registered Facility that has been accredited in accordance with section 2.34A to provide Contingency Reserve subject to a Maximum Contingency Reserve Block Size may respond to a Contingency Event using the whole quantity of all cleared or partially cleared Contingency Reserve Price-Quantity Pairs.

7.10.21. AEMO must document in a WEM Procedure:

(a) the processes to be followed by AEMO when it observes repeated non-compliance by a Market Participant in accordance with the WEM Procedure referred to in clause 2.15.4;

(b) the processes to be followed by a Market Participant making an application under clause 7.10.12 or notifying AEMO under clause 7.10.16;

(c) the information to be provided by a Market Participant in support of an application under clause 7.10.12;

(d) the processes to be followed by AEMO in determining whether or not to grant permission under clause 7.10.14 or to revoke permission under clause 7.10.17; and

(e) the timeline for assessing an application under clause 7.10.12 and notifying a Market Participant of its decision in accordance with clause 7.10.15, which must not exceed 10 Business Days from the date AEMO receives the application.

Market Advisories

7.11. Market Advisories

7.11.1. A Market Advisory is a notification published by AEMO on the WEM Website that there has been, or is likely to be, an event that AEMO reasonably considers may impact Power System Security, Power System Reliability or the operation of the Central Dispatch Process, the Real-Time Market, the Short Term Energy Market or the Reserve Capacity Mechanism.

7.11.2. AEMO must issue a Market Advisory for future potential events if it considers there to be a high probability that the event will occur unless the event has already been signalled in a Pre-Dispatch Schedule.

7.11.3. Market Advisories must be released as soon as practicable after AEMO becomes aware of a situation requiring the release of a Market Advisory and AEMO must update the Market Advisory as soon as possible after new, relevant information becomes available to it.

7.11.3A. Where AEMO must respond to an unexpected and sudden event, AEMO may issue a Market Advisory after the event has occurred.

7.11.4. AEMO must withdraw a Market Advisory and notify Market Participants, Network Operators and the Economic Regulation Authority of the withdrawal of a Market Advisory as soon as practicable once the situation that the Market Advisory relates to has finished.

7.11.5. AEMO must release a Market Advisory in the event of, or in anticipation of, any circumstance which would, in AEMO's reasonable opinion, significantly threaten Power System Security or Power System Reliability, including but not limited to, the following circumstances:

(a) the SWIS is in, or is expected to be in, an Emergency Operating State;

(b) the SWIS is unable to be, or is expected that it cannot be, operated in accordance with the Power System Security Principles;

(c) System Restart Service is, or is expected to be, enabled for purposes other than a test;

(d) AEMO is unable to maintain the SWIS in a Reliable Operating State;

(e) the whole or any part of the ESM Rules, including, without limitation, in respect to the operation of the Real-Time Market, have been, or are expected to be, suspended in accordance with clause 2.44.1;

(f) fuel supply on a Trading Day is at risk, or is significantly more restricted than usual;

(g) involuntary load shedding is occurring or is expected to occur that AEMO reasonably considers may impact Power System Security, Power System Reliability or the operation of Central Dispatch Process;

(gA) AEMO reasonably considers that the dispatch of Demand Side Programmes may occur for a Trading Day as a result of a potential energy shortfall identified in accordance with the WEM Procedure referred to in clause 7.6.5C;

(h) significant degradation or failure of AEMO market or control systems required for the normal conduct of the operation of the Real-Time Market and the Central Dispatch Process;

(i) an AEMO Intervention Event has occurred, or is expected to occur; and

(j) a significant Contingency Event has occurred, as detailed in the WEM Procedure referred to in clause 7.11.8,

unless the situation has already been signalled through a Low Reserve Condition Declaration, Pre-Dispatch Schedule, or in the information published under section 3.22, as applicable.

7.11.6. Subject to clause 7.11.6B, a Market Advisory must contain the following information:

(a) the date and time that the Market Advisory is released;

(b) the time period for which the Market Advisory is expected to apply;

(c) details of the situation that the Market Advisory relates to, including the location, extent and seriousness of the situation where AEMO is able to reasonably estimate this information at the time the Market Advisory is issued;

(cA) where the Market Advisory relates to the circumstances described in clause 7.11.5(gA), AEMO's estimate of:

i. which Demand Side Programmes may be dispatched; and

ii. the period during which the DSP Energy Level of the Demand Side Programmes may potentially be restricted;

(d) any actions AEMO plans to take in response to the situation, including whether AEMO's actions constitute an AEMO Intervention Event;

(e) the latest time at which AEMO would need to intervene through an AEMO Intervention Event should the response from Market Participants not be such as to obviate the need for the AEMO Intervention Event;

(f) where relevant, a description of the actions AEMO has taken or is taking in response to the situation; and

(g) where AEMO has developed the WEM Procedure referred to in clause 7.11.8, whether that WEM Procedure applies to the situation.

7.11.6A. AEMO must issue an updated Market Advisory containing the information in clause 7.11.6(c) as soon as practicable where AEMO revises an estimate of the information or after AEMO is able to reasonably determine the information.

7.11.6B. If any information that would otherwise be released under clauses 7.11.6(c), 7.11.6(d) or 7.11.6(e) is confidential or has a confidentiality status that would prevent the Economic Regulation Authority from releasing the information, AEMO must:

(a) release that information to the Economic Regulation Authority but, subject to clause 7.11.6B(b), ensure that the Market Advisory contains information of only a general or aggregate nature so that the information publicly released is not confidential; and

(b) include in the Market Advisory the details of any circumstance that has given rise to AEMO issuing the Market Advisory, including:

i. the name of the Registered Facility or Network element where that Registered Facility or Network element has caused or materially contributed to the circumstances giving rise to the Market Advisory;

ii. the name of the Registered Facility, or Registered Facilities, that are likely to be dispatched in response to the Market Advisory; and

iii. unless already published, any changes to the inputs to the Dispatch Algorithm that AEMO has made or intends to make in response to the situation identified in the Market Advisory, including changes to Constraint Equations.

7.11.6C. Where AEMO is required to:

(a) make changes to any inputs to the Dispatch Algorithm; or

(b) issue a direction to a Market Participant or a Network Operator,

prior to issuing a Market Advisory, AEMO may make any such changes and issue any such direction as if a Market Advisory had already been issued.

7.11.7. Market Participants, Network Operators and the Economic Regulation Authority must inform AEMO as soon as practicable if they become aware of any

circumstances that might reasonably be expected to result in AEMO issuing a Market Advisory.

7.11.8. AEMO may document in a WEM Procedure the processes to be followed by AEMO and Market Participants with respect to the events or situations specified in, or contemplated by, this section 7.11, including:

(a) a description of events that AEMO would consider significant for the purposes of 7.11.5(j);

(b) the processes to be followed by Market Participants after receiving a relevant Market Advisory; and

(c) the processes to be followed by AEMO after it has issued a relevant Market Advisory.

Price Determination

7.11A. Price Determination Principles

7.11A.1. The principles applying to the determination of prices in the Real-Time Market are:

(a) subject to this section 7.11A and sections 7.11B and 7.11E, a Market Clearing Price at the Reference Node is determined by AEMO using the Dispatch Algorithm for each Dispatch Interval;

(b) a Reference Trading Price is determined by AEMO as the time-weighted average of the Market Clearing Prices for energy for each Dispatch Interval in a Trading Interval;

(c) Registered Facilities which operate in accordance with a direction in the Central Dispatch Process are to be taken into account by AEMO, but AEMO must not use the applicable Real-Time Market Offers or Real-Time Market Bids for those Registered Facilities in the calculation of the Market Clearing Price for the relevant Market Service in the relevant Dispatch Interval;

(d) where a Registered Facility is Inflexible, AEMO must take the Inflexibility of the Registered Facility into account in the Dispatch Algorithm, but must not use the price in the Real-Time Market Offer or Real-Time Market Bid for that Registered Facility for the applicable Market Service in the calculation of the Market Clearing Price for that Market Service in the relevant Dispatch Interval;

(e) Loss Factors and Constraint Equations are to be taken into account by AEMO in the calculation of Market Clearing Prices;

(f) where the Injection or Withdrawal of a Registered Facility is limited above or below the level at which it would otherwise have been dispatched by AEMO on the basis of its Real-Time Market Offer or Real-Time Market Bid

for energy due to a Constraint Equation included in the Dispatch Algorithm under clause 7.5.8(a):

i. the Registered Facility's Real-Time Market Offer or Real-Time Market Bid for energy, as applicable, is to be taken into account by AEMO in the determination of dispatch, but the Real-Time Market Offer or Real-Time Market Bid, as applicable, is not to be used by AEMO in the calculation of the Market Clearing Price for energy in the relevant Dispatch Interval; and

ii. the Registered Facility's Real-Time Market Submissions for other Frequency Co-optimised Essential System Services are to be used by AEMO in the determination of dispatch and taken into account in determining the Market Clearing Prices for those Market Services;

(g) subject to section 9.9, AEMO must apply the Reference Trading Price to both sales and purchases of energy in the relevant Trading Interval;

(h) when a Market Clearing Price is determined for a Frequency Co-optimised Essential System Service, AEMO must apply that price to purchases of that Frequency Co-optimised Essential System Service in the relevant Dispatch Interval; and

(i) where there is a FCESS Accreditation Shortfall in a Frequency Co-optimised Essential System Service, AEMO must set the Market Clearing Price for that service to the difference between the Energy Offer Price Ceiling and the Energy Offer Price Floor.

7.11B. Determination of Market Clearing Prices

7.11B.1. Subject to section 7.11C, where AEMO runs the Dispatch Algorithm, AEMO must determine a Market Clearing Price for each Market Service for a Dispatch Interval.

7.11B.1A. Subject to clause 7.11D.5, if AEMO fails to run the Dispatch Algorithm for the purposes of the Central Dispatch Process for a Dispatch Interval, then AEMO must:

(a) determine the Market Clearing Prices for the Dispatch Interval from the Reference Scenario for the Dispatch Interval in the Market Schedule identified in accordance with clause 7.11B.1B; and

(b) determine the information identified in clauses 7.13.1BA, 7.13.1DA and 7.13.1EA for the Dispatch Interval using the Reference Scenario for the Dispatch Interval in the Market Schedule identified in accordance with clause 7.11B.1B.

7.11B.1B. For the purposes of clauses 7.11B.1A and 7.11C.2, AEMO must identify a replacement Market Schedule containing the Dispatch Interval as follows:

(a) if AEMO has sufficient information, it must use the Dispatch Algorithm with corrected Dispatch Inputs to determine and identify a Market Schedule for the relevant Dispatch Interval that does not include manifestly incorrect data, in accordance with the WEM Procedure referred to in clause 7.11C.1;

(b) if AEMO is unable to identify a Market Schedule under clause 7.11B.1B(a), then AEMO must identify the most recent Dispatch Schedule, if available, that contains the Dispatch Interval and which AEMO reasonably considers does not include manifestly incorrect data;

(c) if AEMO is unable to identify a Market Schedule under clauses 7.11B.1B(a) or 7.11B.1B(b), then AEMO must identify the most recent Pre-Dispatch Schedule, if available, that contains the Dispatch Interval and which AEMO reasonably considers does not include manifestly incorrect data; and

(d) if AEMO is unable to identify a Market Schedule under clauses 7.11B.1B(a), 7.11B.1B(b) or 7.11B.1B(c), then AEMO must identify the most recently determined Dispatch Schedule or Pre-Dispatch Schedule that contains the Dispatch Interval.

7.11B.2. Subject to clauses 7.11B.1A, 7.11B.3, 7.11B.3A, 7.11B.3B, 7.11B.4, 7.11B.4A and 7.13.1CB, the Market Clearing Price for a Market Service represents the marginal value of that Market Service at the Reference Node at that time, which is calculated as the cost of meeting an incremental change in the requirement for the Market Service at that time in accordance with clause 7.6.4.

7.11B.3. Subject to clause 7.11D.5, if, for any Dispatch Interval:

(a) the Dispatch Interval has not already been subject to the Central Dispatch Process;

(b) AEMO reasonably determines that the Dispatch Algorithm used for the Central Dispatch Process may determine that there is insufficient capacity to meet all load; and

(c) AEMO has issued a manual load shed direction to a Network Operator under clause 3.4.4,

then AEMO must set the Energy Market Clearing Price for the Dispatch Interval to equal the Energy Offer Price Ceiling.

7.11B.3A. If, for any Dispatch Interval, the Energy Market Clearing Price determined using the Dispatch Algorithm is:

(a) greater than the Energy Offer Price Ceiling, then AEMO must set the Energy Market Clearing Price in that Dispatch Interval to equal the Energy Offer Price Ceiling; or

(b) less than the Energy Offer Price Floor, then AEMO must set the Energy Market Clearing Price in that Dispatch Interval to equal the Energy Offer Price Floor.

7.11B.3B. If, for any Dispatch Interval, the Market Clearing Price for a Frequency Co-optimised Essential System Service determined using the Dispatch Algorithm is:

(a) greater than the applicable FCESS Clearing Price Ceiling, then AEMO must set the Market Clearing Price for the Frequency Co-optimised Essential System Service in that Dispatch Interval to equal the applicable FCESS Clearing Price Ceiling; or

(b) less than zero, then AEMO must set the Market Clearing Price for the Frequency Co-optimised Essential System Service in that Dispatch Interval to equal zero.

7.11B.4. If, for any Dispatch Interval, AEMO has determined that the Dispatch Interval is an Affected Dispatch Interval under clause 7.11C.1A, then AEMO must set the Market Clearing Prices for the Dispatch Interval in accordance with section 7.11C.

7.11B.4A. If, for any Dispatch Interval, AEMO has not determined that the Dispatch interval is an Affected Dispatch Interval, and AEMO has declared the Dispatch Interval to be an Intervention Dispatch Interval under clause 7.11C.6, then AEMO must set the Market Clearing Prices for the Dispatch Interval in accordance with clauses 7.11C.7, 7.11C.8, 7.11C.9 and 7.11C.10.

7.11C. Corrections to Price Determinations and Intervention Pricing

7.11C.1. AEMO must develop procedures for the identification of Affected Dispatch Intervals within the timeframes contemplated under clause 7.11C.2, and must document in a WEM Procedure:

(a) the conditions or circumstances that would identify a Dispatch Interval as an Affected Dispatch Interval;

(b) the conditions and circumstances that would enable AEMO to determine a replacement Market Schedule under clause 7.11B.1B(a); and

(c) the process AEMO must follow to determine a replacement Market Schedule under clause 7.11B.1B(a).

7.11C.1A. Subject to clause 7.11D.5, AEMO must use the procedures developed under clause 7.11C.1 to determine whether each Dispatch Interval is an Affected Dispatch Interval.

7.11C.2. Where AEMO determines that a Dispatch Interval is an Affected Dispatch Interval, AEMO must, by noon on the first Business Day following the end of the Trading Day which contains the Dispatch Interval:

(a) replace all Market Clearing Prices for the Dispatch Interval with the Market Clearing Prices from the Reference Scenario for the Dispatch Interval in the Market Schedule identified in accordance with clause 7.11B.1B;

(b) if AEMO has already calculated the relevant Reference Trading Price, recalculate and adjust the Reference Trading Price, in accordance with clause 7.11A.1(b); and

(c) determine the information identified in clauses 7.13.1BA, 7.13.1DA and 7.13.1EA for the Dispatch Interval using the Reference Scenario for the Dispatch Interval in the Market Schedule identified in accordance with clause 7.11B.1B.

7.11C.3. As soon as reasonably practicable after the actions referred to in clause 7.11C.2, AEMO must publish on the WEM Website a report outlining:

(a) the reasons for determining that a Dispatch Interval was an Affected Dispatch Interval;

(b) whether that determination was correct; and

(c) what action will be taken to minimise the risk of a similar event in future.

7.11C.4. At least once each year, AEMO must review the effectiveness of the processes developed by AEMO under clause 7.11C.1 and publish a report on the WEM Website detailing the findings of the review.

7.11C.5. A report under clause 7.11C.4 must:

(a) cover the 12-month period since the end of the period covered by the last report;

(b) be published within 3 months of the end of the review period covered by the report; and

(c) include the following:

i. details of all Affected Dispatch Intervals which should not have been identified as Affected Dispatch Intervals;

ii. the reasons why the Affected Dispatch Intervals identified under clause 7.11C.5(c)(i) were identified as Affected Dispatch Intervals; and

iii. details of any Dispatch Intervals that AEMO has subsequently determined should have been identified by AEMO as Affected Dispatch Intervals, but were not.

7.11C.5A. AEMO must develop and submit a Procedure Change Proposal where it considers that a change is required to the WEM Procedure developed under clause 7.11C.1 as a result of a report that it has published under clause 7.11C.4.

7.11C.6. Subject to clause 7.11D.5, AEMO must declare a Dispatch Interval to be an Intervention Dispatch Interval where one or more AEMO Intervention Events were in effect in the Dispatch Interval.

7.11C.7. Subject to clauses 7.11C.8(a) and 7.11C.8(b), if, in AEMO's reasonable opinion, the reason for an AEMO Intervention Event is to obtain either:

(a) a Market Service for which a Market Clearing Price is determined by the Dispatch Algorithm; or

(b) a service that is a direct substitute for a Market Service for which a Market Clearing Price is determined by the Dispatch Algorithm,

then AEMO must, in accordance with the methodology or assumptions to be documented in the WEM Procedure referred to in clause 7.11C.11, set the Market Clearing Prices for an Intervention Dispatch Interval at the values which AEMO, in its reasonable opinion, considers would have applied as the Market Clearing Prices for that Dispatch Interval had the AEMO Intervention Event not occurred.

7.11C.8. If, in AEMO's reasonable opinion, the reason for an AEMO Intervention Event is to obtain:

(a) energy or a Frequency Co-optimised Essential System Service which, as a result of a Constraint, is only capable of being provided by a Registered Facility in a part of the SWIS which does not include the Reference Node due to the Constraint;

(b) demand response which, as a result of a Constraint, is needed to reduce demand for energy or Frequency Co-optimised Essential System Service in a part of the SWIS which does not include the Reference Node due to the Constraint; or

(c) a service for which a Market Clearing Price is not determined by the Dispatch Algorithm, regardless of whether energy or Frequency Co-optimised Essential System Services are also provided incidental to the provision of the service,

then AEMO must continue to set the Market Clearing Prices for the Intervention Dispatch Interval in accordance with section 7.11B, excluding 7.11B.4A.

7.11C.9. If more than one AEMO Intervention Event is in effect in respect of an Intervention Dispatch Interval, AEMO must set the Market Clearing Prices pursuant to clause 7.11C.7 as if:

(a) the services described in clause 7.11C.7 were not provided; and

(b) energy or any Essential System Services provided incidental to the provision of any services described in clause 7.11C.8 were taken into account.

7.11C.10. AEMO must use its reasonable endeavours to set Market Clearing Prices according to clause 7.11C.7 as soon as practicable following an AEMO Intervention Event, but may continue to set Market Clearing Prices as if no AEMO Intervention Event had occurred for Dispatch Intervals before the later of:

(a) if AEMO is able to operate the SWIS in accordance with the Power System Security Principles, the Dispatch Interval immediately following the first Intervention Dispatch Interval; or

(b) if AEMO is not able to operate the SWIS in accordance with the Power System Security Principles, the second Dispatch Interval after AEMO became able to operate the SWIS in accordance with the Power System Security Principles after the first Intervention Dispatch Interval.

7.11C.11. AEMO must document in a WEM Procedure the methodology it will use, and any assumptions it may be required to make, to determine the Market Clearing Prices under clauses 7.11C.7, 7.11C.8 and 7.11C.10. The methodology must, wherever reasonably practicable:

(a) be consistent with the principles for the determination of Market Clearing Prices set out in section 7.11A; and

(b) enable AEMO to determine and publish such prices in accordance with the applicable timeframes for the publication of the Market Clearing Prices under these ESM Rules.

Real-Time Market Suspension and Administered Pricing

7.11D. Real-Time Market Suspension

7.11D.1. AEMO may suspend the Real-Time Market:

(a) in the event of a system shutdown or major supply disruption;

(b) when AEMO has been requested by the Minister, under clause 2.44.1, to suspend the market or operate all or part of the power system in connection with the exercise of emergency powers; or

(c) when AEMO determines, in its reasonable opinion, that actions undertaken to maintain Power System Security and Power System Reliability are significantly impacting market settlement in accordance with the provisions of these ESM Rules due to:

i. failure of its IT systems;

ii. loss of communications or control systems required to maintain Power System Security; or

iii. any other reason as identified in the WEM Procedure published under clause 7.11D.4.

7.11D.2. When AEMO determines to suspend the Real-Time Market under clause 7.11D.1 it must:

(a) issue a Market Advisory which must include:

i. the time from which the Real-Time Market will be suspended, which must be from the commencement of a Dispatch Interval;

ii. the reason AEMO has been required to suspend the Real-Time Market; and

iii. where applicable, any additional actions to those specified in the WEM Procedure under clause 7.11D.4 required of Market Participants during the suspension period; and

(b) from the time specified in clause 7.11D.2(a)(i):

i. where AEMO determines that the Dispatch Algorithm cannot be used, cease the use of the Dispatch Algorithm in the Central Dispatch Process;

ii. determine Market Clearing Prices in accordance with section 7.11E;

iii. determine the Minimum RoCoF Control Requirement, Additional RoCoF Control Requirement and RoCoF Control Requirement for each Dispatch Interval when the Real-Time Market will be suspended as zero; and

iv. determine the Facility Performance Factor for each Frequency Co-optimised Essential System Service for each Registered Facility for each Dispatch Interval when the Real-Time Market will be suspended as one.

7.11D.2A. If AEMO has suspended the Real-Time Market in accordance with 7.11D.1, AEMO may in addition to any other ability:

(a) direct any Rule Participant to provide Essential System Services where they are capable of doing so;

(b) cease the use of the Dispatch Algorithm in the Central Dispatch Process;

(c) issue directions to Rule Participants to operate Registered Facilities at a particular level or in a particular way; and

(d) take other actions as considered necessary, consistent with good electricity industry practice, in order to maintain Power System Security or Power System Reliability in the SWIS.

7.11D.3. Where AEMO determines, in its reasonable opinion, it is practicable to resume the operation of the Real-Time Market it must:

(a) issue a Market Advisory which must include:

i. the time from which the Real-Time Market suspension will be lifted which must be the commencement of a Trading Interval and provide a notice period of not less than one hour; and

ii. where applicable, any additional actions to those specified in the WEM Procedure under clause 7.11D.4 required of Market Participants leading up to the time of the suspension being lifted; and

(b) where relevant, resume the use of the Dispatch Algorithm in the Central Dispatch Process from the time described in clause 7.11D.3(a)(i).

7.11D.4. AEMO must document in a WEM Procedure:

(a) the process by which AEMO will determine to suspend the Real-Time Market;

(b) any reasons under clause 7.11D.1(c)(iii) that AEMO may suspend the Real-Time Market;

(c) the processes which Market Participants may be required to follow during the suspension;

(d) the processes AEMO will follow during the suspension and the process to lift the suspension; and

(e) any actions required of AEMO or Market Participants to resume the Real-Time Market.

7.11D.5. Where AEMO suspends the Real-Time Market under clause 7.11D.1, clauses 7.1.1, 7.2.2, 7.2.4, 7.6.1, 7.6.2, 7.11B.1A, 7.11B.3, 7.11C.1A, 7.11C.6, 7.13.1, 7.13.1A, 7.13.1CC, 7.13.1D, 7.13.1DA, 7.13.1EA, 7.13.1G, 7.13A.1 and 7.14.1 do not apply.

7.11D.6. AEMO must set the RTM Suspension Flag for each Dispatch Interval to:

(a) one, if AEMO has suspended the Real-Time Market under clause 7.11D.1 for the Dispatch Interval; or

(b) zero, otherwise.

7.11E. Administered Pricing in the Event of Market System Failure

7.11E.1. If the Real-Time Market is suspended under clause 7.11D.1(a), AEMO must set the final Market Clearing Prices for each Market Service in any Dispatch Interval during the suspension as follows:

(a) the Final Energy Market Clearing Price is to equal the Energy Offer Price Ceiling;

(b) the Final Regulation Raise Market Clearing Price is to equal zero and the Essential System Service Enablement Quantity for each Registered Facility accredited for Regulation Raise for the Dispatch Interval is zero;

(c) the Final Regulation Lower Market Clearing Price is to equal zero and the Essential System Service Enablement Quantity for each Registered Facility accredited for Regulation Lower for the Dispatch Interval is zero;

(d) the Final Contingency Reserve Raise Market Clearing Price is to equal zero and the Essential System Service Enablement Quantity for each Registered Facility accredited for Contingency Reserve Raise for the Dispatch Interval is zero;

(e) the Final Contingency Reserve Lower Market Clearing Price is to equal zero and the Essential System Service Enablement Quantity for each Registered Facility accredited for Contingency Reserve Lower for the Dispatch Interval is zero; and

(f) the Final RoCoF Control Service Market Clearing Price is to equal zero and the RoCoF Control Service requirements for the Dispatch Interval is zero.

7.11E.2. If the Real-Time Market is suspended under clause 7.11D.1(b), AEMO must set the final Market Clearing Prices for each Market Service in any Dispatch Interval during the suspension as requested by the Minister.

7.11E.3. If the Real-Time Market is suspended under clause 7.11D.1(c), AEMO must set the final Market Clearing Prices for each Market Service in any Dispatch Interval during the suspension as the average final Market Clearing Price for that Market Service in the equivalent intervals in the four most recent completed Trading Weeks.

7.11E.4. Where, for the purposes of clause 7.11E.3, a Market Clearing Price is not available for a Market Service for an equivalent Dispatch Interval in the four most recent completed Trading Weeks referred to in clause 7.11E.3, AEMO must set the final Market Clearing Prices for each Market Service as follows:

(a) where there is no Final Energy Market Clearing Price available for the equivalent Dispatch Interval, AEMO must set the Final Energy Market Clearing Price as the average price for energy from the most recently published price for energy for 28 consecutive Trading Days for the equivalent Dispatch Interval;

(b) where there is no Final Regulation Raise Market Clearing Price available for the equivalent Dispatch Interval, AEMO must set the Final Regulation Raise Market Clearing Price as the average price for Regulation Raise, or equivalent service, from the most recently published price for the service for 28 consecutive Trading Days for the equivalent Dispatch Interval;

(c) where there is no Final Regulation Lower Market Clearing Price available for the equivalent Dispatch Interval, AEMO must set the Final Regulation Lower Market Clearing Price as the average price for Regulation Lower, or equivalent service, from the most recently published price for the service for 28 consecutive Trading Days for the equivalent Dispatch Interval;

(d) where there is no Final Contingency Reserve Raise Market Clearing Price available for the equivalent Dispatch Interval, AEMO must set the Final Contingency Reserve Raise Market Clearing Price as:

Margin(di) × Energy_Price(di)

where:

i. Margin is the Spinning Reserve margin price as the most recent determination by the Economic Regulation Authority for the equivalent Dispatch Interval; and

ii. Energy_Price is the average price for energy from the most recently published energy prices for 28 consecutive Trading Days for the equivalent Dispatch Interval;

(e) where there is no Final Contingency Reserve Lower Market Clearing Price available for the equivalent Dispatch Interval, AEMO must set the Final Contingency Reserve Lower Price Market Clearing Price using an estimation method that takes into account the quantum and price set by the Economic Regulation Authority for load rejection reserve; and

(f) where there is no Final RoCoF Control Service Market Clearing Price available for the equivalent Dispatch Interval, AEMO must set the RoCoF Control Service requirements for the Dispatch Interval to zero and set the Final RoCoF Control Service Market Clearing Price to zero.

7.11E.5. All administered prices set under clauses 7.11E.3 and 7.11E.4 will be subject to a floor of $0.

7.11E.6. To avoid doubt, and without limiting clause 1.55.9, for the purposes of the time periods specified in clauses 7.11E.3 and 7.11E.4, AEMO may, to the extent it considers necessary to set the final Market Clearing Prices specified in those clauses, use any data and information under the Pre-Amended Rules (as defined in clause 1.55.9) that it considers reasonable to use in the circumstances.

7.12. Market Suspension Compensation

7.12.1. In this section 7.12:

Suspension Period: Means a continuous period in which AEMO has suspended the Real-Time Market under clause 7.11D.1(c).

Deemed Real-Time Payment: Has the meaning given in clause 7.12.1A.

Deemed Real-Time Cost: Has the meaning given in clause 7.12.1B.

7.12.1A. The Deemed Real-Time Payment for Market Participant p in Suspension Period s is:

$$
\begin{aligned}
&DeemedRTPayment(p,s) \\
&\quad = NCESS_Activation_Payment(p,s) \\
&\quad + SC_Activation_Payment(p,s) \\
&\quad + \sum_{DI \in s} \sum_{f \in p} \Big(CR_Payable(f,DI) + CL_Payable(f,DI) \\
&\quad + RCS_Payable(f,DI) + RR_Payable(f,DI) + RL_Payable(f,DI) \\
&\quad + \Big(max\big(MarginalOfferPrice(f,DI), ReferenceTradingPrice(t)\big) \\
&\quad \times EnergyUpliftQuantity(f,DI) \Big) \Big)
\end{aligned}
$$

where:

(a) NCESS_Activation_Payment(p,s) is the sum of any activation payments received by Market Participant p for Suspension Period s under a Non-Co-optimised Essential System Service Contract for a Registered Facility;

(b) SC_Activation_Payment(p,s) is the sum of any activation payments received by Market Participant p for Suspension Period s under a Supplementary Capacity Contract for a Registered Facility;

(c) DI∈s denotes all Dispatch Intervals DI in Suspension Period s;

(d) f∈p denotes all Registered Facilities f registered to Market Participant p in Dispatch Interval DI;

(e) CR_Payable(f,DI) is the Contingency Reserve Raise amount payable for Registered Facility f in Dispatch Interval DI as calculated in accordance with clause 9.10.6;

(f) CL_Payable(f,DI) is the Contingency Reserve Lower amount payable for Registered Facility f in Dispatch Interval DI as calculated in accordance with clause 9.10.10;

(g) RCS_Payable(f,DI) is the RoCoF Control Service amount payable for Registered Facility f in Dispatch Interval DI as calculated in accordance with clause 9.10.14;

(h) RR_Payable(f,DI) is the Regulation Raise amount payable for Registered Facility f in Dispatch Interval DI as calculated in accordance with clause 9.10.22;

(i) RL_Payable(f,DI) is the Regulation Lower amount payable for Registered Facility f in Dispatch Interval DI as calculated in accordance with clause 9.10.23;

(j) MarginalOfferPrice(f,DI) is the highest Loss Factor Adjusted Price associated with any cleared (or scheduled) Price-Quantity Pair for In-Service Capacity in respect of Market Participant p's Real-Time Market Offer for energy that was dispatched for Registered Facility f in Dispatch Interval DI;

(k) ReferenceTradingPrice(t) is the Final Reference Trading Price for Trading Interval t containing Dispatch Interval DI; and

(l) EnergyUpliftQuantity(f,DI) is the quantity determined for Registered Facility f in Dispatch Interval DI under clause 9.9.11.

7.12.1B. The Deemed Real-Time Cost for Market Participant p in Suspension Period s is the Economic Regulation Authority's best estimate of all the efficient variable costs incurred by Market Participant p in Suspension Period s that relate only to the provision of Market Services, Non-Co-optimised Essential System Services and supplementary capacity from Registered Facilities.

7.12.1C. If:

(a) AEMO has suspended the Real-Time Market under clause 7.11D.1(c); and

(b) the Economic Regulation Authority considers that a Market Participant has received a material and irregular level of Energy Uplift Payments over the Suspension Period,

then the Economic Regulation Authority must determine and compare the Market Participant's Deemed Real-Time Payment and Deemed Real-Time Cost for the Suspension Period.

7.12.2. If the Economic Regulation Authority determines under clauses 7.12.1C or 7.12.7(b) that a Market Participant's Deemed Real-Time Payment for a Suspension Period exceeds its Deemed Real-Time Cost (**"Market Participant Excess"**), then:

(a) the Economic Regulation Authority may determine a Market Participant Excess Amount for the Market Participant for each Trading Interval in the Suspension Period in accordance with clause 7.12.2A; and

(b) if the Economic Regulation Authority determines a Market Participant Excess Amount for the Market Participant for each Trading Interval in the Suspension Period under clause 7.12.2(a), the Economic Regulation Authority must, as soon as practicable, but before the commencement date corresponding to the Settlement Adjustment Date 3 of the first Trading Week to which the Market Participant Excess Amounts relate, notify AEMO and the Market Participant of the Market Participant Excess Amounts and the Trading Intervals to which each Market Participant Excess Amount relates.

7.12.2A. The Economic Regulation Authority must determine a Market Participant Excess Amount for Market Participant p for Trading Interval t in Suspension Period s under clause 7.12.2(a) as:

$$MPEA(p,t) = min\big(EnergyUpliftPayment(p,s),\ DeemedRTPayment(p,s) - DeemedRTCost(p,s)\big) \times \frac{EnergyUpliftPayment(p,t)}{EnergyUpliftPayment(p,s)}$$

where:

(a) EnergyUpliftPayment(p,s) is the sum of all Energy Uplift Payments received by Market Participant p for Suspension Period s;

(b) DeemedRTPayment(p,s) is the Deemed Real-Time Payment for Market Participant p for Suspension Period s, as determined by the Economic Regulation Authority in accordance with clause 7.12.1A;

(c) DeemedRTCost(p,s) is the Deemed Real-Time Cost for Market Participant p for Suspension Period s, as determined by the Economic Regulation Authority in accordance with clause 7.12.1B; and

(d) EnergyUpliftPayment(p,t) is the sum of Energy Uplift Payments received by Market Participant p for Dispatch Intervals in Trading Interval t that fall within Suspension Period s.

7.12.3. If AEMO has suspended the Real-Time Market under clause 7.11D.1(c) and a Market Participant considers that the Deemed Real-Time Payment for the Market Participant for the Suspension Period is lower than the corresponding payment would have been if the Real-Time Market was not suspended, the Market Participant may request the Economic Regulation Authority to determine if that is correct and, if so, determine whether a Market Participant Deficit exists for the Market Participant for the Suspension Period in accordance with clause 7.12.7.

7.12.4. A request under clause 7.12.3 must:

(a) be submitted to the Economic Regulation Authority within six weeks of the Settlement Statement Date for the Trading Week in which the Trading Interval the subject of the request under clause 7.12.3 occurred;

(b) contain information and justification that substantiates the request; and

(c) where a Compensation Guideline has been published by the Economic Regulation Authority under clause 7.12.9, comply with the Compensation Guideline.

7.12.5. The Economic Regulation Authority may request additional information or justification from a Market Participant that has submitted a request under clause 7.12.3 that substantiates the request. The Market Participant must provide the requested information or justification to the Economic Regulation Authority within ten Business Days of receiving the Economic Regulation Authority's request.

7.12.6. The Economic Regulation Authority may request AEMO to verify the information provided by a Market Participant to the Economic Regulation Authority under

clauses 7.12.4(b) or 7.12.5, as applicable. AEMO must respond to the Economic Regulation Authority within ten Business Days of receiving the Economic Regulation Authority's request.

7.12.7. The Economic Regulation Authority must, following receipt of any further information under clause 7.12.5 or a response from AEMO under clause 7.12.6, if applicable, determine whether:

(a) the Market Participant's Deemed Real-Time Cost for the Suspension Period exceeded its Deemed Real-Time Payment (**"Market Participant Deficit"**), in which case clause 7.12.8 applies; or

(b) the Market Participant's Deemed Real-Time Payment for the Suspension Period exceeded its Deemed Real-Time Cost, in which case clause 7.12.2 applies.

7.12.8. If the Economic Regulation Authority determines that there is a Market Participant Deficit under clause 7.12.7, the Economic Regulation Authority must:

(a) determine a Market Participant Deficit Amount for the Market Participant for each Trading Interval in the Suspension Period in accordance with clause 7.12.8A; and

(b) as soon as practicable, but before the commencement date corresponding to the Settlement Adjustment Date 3 of the first Trading Week to which the Market Participant Deficit Amounts relate, notify AEMO and the Market Participant of the Market Participant Deficit Amounts determined under clause 7.12.8(a) and the Trading Intervals to which the Market Participant Deficit Amounts relate.

7.12.8A. The Economic Regulation Authority must determine a Market Participant Deficit Amount for Market Participant p for Trading Interval t in Suspension Period s under clause 7.12.8(a) as:

$$MPDA(p,t) = \left(DeemedRTCost(p,s) - DeemedRTPayment(p,s)\right) \times \frac{NDI(t)}{NDI(s)}$$

where:

(a) DeemedRTCost(p,s) is the Deemed Real-Time Cost for Market Participant p for Suspension Period s, as determined by the Economic Regulation Authority in accordance with clause 7.12.1B;

(b) DeemedRTPayment(p,s) is the Deemed Real-Time Payment for Market Participant p for Suspension Period s, as determined by the Economic Regulation Authority in accordance with clause 7.12.1A;

(c) NDI(t) is the number of Dispatch Intervals in Trading Interval t that fall within Suspension Period s; and

(d) NDI(s) is the number of Dispatch Intervals in Suspension Period s.

7.12.9. The Economic Regulation Authority may publish on its website a guideline prescribing the processes to be followed and the information and justification to be provided by a Market Participant in making a request under clause 7.12.3 **("Compensation Guideline")**. The Economic Regulation Authority may amend the Compensation Guideline from time to time and the amended guideline will take effect from the date the amended guideline is published on the Economic Regulation Authority's website.

7.12.10. A Notice of Disagreement cannot be issued under section 9.16 in respect to a Market Participant Excess Amount or a Market Participant Deficit Amount.

Settlement and Monitoring Data

7.13. Settlement and Monitoring Data

7.13.1. Subject to clause 7.11D.5, AEMO must make available to Market Participants, where the Dispatch Algorithm has successfully determined the Market Schedule:

(a) for each Pre-Dispatch Interval of each Pre-Dispatch Schedule or Week-Ahead Schedule, within 30 minutes of determining that Market Schedule; and

(b) for each Dispatch Schedule, within 5 minutes of determining that Dispatch Schedule,

the following information:

(c) total quantity of Real-Time Market Offers for In-Service Capacity for each Market Service;

(d) total quantity of Real-Time Market Offers for Available Capacity for each Market Service;

(e) total quantity of Real-Time Market Bids for In-Service Capacity for energy;

(f) total quantity of Real-Time Market Bids for Available Capacity for energy; and

(g) Intervention Constraints.

7.13.1A. Subject to clause 7.11D.5, AEMO must make available to Market Participants, where the Dispatch Algorithm has successfully determined the Market Schedule:

(a) for each Pre-Dispatch Interval in each Scenario of each Pre-Dispatch Schedule or Week-Ahead Schedule, within 30 minutes of determining that Market Schedule; and

(b) for each Scenario of each Dispatch Schedule, within 5 minutes of determining that Dispatch Schedule,

the following information:

(c) the Forecast Unscheduled Operational Demand or, where applicable, the alternative forecast used for the Scenario;

(cA) the Forecast Operational Demand or, where applicable, the equivalent forecast determined for the Scenario;

(cB) the Forecast Operational Withdrawal or, where applicable, the equivalent forecast determined for the Scenario;

(d) the projected total quantity required of each Frequency Co-optimised Essential System Service;

(e) projected shortfalls in each Market Service;

(f) projected Dispatch Targets, Dispatch Caps and Dispatch Forecasts as applicable for each Registered Facility. To avoid doubt, AEMO must identify which Facility each quantity is associated with;

(g) projected Essential System Service Enablement Quantities as applicable for each Registered Facility. To avoid doubt, AEMO must identify which Facility each quantity is associated with;

(h) binding Constraint Equations;

(i) Near Binding Constraint Equations;

(j) projected Market Clearing Prices for each Market Service;

(k) the Minimum RoCoF Control Requirement;

(l) the Additional RoCoF Control Requirement;

(m) the RoCoF Control Requirement;

(n) the Contingency Raise Offset;

(o) the Contingency Lower Offset;

(p) Facility Performance Factors; and

(q) the identity of each Registered Facility that was subject to a Commissioning Test or a Reserve Capacity Test.

7.13.1B. Within 5 minutes of each time AEMO uses the Dispatch Algorithm for the purposes of the Central Dispatch Process, and no later than the end of the relevant Dispatch Interval, AEMO must make available to Market Participants for the Dispatch Interval:

(a) Dispatch Targets, Dispatch Caps, Dispatch Forecasts as applicable for each Facility;

(b) Essential System Service Enablement Quantities as applicable for each Registered Facility and each Frequency Co-optimised Essential System Service;

(c) the Market Clearing Price for each Market Service;

(d) binding Constraint Equations;

(e) Near Binding Constraint Equations;

(f) the Minimum RoCoF Control Requirement;

(g) the Additional RoCoF Control Requirement;

(h) the RoCoF Control Requirement;

(i) the Contingency Raise Offset;

(j) the Contingency Lower Offset;

(k) Facility Performance Factors; and

(l) the AEMO estimated quantity of Not In-Service Capacity for each Scheduled Facility or Semi-Scheduled Facility for which a Market Participant holds Capacity Credits.

7.13.1BA. Subject to clause 7.13.1K, if AEMO fails to use the Dispatch Algorithm for the purposes of the Central Dispatch Process for a Dispatch Interval or AEMO determines a Dispatch Interval to be an Affected Dispatch Interval, then AEMO must, by noon on the first Business Day following the end of the Trading Day which contains the Dispatch Interval, make available to Market Participants the following information for the Dispatch Interval determined from the Market Schedule identified under clause 7.11B.1B in accordance with clauses 7.11B.1A(b) or 7.11C.2(c) (as applicable):

(a) Dispatch Targets, Dispatch Caps, Dispatch Forecasts, applicable for each Facility;

(b) Essential System Service Enablement Quantities, as applicable for each Registered Facility and each Frequency Co-optimised Essential System Service;

(c) binding Constraint Equations;

(d) Near Binding Constraint Equations;

(e) the Minimum RoCoF Control Requirement;

(f) the Additional RoCoF Control Requirement;

(g) the RoCoF Control Requirement;

(h) the Contingency Raise Offset;

(i) the Contingency Lower Offset;

(j) Facility Performance Factors; and

(k) the AEMO estimated quantity of Not In-Service Capacity for each Scheduled Facility or Semi-Scheduled Facility for which a Market Participant holds Capacity Credits.

7.13.1C. Subject to clauses 7.13.1CB, 7.13.1CC and 7.13.1K, within 5 minutes of the end of a Trading Interval, AEMO must make available to Market Participants the Reference Trading Price for that Trading Interval.

7.13.1CA. If a Market Clearing Price for a Dispatch Interval has been impacted by an Affected Dispatch Interval, AEMO must, by noon on the first Business Day following the end of the Trading Day which contains the Dispatch Interval:

(a) determine revised Market Clearing Prices for each Market Service for the relevant Dispatch Interval in accordance with clause 7.11C.2(a);

(b) determine the revised Reference Trading Price for the relevant Trading Interval; and

(c) make the revised prices referred to in clauses 7.13.1CA(a) and 7.13.1CA(b) available to Market Participants.

7.13.1CB. If a Market Clearing Price for a Dispatch Interval has been impacted by a suspension of the Real-Time Market under clause 7.11D.1, AEMO must, by noon on the first Business Day following the end of the Trading Day which contains the Dispatch Interval:

(a) determine Market Clearing Prices for each Market Service for the Dispatch Interval in accordance with section 7.11E;

(b) determine the Reference Trading Price or revised Reference Trading Price for the relevant Trading Interval; and

(c) make the prices or revised prices referred to in clauses 7.13.1CB(a) and 7.13.1CB(b) available to Market Participants.

7.13.1CC. If a Market Clearing Price for a Dispatch Interval has been impacted by a failure of the Dispatch Algorithm in the Central Dispatch Process, AEMO must, by noon on the first Business Day following the end of the Trading Day which contains the Dispatch Interval:

(a) determine Market Clearing Prices for each Market Service for the Dispatch Interval in accordance with clause 7.11B.1A(a);

(b) determine the Reference Trading Price or revised Reference Trading Price for the relevant Trading Interval; and

(c) make the prices or revised prices referred to in clauses 7.13.1CC(a) and 7.13.1CC(b) available to Market Participants.

7.13.1CD. If a Market Clearing Price for a Dispatch Interval has been impacted by an AEMO Intervention Event, AEMO must, by noon on the first Business Day following the end of the Trading Day which contains the Dispatch Interval:

(a) determine revised Market Clearing Prices for each Market Service for the Dispatch Interval in accordance with clause 7.11B.4A;

(b) determine the revised Reference Trading Price for the relevant Trading Interval; and

(c) make the revised prices referred to in clauses 7.13.1CD(a) and 7.13.1CD(b) available to Market Participants.

7.13.1D. Subject to clause 7.11D.5, for each Pre-Dispatch Interval or Dispatch Interval in each Scenario in each Market Schedule, where the Dispatch Algorithm has successfully determined the Market Schedule, AEMO must, within 30 minutes of the completion of the Market Schedule (or within 5 minutes of completion for the Dispatch Schedule), make available to each Market Participant:

(a) which of its Registered Facilities clause 7.5.8(a) applies to;

(b) which of its Registered Facilities clause 7.5.8(b) applies to; and

(c) the Estimated FCESS Uplift Payment for each of its Scheduled Facilities and Semi-Scheduled Facilities.

7.13.1DA. Subject to clause 7.11D.5, if AEMO fails to use the Dispatch Algorithm for the purposes of the Central Dispatch Process for a Dispatch Interval, or AEMO determines a Dispatch Interval to be an Affected Dispatch Interval, AEMO must, by noon on the first Business Day following the end of the Trading Day which contains the Dispatch Interval, make available to each Market Participant the information specified in clause 7.13.1D from the Market Schedule that was identified under clause 7.11B.1B in accordance with clauses 7.11B.1A(b) or 7.11C.2(c) (as applicable).

7.13.1E. AEMO must prepare and publish on the WEM Website the following data for a Trading Day by noon on the first Business Day following the day on which the Trading Day ends:

(a) the following SCADA data for each Dispatch Interval of the Trading Day:

i. an estimate of the MWh Injection or Withdrawal of each Scheduled Facility, Semi-Scheduled Facility or Non-Scheduled Facility monitored by AEMO's SCADA system;

ii. [Blank]

iii. where it was available to AEMO for use in the Dispatch Algorithm for the purposes of the Central Dispatch Process, data that has been used to adjust Essential System Service submissions for each Facility;

iv. the Charge Level immediately prior to the start of the Dispatch Interval of each Electric Storage Resource that is part of a Semi-Scheduled Facility or Scheduled Facility and monitored by AEMO's SCADA system;

v. the MWh output or consumption of each separate electricity producing unit in each Energy Producing System supplying an Intermittent Load for which, in AEMO's reasonable opinion, the information provided under clause 2.30B.3(g) does not show that if a Contingency Event or an event behind the relevant connection point affects the Energy Producing System the net Injection or Withdrawal of the Facility will change by less than 10 MW;

vi. the EOI Quantity of each Scheduled Facility, Semi-Scheduled Facility and Non-Scheduled Facility;

vii. the Operational Demand;

viii. the Operational Withdrawal; and

ix. any other SCADA data used as an input into the Dispatch Algorithm and used for the purposes of the Central Dispatch Process;

(aA) for each Trading Interval of the Trading Day, an estimate, derived from SCADA data, of the MWh Injection or Withdrawal of each Scheduled Facility, Semi-Scheduled Facility or Non-Scheduled Facility monitored by AEMO's SCADA system;

(b) the maximum daily ambient temperature at the site of each Scheduled Facility or Semi-Scheduled Facility, recorded in accordance with the method specified in Appendix 1(b)(viii) or Appendix 1(c)(viii) as applicable;

(c) for each Frequency Co-optimised Essential System Service, the Essential System Service Enablement Quantities scheduled in each Dispatch Interval of the Trading Day as applicable for each Registered Facility;

(d) where applicable, for each Trading Interval of the Trading Day, the requested decrease in absolute value of Withdrawal for each Demand Side Programme calculated under clause 7.13.5; and

(e) the details captured by AEMO under clause 7.6.8 for each Dispatch Instruction issued to a Registered Facility for a Dispatch Interval of the Trading Day that was not generated by the Dispatch Algorithm.

7.13.1EA. Subject to clause 7.11D.5, AEMO must prepare and publish on the WEM Website the following data for a Trading Day by noon on the first Business Day following the day on which the Trading Day ends:

(a) details of each Real-Time Market Submission used as an input to the Dispatch Algorithm for the purposes of the Central Dispatch Process, or revised in accordance with clauses 7.11B.1A(b) or 7.11C.2(c), for Dispatch Intervals in the Trading Day, including, as applicable:

i. the Registered Facility ID;

iA. the Market Service;

ii. Price-Quantity Pairs (as adjusted by AEMO under clauses 7.4.51 or 7.4.51A, if applicable);

iii. In-Service Capacity for Injection;

iv. Available Capacity for Injection;

v. In-Service Capacity for Withdrawal;

vi. Available Capacity for Withdrawal;

vii. the Maximum Upwards Ramp Rate;

viii. the Maximum Downwards Ramp Rate;

ix. Enablement Minimums;

x. Enablement Maximums;

xi. Low Breakpoints;

xii. High Breakpoints;

xiii. Dispatch Inflexibility Profiles;

xiv. any reasons for revisions in accordance with clauses 7.4.26(a) or 7.4.27(a);

xv. if the Registered Facility is Inflexible;

xvi. the Unconstrained Injection Forecast; and

xvii. the Unconstrained Withdrawal Forecast;

(b) where applicable, for each Scheduled Facility or Semi-Scheduled Facility and each Dispatch Interval of the Trading Day, the Congestion Rental, generated by the Dispatch Algorithm for the purposes of the Central Dispatch Process, or revised in accordance with clauses 7.11B.1A(b) or 7.11C.2(c), calculated under clause 7.14.1;

(c) for each Dispatch Interval of the Trading Day, information used in the Dispatch Algorithm for the purposes of the Central Dispatch Process, or revised in accordance with clauses 7.11B.1A(b) or 7.11C.2(c):

i. for each CR Facility, the Single Facility Raise Risk for the Dispatch Interval;

ii. for each Facility Raise Contingency which is a Credible Contingency Event that is taken into account when setting the Contingency Reserve Raise requirement under clause 7.2.4 in the Dispatch Interval, the Facility Raise Contingency Risk associated with the Dispatch Interval;

iiA. for each Network Raise Contingency which is a Credible Contingency Event that is taken into account when setting the Contingency Reserve Raise requirement under clause 7.2.4 in the Dispatch Interval:

1. the Network Raise Risk associated with the Network Supply Contingency; and
2. the Network Facility Raise Risk of each CR Facility that contributes to the Network Raise Contingency in the Dispatch Interval;

iii. the Largest Credible Supply Contingency;

iv. the Largest Credible Load Contingency;

v. all Facility Lower Risks for the Dispatch Interval; and

vi. for each Network Lower Contingency which is a Credible Contingency Event that is taken into account when setting the Contingency Reserve Lower requirement under clause 7.2.4 for the Dispatch Interval:

1. the Network Lower Risk associated with the Network Lower Contingency; and
2. the Network Facility Lower Risk of each CL Facility that contributes to the Network Lower Contingency in the Dispatch Interval;

(d) for each Dispatch Interval of the Trading Day, for each Semi-Scheduled Facility and Non-Scheduled Facility, any alternative forecast quantities to the Unconstrained Injection Forecast and Unconstrained Withdrawal Forecast provided by the Market Participant in its Real-Time Market Submission that were determined and used by AEMO as an input to the Dispatch Algorithm for the purposes of the Central Dispatch Process under clause 7.2.4A, or revised in accordance with clauses 7.11B.1A(b) or 7.11C.2(c); and

(e) where applicable, for each Scheduled Facility or Semi-Scheduled Facility and each Dispatch Interval, the Energy Uplift Price and the Uplift Payment Mispricing Trigger as determined by the Dispatch Algorithm, or revised in accordance with clauses 7.11B.1A(b) or 7.11C.2(c).

7.13.1F. AEMO must prepare and publish on the WEM Website, for each Trading Interval and Dispatch Interval of a Trading Day, by noon on the first Business Day following the day on which the Trading Day ends:

(a) an estimate of the total quantity of energy not served (in MWh) due to involuntary load shedding (manual and automatic);

(b) an estimate of the change in Withdrawal (in MWh) of any Interruptible Loads in the provision of Contingency Reserve Raise; and

(c) an estimate of the change in Withdrawal (in MWh) of Demand Side Programmes in response to any Dispatch Instructions.

7.13.1FA. AEMO must prepare and publish on the WEM Website, for each Trading Interval of a Trading Week, by noon on the first Business Day following the Settlement Date for the Trading Week as published under clause 9.3.1(d):

(a) an estimate of the total quantity of energy (in MWh) by which Facilities reduced their consumption in accordance with the terms of a Supplementary Capacity Contract; and

(b) an estimate of the total quantity of energy (in MWh) by which Facilities reduced their consumption in accordance with the terms of an NCESS Contract.

7.13.1G. Subject to clause 7.11D.5, AEMO must make available to Market Participants, for each Dispatch Interval of each DSP Pre-Dispatch Schedule or DSP Week-Ahead Schedule, within 30 minutes of determining that DSP Schedule, the following information:

(a) for each Demand Side Programme:

i. DSP Unconstrained Quantity;

ii. DSP Constrained Quantity;

(iii) [Blank]

iv. [Blank]

v. estimated Reserve Capacity Obligation Quantity;

vi. DSP Forecast Capacity; and

vii. DSP Forecast Reduction;

(b) the sum of the DSP Forecast Capacities of each Demand Side Programme; and

(c) the sum of the DSP Forecast Reductions of each Demand Side Programme.

7.13.1H. Within five minutes of each time AEMO issues a Dispatch Instruction to a Demand Side Programme, AEMO must make available to Market Participants the details of that Dispatch Instruction.

7.13.1I. AEMO must publish the following information on the WEM Website as soon as practicable after it has made the information available to Market Participants:

(a) the information referred to in clauses 7.13.1, 7.13.1B, 7.13.1BA, 7.13.1C, 7.13.1CA, 7.13.1CB, 7.13.1CC, 7.13.1CD, 7.13.1G and 7.13.1H; and

(b) the information referred to in clause 7.13.1A for the Reference Scenario and Available Capacity Scenario of the applicable Market Schedule.

7.13.1J. If AEMO is prevented from completing the relevant processes that enable the publishing of data on the WEM Website under clauses 7.13.1E, 7.13.1EA, 7.13.1F or 7.13.1I, AEMO must:

(a) issue a Market Advisory notifying of the delay; and

(b) use reasonable endeavours to publish the information on the WEM Website as soon as practicable.

7.13.1K. If AEMO is prevented from completing the relevant processes that enable the provision of the data described in clauses 7.13.1BA, 7.13.1CA, 7.13.1CB, 7.13.1CC, 7.13.1CD or 7.13.1DA, AEMO must:

(a) issue a Market Advisory notifying of the delay; and

(b) use reasonable endeavours make the information available to Market Participants as soon as practicable.

7.13.1L. AEMO may, if it reasonably considers it is required in order to estimate, or support AEMO's estimate of, the quantity referred to in clause 7.13.1F, delay the publication of data in clause 7.13.1F by up to two Business Days and request information from Rule Participants in respect to any involuntary load shedding. A Rule Participant must comply with a request under this clause 7.13.1L within the time specified in the request.

7.13.2. Where AEMO is required to develop estimates under clause 7.13.6, AEMO must publish those estimates as soon as practicable after the date specified in clause 4.1.11.

7.13.3. AEMO must document in a WEM Procedure the procedure to be followed by Rule Participants in providing settlement and monitoring data to AEMO.

7.13.4. AEMO must:

(a) determine the Operational Demand Estimate and Operational Withdrawal Estimate from SCADA data for Registered Facilities at least once every minute; and

(b) publish each Operational Demand Estimate and Operational Withdrawal Estimate on the WEM Website as soon as practicable after its determination under clause 7.13.4(a),

and these values are not required to be maintained on the WEM Website after their initial publication.

7.13.5. AEMO must, for the purposes of clauses 4.25.2(b), 4.26.2D and 7.13.1E(d), calculate, for each Demand Side Programme for each Trading Interval, the quantity, in MW, by which the Facility was instructed by the applicable Dispatch Instruction or Reserve Capacity Test to amend its DSP Energy Level during that Trading Interval, where the quantity:

(a) must not exceed the Peak Reserve Capacity Obligation Quantity or Flexible Reserve Capacity Obligation Quantity for the Demand Side Programme (as relevant); and

(b) must not take account of the Facility's actual performance in response to the Dispatch Instruction or Reserve Capacity Test.

7.13.6. If an estimate is required to support the Relevant Level Method for a Registered Facility that:

(a) contains an Intermittent Generating System; or

(b) is a Non-Scheduled Facility,

AEMO must estimate, for the Intermittent Generating System or Non-Scheduled Facility, for each Trading Interval, the maximum quantity of sent out energy in MWh which the Intermittent Generating System or Non-Scheduled Facility could have potentially generated in the Trading Interval had the output of the Registered Facility associated with the Intermittent Generating System or the Non-Scheduled Facility not been restricted by a Dispatch Instruction or Network limitation during that Trading Interval, in accordance with the WEM Procedure referred to in clause 7.13.8.

7.13.7. If AEMO reasonably believes that the estimate determined under clause 7.13.6 was incorrect, it must revise the estimate for use in the Relevant Level Method.

7.13.8. AEMO must develop a WEM Procedure specifying:

(a) the methods that AEMO will use to determine estimates under clause 7.13.6;

(b) the process for revising an estimate under clause 7.13.7; and

(c) the information that a Market Participant must provide to AEMO for each of the Market Participant's Registered Facilities to support the preparation of estimates under clauses 7.13.6 and 7.13.7.

Not In-Service Capacity

7.13A. Not In-Service Capacity

7.13A.1. Subject to clause 7.11D.5, AEMO must determine the Not In-Service Capacity for each Scheduled Facility or Semi-Scheduled Facility f for which a Market Participant holds Capacity Credits, in the Dispatch Interval DI as:

(a) if AEMO has failed to use the Dispatch Algorithm for the purposes of the Central Dispatch Process for Dispatch Interval DI or AEMO has determined that Dispatch Interval DI is an Affected Dispatch Interval:

NISCap(f,DI) = 0

(b) if clause 7.13A.1(a) does not apply and AEMO has directed a Registered Facility to offer its capacity as In-Service Capacity:

NISCap(f,DI) = Max(0, Min(PRCOQ(f,DI), ReqDispEnergy(f,DI)) – Max(ISSDCEnergy(f,DI), ISDispEnergy(f,DI))

or

(c) otherwise:

NISCap(f,DI) = Max(0, Min(PRCOQ(f,DI), EstDispEnergy(f,DI)) – Max(ISSDCEnergy(f,DI), ISDispEnergy(f,DI))

where:

i. NISCap(f,DI) is the Not In-Service Capacity quantity for the relevant Facility f in Dispatch Interval DI;

ii. EstDispEnergy(f,DI) is the quantity of estimated energy dispatch immediately prior to the Start Decision Cutoff time for the relevant Facility f in Dispatch Interval DI, calculated in accordance with clause 7.13A.2;

iii. ISSDCEnergy(f,DI) is the quantity of In-Service Capacity offered immediately after the Start Decision Cutoff time for the relevant Facility f in Dispatch Interval DI, calculated in accordance with clause 7.13A.3;

iv. ISDispEnergy(f,DI) is the total MW quantity of In-Service Capacity for the relevant Facility f included in the Real-Time Market Offers for energy that were used to formulate Dispatch Instructions and calculate Market Clearing Prices for Dispatch Interval DI; ~~and~~

v. ReqDispEnergy(f,DI) is the quantity of In-Service Capacity for the relevant Facility f required by AEMO in Dispatch Interval DI; and~~.~~

vi. PRCOQ(f,DI) is the Peak Reserve Capacity Obligation Quantity for Facility f in Dispatch Interval DI.

7.13A.2. EstDispEnergy(f, DI) for each Scheduled Facility or Semi-Scheduled Facility f in Dispatch Interval DI is determined from the most recent Market Schedule made available to Market Participants before the Start Decision Cutoff from the Price-Quantity Pair for Injection for the relevant Facility f with the longest minimum time to synchronise, as specified in clause 7.4.40(g)(i)(3), as applicable:

(a) where at least one Dispatch Schedule has been made available to Market Participants that contains Dispatch Interval DI within a Trading Interval, the total MW quantity of energy scheduled for dispatch by the Dispatch Algorithm in the Dispatch Interval DI for the relevant Facility f determined in the Available Capacity Scenario of the Dispatch Schedule; or

(b) where at least one Pre-Dispatch Schedule has been made available to Market Participants that contains Dispatch Interval DI within a Trading

Interval, then the total MW quantity of energy scheduled for dispatch by the Dispatch Algorithm in the Trading Interval for the relevant Facility f determined in the Available Capacity Scenario of the Pre-Dispatch Schedule; or

(c) where at least one Week-Ahead Schedule has been made available to Market Participants that contains Dispatch Interval DI within a Trading Interval, then the total MW quantity of energy scheduled for dispatch by the Dispatch Algorithm in the Trading Interval for the relevant Facility f determined in the Available Capacity Scenario of the Week-Ahead Schedule; or

(d) otherwise, zero.

7.13A.3. ISSDCEnergy(f,DI) for each Scheduled Facility or Semi-Scheduled Facility f in Dispatch Interval DI is determined from the most recent Market Schedule made available to Market Participants after the Start Decision Cutoff from the Price-Quantity Pair for Injection for the relevant Facility f with the longest minimum time to synchronise, as specified in clause 7.4.40(g)(i)(3), as applicable:

(a) where at least one Dispatch Schedule has been made available to Market Participants that contains Dispatch Interval DI within a Trading Interval, the total MW quantity of In-Service Capacity included in the Real-Time Market Submission for energy from the relevant Facility f in the Dispatch Interval DI; or

(b) where at least one Pre-Dispatch Schedule has been made available to Market Participants that contains Dispatch Interval DI within a Trading Interval, the total MW quantity of In-Service Capacity included in the Real-Time Market Submission for energy from the relevant Facility f in the Trading Interval; or

(c) where at least one Week-Ahead Schedule has been made available to Market Participants that contains Dispatch Interval DI within a Trading Interval, the total MW quantity of In-Service Capacity included in the Real-Time Market Submission for energy from the relevant Facility f in the Trading Interval; or

(d) otherwise, zero.

Congestion Rental

7.14. Calculation of Congestion Rental

7.14.1. Subject to clause 7.11D.5, AEMO must calculate for each Scheduled Facility or Semi-Scheduled Facility and each Dispatch Interval of a Trading Day, the Congestion Rental in respect of the full set of Network Constraints invoked in the Dispatch Algorithm (including Constraints deemed to be Network Constraints

under clause 7.7.8A). The Congestion Rental for Registered Facility f in Dispatch Interval DI is:

$$\text{CongestionRental}(f,DI) = \sum_{n \in N} \text{ConstraintCoefficient}(f,n,DI) \times \text{MarginalConstraintValue}(n,DI)$$

where:

(a) ConstraintCoefficient(f,n,DI) is the coefficient of Registered Facility f in respect of the cleared energy quantity of Registered Facility f in Network Constraint n in Dispatch Interval DI;

(b) MarginalConstraintValue(n,DI) is the marginal value of Network Constraint n in Dispatch Interval DI; and

(c) n∈N denotes all Network Constraints applied in Dispatch Interval DI.

Estimated FCESS Uplift Payments

7.17. Calculation of Estimated FCESS Uplift Payments

7.17.1. The Estimated FCESS Uplift Payment for a Scheduled Facility or Semi-Scheduled Facility f in Dispatch Interval DI is:

$$\text{EstFCESSUpliftPayment}(f,DI) = \begin{cases} 0, \text{ if } \sum_{m \in FCESS} \text{EnablementQty}(m,f,DI) = 0 \\ 0, \text{ if DispatchTarget}(f,DI) \leq 0 \\ \text{Max}(0, \text{RTMDispatchCost}(f,DI) - \text{RTMBaseCompensation}(f,DI)), \\ \text{otherwise} \end{cases}$$

where:

(a) m∈FCESS denotes each of the Contingency Reserve Raise, Contingency Reserve Lower, Regulation Raise and Regulation Lower Frequency Co-optimised Essential System Services;

(b) EnablementQty(m,f,DI) is the Essential System Service Enablement Quantity for Registered Facility f in Dispatch Interval DI, as calculated for the relevant Market Schedule and Scenario;

(c) DispatchTarget(f,DI) is the Dispatch Target for Registered Facility f in Dispatch Interval DI, as calculated for the relevant Market Schedule and Scenario;

(d) RTMDispatchCost(f,DI) is the estimated Real-Time Market dispatch cost based on Real-Time Market Offers for Registered Facility f in Dispatch Interval DI, calculated in accordance with clause 7.17.2; and

(e) RTMBaseCompensation(f,DI) is the Real-Time Market base compensation amount for Registered Facility f in Dispatch Interval DI, calculated in accordance with clause 7.17.3.

7.17.2. For the purposes of clause 7.17.1, the estimated Real-Time Market dispatch cost based on Real-Time Market Offers for Registered Facility f in Dispatch Interval DI is:

$$\begin{aligned}\text{RTMDispatchCost}(f,DI) &= \left(\sum_{epq \in \text{EnergyOffer}(f,DI)} (\text{ClearedEnergyQty}(f,DI,epq) \times \text{EnergyPrice}(f,DI,epq)) \right. \\ &+ \sum_{m \in \text{FCESS}} \sum_{fpq \in \text{FCESSOffer}(m,f,DI)} (\text{ClearedQty}(m,f,DI,fpq) \\ &\left. \times \text{FCESSPrice}(m,f,DI,fpq)) \right) \times \frac{5}{60}\end{aligned}$$

where:

(a) epq∈EnergyOffer(f,DI) denotes all Price-Quantity Pairs in the Real-Time Market Offer for energy for Registered Facility f in Dispatch Interval DI that are not excluded in the relevant Scenario;

(b) ClearedEnergyQty(f,DI,epq) is the part of the quantity from Price-Quantity Pair epq that is included in the estimated FCESS Minimum Dispatch Target (as calculated in accordance with clause 7.17.4 for the relevant Market Schedule and Scenario) for Registered Facility f in Dispatch Interval DI;

(c) EnergyPrice(f,DI,epq) is the price specified in Price-Quantity Pair epq for Registered Facility f in Dispatch Interval DI;

(d) m∈FCESS denotes each of the Contingency Reserve Raise, Contingency Reserve Lower, Regulation Raise and Regulation Lower Frequency Co-optimised Essential System Services;

(e) fpq∈FCESSOffer(m,f,DI) denotes all Price-Quantity Pairs fpq in the Real-Time Market Offer for Registered Facility f in Dispatch Interval DI for Frequency Co-optimised Essential System Service m (if one exists) that are not excluded in the relevant Scenario;

(f) ClearedQty(m,f,DI,fpg) is the part of the quantity from Price-Quantity Pair fpq that is included in the relevant Essential System Service Enablement Quantity determined for Registered Facility f in Dispatch Interval DI for the relevant Market Schedule and Scenario;

(g) FCESSPrice(m,f,DI,fpq) is the price specified in Price-Quantity Pair fpq for Registered Facility f in Dispatch Interval DI for Frequency Co-optimised Essential System Service m (as adjusted by AEMO under clause 7.4.51A, if applicable); and

(h) 5/60 represents the period of a Dispatch Interval in hours.

7.17.3. For the purposes of clause 7.17.1, the estimated Real-Time Market base compensation amount for Registered Facility f in Dispatch Interval DI is:

$$\text{RTMBaseCompensation}(f,DI) = \left(\text{FCESSMinDispatchTarget}(f,DI) \times \text{EMCP}(DI) \times \text{LF}(f,DI) + \sum_{m \in FCESS} (\text{EnablementQty}(m,f,DI) \times \text{MCP}(m,DI) \times \text{PF}(m,f,DI))\right) \times \frac{5}{60}$$

where:

(a) FCESSMinDispatchTarget(f,DI) is the estimated FCESS Minimum Dispatch Target (as calculated in accordance with clause 7.17.4) for Registered Facility f in Dispatch Interval DI for the relevant Market Schedule and Scenario;

(b) EMCP(DI) is the Market Clearing Price for energy for Dispatch Interval DI as calculated for the relevant Market Schedule and Scenario;

(c) LF(f,DI) is the Loss Factor applicable to the Measurement Point associated with Registered Facility f in Dispatch Interval DI;

(d) m∈FCESS denotes each of the Contingency Reserve Raise, Contingency Reserve Lower, Regulation Raise and Regulation Lower Frequency Co-optimised Essential System Services;

(e) EnablementQty(m,f,DI) is the Essential System Service Enablement Quantity for Registered Facility f in Dispatch Interval DI as calculated for the relevant Market Schedule and Scenario;

(f) MCP(m,DI) is the Market Clearing Price for Frequency Co-optimised Essential System Service m in Dispatch Interval DI as calculated for the relevant Market Schedule and Scenario;

(g) PF(m,f,DI) is the Facility Performance Factor for Registered Facility f in Dispatch Interval DI for Frequency Co-optimised Essential System Service m as determined for the relevant Market Schedule and Scenario; and

(h) 5/60 represents the period of a Dispatch Interval in hours.

7.17.4. For the purposes of clauses 7.17.2 and 7.17.3, the estimated FCESS Minimum Dispatch Target for Registered Facility f in Dispatch Interval DI is:

$$\text{FCESSMinDispatchTarget}(f,DI) = \max(0, \text{Raise_MinDT}(f,DI), \text{Lower_MinDT}(f,DI))$$

where:

(a) Raise_MinDT(f,DI) is the minimum theoretical Dispatch Target from which Registered Facility f could have provided its Essential System Service Enablement Quantities for Contingency Reserve Raise and Regulation Raise in Dispatch Interval DI, as calculated in accordance with clause 7.17.5; and

(b) Lower_MinDT(f,DI) is the minimum theoretical Dispatch Target from which Registered Facility f could have provided its Essential System Service Enablement Quantities for Contingency Reserve Lower and Regulation Lower in Dispatch Interval DI, as calculated in accordance with clause 7.17.6.

7.17.5. For the purposes of clause 7.17.4, the estimated minimum theoretical Dispatch Target from which Registered Facility f could have provided its Essential System Service Enablement Quantities for Contingency Reserve Raise and Regulation Raise in Dispatch Interval DI is:

$$\text{Raise_MinDT}(f,DI) = \begin{cases} \max(\text{EM_CR}(f,DI), \text{EM_RR}(f,DI)), \\ \quad \text{if CR_EnablementQuantity}(f,DI) > 0 \text{ and RR_EnablementQuantity}(f,DI) > 0 \\ \text{EM_CR}(f,DI), \text{ if CR_EnablementQuantity}(f,DI) > 0 \text{ and RR_EnablementQuantity} \leq 0 \\ \text{EM_RR}(f,DI), \text{ if RR_EnablementQuantity}(f,DI) > 0 \text{ and CR_EnablementQuantity} \leq 0 \\ 0, \text{ otherwise} \end{cases}$$

where:

(a) EM_CR(f,DI) is the Enablement Minimum for Contingency Reserve Raise for Registered Facility f in Dispatch Interval DI as specified in the relevant Real-Time Market Submission in accordance with clause 7.4.41(d) and adjusted by AEMO, if applicable, under clause 7.4.52;

(b) EM_RR(f,DI) is the Enablement Minimum for Regulation Raise for Registered Facility f in Dispatch Interval DI as specified in the relevant Real-Time Market Submission in accordance with clause 7.4.41(d) and adjusted by AEMO, if applicable, under clause 7.4.52;

(c) CR_EnablementQuantity(f,DI) is the Essential System Service Enablement Quantity for Contingency Reserve Raise for Registered Facility f in Dispatch Interval DI as calculated for the relevant Market Schedule and Scenario; and

(d) RR_EnablementQuantity(f,DI) is the Essential System Service Enablement Quantity for Regulation Raise for Registered Facility f in Dispatch Interval DI as calculated for the relevant Market Schedule and Scenario.

7.17.6. For the purposes of clause 7.17.4, the estimated minimum theoretical Dispatch Target from which Registered Facility f could have provided its Essential System Service Enablement Quantities for Contingency Reserve Lower and Regulation Lower in Dispatch Interval DI is:

$$\text{Lower_MinDT}(f,DI) = \begin{cases} \text{CL_EnablementQuantity}(f,DI) + \text{RL_EnablementQuantity}(f,DI) + \max(\text{EM_CL}(f,DI), \text{EM_RL}(f,DI)), \\ \text{if CL_EnablementQuantity}(f,DI) > 0 \text{ and RL_EnablementQuantity}(f,DI) > 0 \\ \text{EM_CL}(f,DI) + \text{CL_EnablementQuantity}(f,DI), \\ \text{if CL_EnablementQuantity}(f,DI) > 0 \text{ and RL_EnablementQuantity}(f,DI) \leq 0 \\ \text{EM_RL}(f,DI) + \text{RL_EnablementQuantity}(f,DI), \\ \text{if RL_EnablementQuantity}(f,DI) > 0 \text{ and CL_EnablementQuantity}(f,DI) \leq 0 \\ 0, \text{ otherwise} \end{cases}$$

where:

(a) CL_EnablementQuantity(f,DI) Essential System Service Enablement Quantity for Contingency Reserve Lower for Registered Facility f in Dispatch Interval DI as calculated for the relevant Market Schedule and Scenario;

(b) RL_EnablementQuantity(f,DI) is the Essential System Service Enablement Quantity for Regulation Lower for Registered Facility f in Dispatch Interval DI as calculated for the relevant Market Schedule and Scenario;

(c) EM_CL(f,DI) is the Enablement Minimum for Contingency Reserve Lower for Registered Facility f in Dispatch Interval DI as specified in the relevant Real-Time Market Submission in accordance with clause 7.4.41(d) and adjusted by AEMO, if applicable, under clause 7.4.52; and

(d) EM_RL(f,DI) is the Enablement Minimum for Regulation Lower for Registered Facility f in Dispatch Interval DI as specified in the relevant Real-Time Market Submission in accordance with clause 7.4.41(d) and adjusted by AEMO, if applicable, under clause 7.4.52.

8 Wholesale Market Metering

Metering Data Agents

8.1. Metering Data Agents

8.1.1. There must be a Metering Data Agent for each Network.

8.1.2 Subject to clause 8.1.4, the Network Operator is also the Metering Data Agent for any Network registered by that Network Operator.

8.1.3. A Metering Data Agent must operate to the relevant Metering Protocol.

8.1.4. If the Network Operator in respect of a Network notifies AEMO and the Network business unit of the Electricity Network Corporation that it does not wish to be the Metering Data Agent for a Network registered by that Network Operator, the Network business unit of the Electricity Network Corporation will be the Metering Data Agent for that relevant Network.

8.2. Duties of a Metering Data Agent

8.2.1. A Metering Data Agent must:

(a) keep the Meter Registry updated in accordance with section 8.3; and

(b) provide metering data to AEMO in accordance with section 8.4.

Meter Registry

8.3. Meter Registry

8.3.1. Each Metering Data Agent must maintain a separate Meter Registry for each Network it serves. At a minimum, the Meter Registry for a Network must:

(a) subject to clause 8.3.1A, record each meter connected to the Network or located at a Measurement Point;

(b) record the Market Participant(s) whose generation or consumption is measured by the meter;

(bA) for each meter, record whether the Measurement Point is associated with a Contestable Customer or Non-Contestable Customer;

(c) facilitate changes to the identity of the Market Participant(s) whose generation or consumption is measured by a meter as of a specified time;

(d) record how metered quantities are to be allocated between Market Participants if more than one Market Participant’s generation or consumption is measured by that meter.

8.3.1A. The Meter Registry described in clause 8.3.1 must not record a meter located at a Connection Point where there are multiple Measurement Points behind that Connection Point.

8.3.2. In processing a Facility registration application under clause 2.31, AEMO must notify the applicable Metering Data Agent that it requires confirmation that all Meter Registry information associated with that application is correct.

8.3.3. A Metering Data Agent must within five Business Days from the day of being notified by AEMO in accordance with clause 8.3.2 confirm the Meter Registry information.

8.3.4 If AEMO accepts a Facility registration or Facility deregistration, it must notify the Metering Data Agent for the relevant Network and the Metering Data Agent must, within five Business Days, ensure that the Meter Registry is adjusted accordingly.

8.3.5. A Metering Data Agent must notify AEMO of any changes to the identities of the Market Participants whose supply or consumption is measured by a meter not less than 10 Business Days prior to the Metering Data Agent making a Meter Data Submission that reflects the changed metering arrangements.

8.3.6. AEMO must provide a Metering Data Agent with confirmation of a notification made in accordance with clause 8.3.5 within one Business Day.

8.3.7. If a Metering Data Agent fails to receive a confirmation of receipt in accordance with clause 8.3.6 it must contact AEMO within one Business Day to appraise AEMO of the failure of AEMO to provide confirmation of receipt and, if necessary, to make alternative arrangements for the submission of the information.

Meter Data Submissions

8.4. Meter Data Submission

8.4.1. A Metering Data Agent must provide Meter Data Submissions to AEMO in accordance with the time specified in clause 9.3.2.

8.4.2. A Meter Data Submission must be in the format described in section 8.6.

8.4.3. If a Meter Data Agent issues a Meter Data Submission that contains adjusted kWh quantities for an Interval Meter for a Trading Week for which Settlement Adjustment Date 2 has passed, then within one Business Day, the Metering Data Agent must notify AEMO and the relevant Market Participant, via email, that the adjusted information has been issued.

8.4.4. A notification provided under clause 8.4.3 must include:

(a) the date the Meter Data Submission was issued; and

(b) for each adjusted kWh quantity:

i. the NMI;

ii. the Trading Interval for which the information was adjusted; and

iii. the adjusted kWh quantity.

8.5. Notices of Disagreement and Disputed Meter Data

8.5.1. In the event of a Notice of Disagreement or Notice of Dispute that relates to meter data, AEMO must notify the Metering Data Agent responsible for that data of the Notice of Disagreement or Notice of Dispute.

8.5.2. A Metering Data Agent must respond to the notification described in clause 8.5.1 in accordance with the Metering Protocol referred to in clause 8.1.3 and must include any revised meter data in the first Meter Data Submission made to AEMO following any correction of the meter data.

8.6. Format of Meter Data Submissions

8.6.1. A Meter Data Submission must comprise:

(a) the identity of the Metering Data Agent;

(b) the Trading Week to which the meter data relates;

(c) for each Interval Meter and each Trading Interval in the Trading Week in the Meter Data Submission described in clause 8.6.1(b):

i. the identity of the meter;

ii. the kWh quantity measured by the meter; and

iii. whether the quantity described in clause 8.6.1(c)(ii) is based on an actual meter reading or an estimate, and if based on an estimate, the applicable code describing the reason for the estimate;

(d) [Blank]; and

(e) meter adjustments that stem from actual or revised meter data becoming available or from the resolution of a dispute concerning meter data ("Meter Dispute") in accordance with the dispute resolution process in the applicable Metering Protocol, including:

i. for each interval meter and each Trading Interval in the Trading Week to which a Meter Dispute has resulted in changes to meter data:

1. the kWh quantity for that meter;

2. whether the quantity described in clause 8.6.1(e)(i)(1) is based on an actual meter reading or an estimate, and if

based on an estimate, the applicable code describing the reason for the estimate; and

3. the applicable code describing the reason for the change in the kWh quantity relative to the previously stated value.

8.6.2. AEMO must document in a WEM Procedure:

(a) the format of Meter Data Submissions to be provided by Metering Data Agents; and

(b) the processes that must be followed by Metering Data Agents when making Meter Data Submissions.

Meter Connection and Disconnection

8.6A. Provision of Meter Information

8.6A.1. A Metering Data Agent must provide AEMO with the following information for each Trading Month:

(a) the number of non-interval or accumulation meters that existed at the end of the Trading Month;

(b) the number of new non-interval or accumulation meters connected during the Trading Month; and

(c) the number of non-interval or accumulation meters abolished during the Trading Month.

8.6A.2. The information referred to in clause 8.6A.1 must be provided by the Metering Data Agent no later than the Interval Meter Deadline for the first full Trading Week that occurs after the relevant Trading Month to which the information referred to in clause 8.6A.1 relates.

Metering Protocol Requirements

8.7. Metering Protocol Requirements

8.7.1. A Metering Data Agent must operate in accordance with a Metering Protocol. As a minimum a Metering Protocol must prescribe:

(a) that the Metering Data Agent maintains a Meter Registry tracking a unique identifying number for each meter and the location of that meter, and indicating which Market Participant, if any, is associated with that meter;

(b) that interval meter data is recorded for a 30 minute period starting on the hour and on the half-hour;

(c) a process for replacing missing or inaccurate metering data with estimated data to be included in Meter Data Submissions;

(d) a process for addressing metering data errors stemming from errors in meter reading, failure to read a meter and falsification;

(e) a dispute resolution process pertaining to actions taken in accordance with that Metering Protocol; and

(f) a process for modification of the Metering Protocol in the event of changes to the ESM Rules.

Support of Calculations

8.8. Support of Calculations

8.8.1. Each Metering Data Agent must provide to AEMO within five Business Days of being requested, any of the meter information held by the Metering Data Agent that is required by AEMO for the purposes of these ESM Rules.

9. Settlement

Introduction

9.1. Conventions

9.1.1. In this Chapter 9, apart from clause 9.1.3 (where Rule Participant has its ordinary meaning), a reference to "Rule Participant" is a reference to the relevant Market Participant or the relevant Network Operator as the case may be (and is not a reference to any other Rule Participant).

9.1.2. Settlement is to be based on whole Trading Days, though partial Trading Days are to be facilitated on the first and last day of a financial year and at the commencement of the market. For this purpose, AEMO may declare that part of a Trading Day is to be treated as if that part was a full Trading Day by notice published on the WEM Website.

9.1.3. With respect to the treatment of GST:

(a) all prices, fees and other charges under these ESM Rules (other than under this clause 9.1.3) are exclusive of GST;

(b) in this clause 9.1.3, “adjustment notes”, “GST group”, “input tax credit”, “member”, “recipient created tax invoice”, “representative member”, “supply”, “tax invoice”, “taxable supply” and “valid tax invoice” each have the meaning given to the relevant term in the GST Act;

(c) where a Rule Participant makes a taxable supply to another Rule Participant or person under these ESM Rules, the other Rule Participant or person must also pay the first Rule Participant making the supply an additional amount equal to the GST payable in respect of that supply;

(d) AEMO must include in Settlement Statements and Invoices issued under these ESM Rules the additional amounts contemplated by clause 9.1.3(c);

(e) Rule Participants must, if requested by AEMO, do everything necessary (including entering into recipient created tax invoice agreements) to enable AEMO to issue valid tax invoices, recipient created tax invoices and adjustment notes in respect of all taxable supplies made by or to AEMO under these ESM Rules;

(f) however, if the additional amount paid or payable to AEMO or a Rule Participant or another person under this clause 9.1.3 in respect of a taxable supply differs from the actual amount of GST payable by the Rule Participant under the GST Act in respect of the relevant supply, then adjustments must be made under section 9.15 so as to ensure the additional amount paid under this clause in respect of the supply is equal

to the actual amount of GST payable under the GST Act in respect of the supply; and

(g) if AEMO determines that:

i. a party is entitled to payment of any costs or expenses by way of reimbursement or indemnity; or

ii. a price, fee or other charge payable under these ESM Rules (other than Market Participant Regulator Fees and Market Participant Coordinator Fees) is calculated with reference to a cost or expense incurred by a party,

then the payment or cost or expense (as the case may be) must exclude any part of the cost or expense which is attributable to GST for which the party (or a representative member of any GST group of which the party is a member) is entitled to an input tax credit.

9.1.4. Where these ESM Rules indicate interest is payable on an amount, interest accrues daily at the Bank Bill Rate from (and including) the date that payment was due up to (but excluding) the date of payment, or in the case of an adjusted Settlement Statement provided under section 9.15 from (and including) the payment due date for the Invoice issued for the original Settlement Statement up to (but excluding) the actual date of payment for the Invoice issued for the adjusted Settlement Statement.

9.1.5. Except where otherwise stated, AEMO will perform all calculations described in this chapter.

9.2. Settlement Process

9.2.1. AEMO must document the settlement process in a WEM Procedure, including, but not limited to:

(a) the application of taxes and interest;

(b) the collection and distribution of Civil Penalty Amounts;

(c) the processes to be followed in relation to Notices of Disagreement and Notices of Dispute; and

(d) the processes to be followed in relation to Default Levies and Repaid Amount Levies.

9.2.2. AEMO must document in a WEM Procedure the methodology it will use for undertaking estimates for the purposes of each of clauses 9.10.6(c)(ii), 9.10.10(c)(ii), 9.10.14(c)(ii), 9.10.22(c)(ii), 9.10.23(c)(ii) and clause 2.4(a)(ii) of Appendix 2C.

9.3. Settlement Timeline

9.3.1. The settlement timeline for settlement of amounts payable under these ESM Rules for each Trading Week within a Financial Year must be published by AEMO at least one calendar month prior to the commencement of that Financial Year. This settlement timeline must include for each Trading Week:

(a) the Interval Meter Deadline, being 5:00 PM on the seventeenth (17th) day following the end of a Trading Week;

(b) the Settlement Statement Date, being the Business Day by which AEMO must issue Settlement Statements for a Trading Week, which Business Day must be no later than the fourth Business Day following the Interval Meter Deadline for a Trading Week;

(c) the Invoicing Date, being the Business Day by which AEMO must issue Invoices for Settlement Statements for a Trading Week, which Business Day must be no later than the fourth Business Day following the Interval Meter Deadline for a Trading Week;

(d) the Settlement Date, being the Business Day on which the transactions covered by a Settlement Statement for a Trading Week are settled, which Business Day must be no later than the second Business Day following the date of issue of the Invoice described in clause 9.3.3(b);

(e) the commencement date for each settlement Adjustment Process for a Trading Week;

(f) each Relevant Settlement Adjustment Date for a Trading Week;

(g) each Settlement Statement Date for the Adjustment Process for a Trading Week, being the Business Day by which AEMO must issue Settlement Statements for each Adjustment Process for a Trading Week, which Business Day is determined in accordance with clause 9.15.1(b);

(h) each Invoicing Date for the Adjustment Process for a Trading Week, being the Business Day by which AEMO must issue Invoices for each Adjustment Process for a Trading Week, which Business Day is determined in accordance with clause 9.15.6;

(i) each Settlement Date for the Adjustment Process for a Trading Week, being the Business Day on which the transactions covered by a Settlement Statement for each Adjustment Process are settled, which Business Day is determined in accordance with clause 9.15.7; and

(j) the Settlement Disagreement Deadline.

9.3.2. Meter Data Submissions for a Trading Week must be provided to AEMO by no later than the Interval Meter Deadline.

9.3.3. For the settlement of amounts payable under these ESM Rules for a Trading Week, AEMO must issue to each Rule Participant:

(a) a Settlement Statement covering each of the Trading Days in the Trading Week by no later than the Settlement Statement Date for that Trading Week as published under clause 9.3.1(b); and

(b) an Invoice for the Settlement Statement described in clause 9.3.3(a) by no later than the Invoicing Date for that Trading Week as published under clause 9.3.1(c);

9.3.4. The date for settlement of the transactions covered by the Settlement Statement described in clause 9.3.3(a) and the Invoice described in clause 9.3.3(b) is the Settlement Date for that Trading Week as published under clause 9.3.1(d).

9.3.5. AEMO must undertake a process for adjusting settlements ("**Adjustment Process**") in accordance with section 9.15 in relation to Relevant Settlement Statements. Adjustments may only be made to Relevant Settlement Statements. Adjustments may not be made to Settlement Statements outside of an Adjustment Process.

9.3.6. A Relevant Settlement Statement is any Settlement Statement in respect of a Trading Week, which Trading Week has occurred not greater than 52 weeks in the past:

(a) that requires correction resulting from a Notice of Dispute raised under section 2.19;

(b) where AEMO has indicated under clause 9.16.9 that it will revise information in response to a Notice of Disagreement;

(c) that requires correction resulting from any revised value that AEMO reasonably considers to be in compliance with these ESM Rules and accurate;

(d) where an adjustment is required in accordance with clause 9.1.3;

(e) for which AEMO has revised meter data from a Metering Data Agent; or

(f) that requires correction resulting from any other relevant value that has been revised in accordance with the ESM Rules.

9.3.7. A Settlement Statement will be adjusted in accordance with the Adjustment Process if it is, at the time, a Relevant Settlement Statement on any of:

(a) "**Settlement Adjustment Date 1**" being, for a Trading Week, the Business Day in the 8th week following that Trading Week on which original Settlements Statements for another Trading Week will be issued in that week in accordance with clause 9.3.3(a);

(b) "**Settlement Adjustment Date 2**" being, for a Trading Week, the Business Day in the 35th week following that Trading Week on which original Settlements Statements for another Trading Week will be issued in that week in accordance with clause 9.3.3(a); or

(c) "**Settlement Adjustment Date 3**" being, for a Trading Week, the Business Day in the 51st week following that Trading Week on which original Settlements Statements for another Trading Week will be issued in that week in accordance with clause 9.3.3(a).

Settlement Data

9.4. [Blank]

9.5. The Metered Schedule

9.5.1. For each Trading Interval AEMO must determine the Metered Schedule in accordance with clause 9.5.2 for each:

(a) Scheduled Facility;

(b) Semi–Scheduled Facility;

(c) Non-Scheduled Facility; and

(d) Non-Dispatchable Load.

9.5.2. Subject to clauses 2.30B.10 and 2.30B.11, the Metered Schedule for a Trading Interval for each:

(a) Scheduled Facility;

(b) Semi-Scheduled Facility;

(c) Non-Scheduled Facility; and

(d) Non-Dispatchable Load, excluding Non-Dispatchable Loads referred to in clause 9.5.3,

is the net quantity of energy generated and sent out into the relevant Network or consumed by the Facility during that Trading Interval, Loss Factor adjusted to the Reference Node, and determined from Meter Data Submissions received by AEMO in accordance with section 8.4 or SCADA data maintained by AEMO in accordance with clause 7.13.1E(aA) where interval meter data is not available.

9.5.2A. A Metered Schedule for a Scheduled Facility, Semi-Scheduled Facility or Non-Scheduled Facility is Public Information.

9.5.3. AEMO must determine a single Metered Schedule for a Trading Interval for those Non-Dispatchable Loads with meters not read as interval meters that are served by Synergy where:

(a) the Metered Schedule equals the Notional Wholesale Meter value for that Trading Interval; and

(b) the Notional Wholesale Meter value for a Trading Interval equals negative one multiplied by:

i. the sum of the Metered Schedules with positive quantities for that Trading Interval; plus

ii. the sum of the Metered Schedules with negative quantities for that Trading Interval,

where the Metered Schedules referred to in clauses 9.5.3(b)(i) and 9.5.3(b)(ii) exclude the Metered Schedule for the Notional Wholesale Meter.

9.5.4. AEMO must determine the Demand Side Programme Load for a Demand Side Programme for a Trading Interval as the total net MWh quantity of energy Injected or Withdrawn by the Associated Loads of that Demand Side Programme during the Trading Interval, determined from Meter Data Submissions as:

$$DSPLMW(f,t) = -1 \times \sum_{\substack{i \in All\ Associated \\ Loads\ of\ f}} MQ(i,t)$$

where:

(a) DSPLMW(f,t) I is the Demand Side Programme Load for Demand Side Programme f in Trading Interval t;

(b) MQ(i,t) denotes the non-loss adjusted metered Withdrawal or Injection (as relevant) of Associated Load i in Trading Interval t as determined from Meter Data Submissions; and

(c) i∈All Associated Loads of f denotes the set of Non-Dispatchable Loads that are Associated Loads of Demand Side Programme f in Trading Interval t.

9.5.5. For the purpose of clauses 9.5.2 and 9.5.3, a quantity of energy generated and sent out into the relevant Network has a positive value and a quantity of energy consumed has a negative value.

9.5.5A. AEMO must calculate the Low Injection Flag for each Trading Interval. The Low Injection Flag for Trading Interval t is:

$$LowInjectionFlag(t) = \begin{cases} 1, if\ InjectionContributingQuantity(t) < 200 \\ 0, otherwise \end{cases}$$

where InjectionContributingQuantity(t) is the quantity determined for Trading Interval t in accordance with clause 9.5.5B.

9.5.5B. For the purposes of clause 9.5.5A, InjectionContributingQuantity(t) for Trading Interval t is calculated as:

$$InjectionContributingQuantity(t) = \sum_{f \in F} max\left(0, MeteredSchedule(f,t)\right)$$

where:

(a) f∈F denotes all Scheduled Facilities, Semi-Scheduled Facilities, Non-Scheduled Facilities and Non-Dispatchable Loads (including Synergy's Notional Wholesale Meter); and

(b) MeteredSchedule(f,t) is the Metered Schedule for Facility f for Trading Interval t as calculated in accordance with clauses 9.5.2 and 9.5.3.

9.5.6. AEMO must calculate for each Market Participant the Consumption Share for a Trading Interval. The Consumption Share for Market Participant p in Trading Interval t is:

$$\text{ConsumptionShare}(p,t) = \frac{\text{ConsumptionContributingQuantity}(p,t)}{\text{TotalConsumptionContributingQuantity}(t)}$$

where:

(a) ConsumptionContributingQuantity(p,t) is the Consumption Contributing Quantity for Market Participant p in Trading Interval t as determined in clause 9.5.7; and

(b) TotalConsumptionContributingQuantity(t) is the total Consumption Contributing Quantity for all Market Participants in Trading Interval t as determined in clause 9.5.8.

9.5.7. AEMO must calculate for each Market Participant the Consumption Contributing Quantity for a Trading Interval. The Consumption Contributing Quantity for Market Participant p in Trading Interval t is:

$$ConsumptionContributingQuantity(p,t) = \begin{cases} PriorAverageCCQ(p,t), if\ LowInjectionFlag(t) = 1 \\ \sum_{f \in p} min\left(0, MeteredSchedule(f,t)\right)\ otherwise \end{cases}$$

where:

(a) PriorAverageCCQ(p,t) is the average of the Consumption Contributing Quantities determined for Market Participant p under this clause 9.5.7 for Trading Intervals commencing at the same time of day on the same day of the week as Trading Interval t in the four Trading Weeks immediately prior to the Trading Week containing Trading Interval t;

(b) LowInjectionFlag(t) is the Low Injection Flag determined for Trading Interval t in accordance with clause 9.5.5A;

(c) f∈p denotes all Scheduled Facilities, Semi-Scheduled Facilities, Non-Scheduled Facilities and Non-Dispatchable Loads registered to or associated with Market Participant p (including Synergy's Notional

Wholesale Meter where Synergy is Market Participant p) in Trading Interval t; and

(d) MeteredSchedule(f,t) is the Metered Schedule for facility f for Trading Interval t as calculated in accordance with clause 9.5.2 and clause 9.5.3.

~~9.5.7. AEMO must calculate for each Market Participant the Consumption Contributing Quantity for a Trading Interval. The Consumption Contributing Quantity for Market Participant p in Trading Interval t is:~~

$$\text{ConsumptionContributingQuantity}(p,t) = \sum_{f \in p} \min(0, \text{MeteredSchedule}(f,t))$$

~~where:~~

~~(a) f∈p denotes all Scheduled Facilities, Semi-Scheduled Facilities, Non-Scheduled Facilities and Non-Dispatchable Loads registered to or associated with Market Participant p (including Synergy's Notional Wholesale Meter where Synergy is Market Participant p) in Trading Interval t; and~~

~~(b) MeteredSchedule(f,t) is the Metered Schedule for facility f for Trading Interval t as calculated in accordance with clause 9.5.2 and clause 9.5.3.~~

9.5.8. AEMO must calculate the total Consumption Contributing Quantity for all Market Participants for a Trading Interval. The TotalConsumptionContributingQuantity(t) for all Market Participants in Trading Interval t is:

$$\text{TotalConsumptionContributingQuantity}(t) = \sum_{p \in P} \text{ConsumptionContributingQuantity}(p,t)$$

where:

(a) ConsumptionContributingQuantity(p,t) is the Consumption Contributing Quantity for Market Participant p in Trading Interval t as determined in clause 9.5.7; and

(b) p∈P denotes all Market Participants.

Settlement Calculations

9.6. Settlement Calculations - Net Settlement Amount

9.6.1. AEMO must calculate for each Rule Participant the net settlement amount for a Trading Week.

9.6.2. The net settlement amount for AEMO to Rule Participant p for Trading Week w is:

$$\text{Net_SA}(p,w) = \sum_{d \in w} \text{Net_SA}(p,d)$$

where:

(a) Net_SA(p,d) is the net settlement amount calculated for AEMO to Rule Participant p in Trading Day d in accordance with clause 9.6.3; and

(b) d∈w denotes all Trading Days d in Trading Week w.

9.6.3. The net settlement amount for AEMO to Rule Participant p for Trading Day d is:

$$Net_SA(p,d) = STEM_SA(p,d) + RC_SA(p,d) + RTE_SA(p,d) + ESS_SA(p,d) + OC_SA(p,d) + MPF_SA(p,d) + MSC_SA(p,d)$$

where:

(a) STEM_SA(p,d) is the STEM settlement amount calculated for AEMO to Market Participant p in Trading Day d in accordance with section 9.7;

(b) RC_SA(p,d) is the Reserve Capacity settlement amount calculated for AEMO to Market Participant p in Trading Day d in accordance with section 9.8;

(c) RTE_SA(p,d) is the Real-Time Energy settlement amount calculated for AEMO to Market Participant p in Trading Day d in accordance with section 9.9;

(d) ESS_SA(p,d) is the Essential System Services settlement amount calculated for AEMO to Rule Participant p in Trading Day d in accordance with section 9.10;

(e) OC_SA(p,d) is the Outage Compensation settlement amount calculated for AEMO to Market Participant p in Trading Day d in accordance with section 9.11;

(f) MPF_SA(p,d) is the Market Participant fee settlement amount calculated for AEMO to Market Participant p in Trading Day d in accordance with section 9.12; and

(g) MSC_SA(p,d) is the Market Suspension Compensation settlement amount calculated for AEMO to Market Participant p in Trading Day d in accordance with section 9.11A.

9.7. Settlement Calculations – STEM

9.7.1. AEMO must calculate for each Market Participant the STEM settlement amount for a Trading Day.

9.7.2. The STEM settlement amount for AEMO to Market Participant p for Trading Day d is:

$$STEM_SA(p,d) = \sum_{t \in d} STEM_SA(p,t)$$

where:

(a) STEM_SA(p,t) is the STEM settlement amount calculated for AEMO to Market Participant p in Trading Interval t in accordance with clause 9.7.3; and

(b) t∈d denotes all Trading Intervals t in Trading Day d.

9.7.3. The STEM settlement amount for AEMO to Market Participant p for Trading Interval t is:

$$STEM_SA(p,t) = STEM_Price(t) \times STEM_Quantity(p,t) \times STEM_SuspensionFlag(t)$$

where:

(a) STEM_Price(t) is the STEM Clearing Price for Trading Interval t as provided by AEMO under clause 6.21.1(b);

(b) STEM_Quantity(p,t) is the quantity of energy, details of which are provided by AEMO under clause 6.21.1(c), purchased from, or sold to, AEMO through the STEM by Market Participant p for Trading Interval t where a quantity sold through the STEM has a positive value, and a quantity purchased through the STEM has a negative value; and

(c) STEM_SuspensionFlag(t) has a value of zero for Trading Interval t if AEMO has provided a flag under clause 6.21.1(a) for that Trading Interval, and a value of one for that Trading Interval otherwise.

9.8. Settlement Calculations - Reserve Capacity

9.8.1. AEMO must calculate for each Market Participant the Reserve Capacity settlement amount for a Trading Day.

9.8.2. The Reserve Capacity settlement amount for Market Participant p for Trading Day d is:

$$\begin{aligned} RC_SA(p,d) = {} & Peak_Capacity_Provider_Payment(p,d) \\ & - Peak_Capacity_Purchaser_Payment(p,d) \\ & + Flexible_Capacity_Provider_Payment(p,d) \\ & - Flexible_Capacity_Purchaser_Payment(p,d) \\ & + Capacity_Security_Compensation(p,d) \end{aligned}$$

(a) Peak_Capacity_Provider_Payment(p,d) is calculated in accordance with clause 9.8.3;

(b) Peak_Capacity_Purchaser_Payment(p,d) is calculated in accordance with clause 9.8.4;

(c) Flexible_Capacity_Provider_Payment(p,d) is calculated in accordance with clause 9.8.6;

(d) Flexible_Capacity_Purchaser_Payment(p,d) is calculated in accordance with clause 9.8.9; and

(e) Capacity_Security_Compensation(p,d) is calculated in accordance with clause 9.8.4A.

~~9.8.2. The Reserve Capacity settlement amount for Market Participant p for Trading Day d is:~~

~~$$RC_SA(p,d) = Capacity_Provider_Payment(p,d) - Capacity_Purchaser_Payment(p,d) + Capacity_Security_Compensation(p,d)$$~~

~~where:~~

~~(a) Capacity_Provider_Payment(p,d) is calculated in accordance with clause 9.8.3;~~

~~(b) Capacity_Purchaser_Payment(p,d) is calculated in accordance with clause 9.8.4; and~~

~~(c) Capacity_Security_Compensation(p,d) is calculated in accordance with clause 9.8.4A.~~

9.8.3. For the purposes of clause 9.8.2, Peak_Capacity_Provider_Payment(p,d) for Market Participant p for Trading Day d is:

Peak_Capacity_Provider_Payment(p,d)

= Peak_Capacity_Payments(p,d) – Intermittent_Load_Refund(p,d)

+ Peak_Supplementary_Capacity_Payment(p,d) – Peak_Capacity_Cost_Refund(p,d)

+ Peak_Over_Allocation_Payment(p,d)

where:

(a) [Blank]

(b) Peak_Capacity_Payments(p,d) is calculated in accordance with clause 9.8.3A;

(c) Intermittent_Load_Refund(p,d) is the total Intermittent Load Refund payable to AEMO by Market Participant p in respect of each of its Intermittent Loads, deemed to be an Intermittent Load under clause 1.48.2, for Trading Day d, as determined in accordance with clause 4.29.3(dA);

(d) Peak_Supplementary_Capacity_Payment(p,d) is the net payment to be made by AEMO under a Supplementary Capacity Contract to Market Participant p for Trading Day d, as specified by AEMO in accordance with clause 4.29.3(e)(i), for a contract relating to Peak Capacity or to both Peak Capacity and Flexible Capacity as specified by AEMO in accordance with clause 4.29.3(e)(iii);

(e) Peak_Capacity_Cost_Refund(p,d) is the Peak Capacity Cost Refund payable to AEMO by Market Participant p in respect of that Market

Participant's Peak Capacity Credits for Trading Day d, as specified in clause 4.29.3(d)(vi); and

(f) Peak_Over_Allocation_Payment(p,d) is calculated in accordance with clause 9.8.3B.

~~9.8.3. For the purposes of clause 9.8.2, Capacity_Provider_Payment(p,d) for Market Participant p for Trading Day d is:~~

$$\begin{aligned} &Capacity_Provider_Payment(p,d) \\ &= Capacity_Payments(p,d) \\ &- Intermittent_Load_Refund(p,d) \\ &+ Supplementary_Capacity_Payment(p,d) \\ &- Capacity_Cost_Refund(p,d) \\ &+ Over_Allocation_Payment(p,d) \end{aligned}$$

~~where:~~

~~(a) [Blank]~~

~~(b) Capacity_Payments(p,d) is calculated in accordance with clause 9.8.3A;~~

~~(c) Intermittent_Load_Refund(p,d) is the total Intermittent Load Refund payable to AEMO by Market Participant p in respect of each of its Intermittent Loads, deemed to be an Intermittent Load under clause 1.48.2, for Trading Day d, as determined in accordance with clause 4.29.3(dA);~~

~~(d) Supplementary_Capacity_Payment(p,d) is the net payment to be made by AEMO under a Supplementary Capacity Contract to Market Participant p for Trading Day d, as specified by AEMO in accordance with clause 4.29.3(e)(i);~~

~~(e) Capacity_Cost_Refund(p,d) is the Capacity Cost Refund payable to AEMO by Market Participant p in respect of that Market Participant's Capacity Credits for Trading Day d, as specified in clause 4.29.3(d)(vi); and~~

~~(f) Over_Allocation_Payment(p,d) is calculated in accordance with clause 9.8.3B.~~

~~9.8.3A. For the purposes of clause 9.8.3, Capacity_Payments(p,d) for Market Participant p for Trading Day d is:~~

$$Capacity_Payments(p,d) = \sum_{e \in PCCEntities(p,d)} \left((CC(e,d) - CCA(e,d)) \times EDPRCP(e,d) \right)$$

~~where:~~

~~(a) e∈PCCEntities(p,d) denotes all Facilities or components of Facilities (as applicable) for which Market Participant p holds Capacity Credits on Trading Day d, and e is an entity in that set;~~

~~(b) CC(e,d) is the number of Capacity Credits assigned to entity e for Trading Day d;~~

~~(c) CCA(e,d) is the sum of the Capacity Credits associated with entity e for Trading Day d that have been allocated in Capacity Credit Allocations; and~~

~~(d) EDPRCP(e,d) is the Entity Daily Peak Reserve Capacity Price associated with entity e in Trading Day d.~~

9.8.3A. For the purposes of clause 9.8.3, Peak_Capacity_Payments(p,d) for Market Participant p for Trading Day d is:

$$Peak_Capacity_Payments(p,d) = \sum_{e \in PCCEntities(p,d)} \left((PCC(e,d) - PCCA(e,d)) \times EDPRCP(e,d) \right)$$

where:

(a) e∈PCCEntities(p,d) denotes all Facilities or components of Facilities (as applicable) for which Market Participant p holds Peak Capacity Credits on Trading Day d, and e is an entity in that set;

(b) PCC(e,d) is the number of Peak Capacity Credits assigned to entity e for Trading Day d;

(c) PCCA(e,d) is the sum of the Peak Capacity Credits associated with entity e for Trading Day d that have been allocated in Capacity Credit Allocations; and

(d) EDPRCP(e,d) is the Entity Daily Peak Reserve Capacity Price associated with entity e in Trading Day d;

~~9.8.3B. For the purposes of clause 9.8.3, Over_Allocation_Payment(p,d) for Market Participant p for Trading Day d is:~~

$$Over_Allocation_Payment(p,d) = max\left(0, Participant_CCA(p,d) - IRCR(p,d)\right) \times Excess_Allocation_Price(p,d)$$

~~where:~~

~~(a) Participant_CCA(p,d) is the sum of Capacity Credits allocated to Market Participant p in Trading Day d in Capacity Credit Allocations;~~

~~(b) IRCR(p,d) is the Individual Reserve Capacity Requirement for Market Participant p for the Trading Month in which Trading Day d falls, expressed in units of MW; and~~

~~(c) Excess_Allocation_Price(p,d) is zero if Participant_CCA(p,d)=0, and otherwise:~~

~~$Excess_Allocation_Price(p,d)$~~

~~$$= \frac{\sum_{c \in C(p,d)}\left(\sum_{e \in PCCEntities(d)}\left(CCA(c,e,p,d) \times EDPRCP(e,d)\right)\right)}{\sum_{c \in C(p,d)}\left(\sum_{e \in PCCEntities(d)}\left(CCA(c,e,p,d)\right)\right)}$$~~

~~where:~~

~~i. C(p,d) is the set of Capacity Credit Allocations made to Market Participant p in Trading Day d and c is a Capacity Credit Allocation within the set;~~

~~ii. e∈PCCEntities(d) denotes all Facilities or components of Facilities (as applicable) for which Capacity Credits are held by Market Participants on Trading Day d;~~

~~iii. CCA(c,e,p,d) is the number of Capacity Credits associated with entity e that have been allocated to Market Participant p in Capacity Credit Allocation c in Trading Day d; and~~

~~iv. EDPRCP(e,d) is the Entity Daily Peak Reserve Capacity Price associated with entity e in Trading Day d.~~

9.8.3B. For the purposes of clause 9.8.3, Peak_Over_Allocation_Payment(p,d) for Market Participant p for Trading Day d is:

Peak_Over_Allocation_Payment(p,d) =
max (0, Participant_PCCA(p,d) – PIRCR(p,d)) ×
Peak_Excess_Allocation_Price(p,d);

where:

(a) Participant_PCCA(p,d) is the sum of Peak Capacity Credits allocated to Market Participant p in Trading Day d in Capacity Credit Allocations;

(b) PIRCR(p,d) is the Peak Individual Reserve Capacity Requirement for Market Participant p for the Trading Month in which Trading Day d falls, expressed in units of MW; and

(c) Peak_Excess_Allocation_Price(p,d) is zero if Participant_PCCA(p,d)=0, and otherwise:

$$Peak_Excess_Allocation_Price(p,d) = \frac{\sum_{c \in C(p,d)}\left(\sum_{e \in PCCEntities(d)}\left(PCCA(c,e,p,d) \times EDPRCP(e,d)\right)\right)}{\sum_{c \in C(p,d)}\left(\sum_{e \in PCCEntities(d)}\left(PCCA(c,e,p,d)\right)\right)}$$

where:

i. C(p,d) is the set of Capacity Credit Allocations made to Market Participant p in Trading Day d and c is a Capacity Credit Allocation within the set;

ii. e∈PCCEntities(d) denotes all Facilities or components of Facilities (as applicable) for which Peak Capacity Credits are held by Market Participants on Trading Day d;

iii. PCCA(c,e,p,d) is the number of Peak Capacity Credits associated with entity e that have been allocated to Market Participant p in Capacity Credit Allocation c in Trading Day d; and

iv. EDPRCP(e,d) is the Entity Daily Peak Reserve Capacity Price associated with entity e in Trading Day d.

9.8.4. For the purposes of clause 9.8.2, Peak_Capacity_Purchaser_Payment(p,d) for Market Participant p for Trading Day d is:

Peak_Capacity_Purchaser_Payment(p,d) =
Peak_Targeted_Reserve_Capacity_Cost(p,d)
+ Peak_Shared_Reserve_Capacity_Cost(p,d)

where:

(a) Peak_Targeted_Reserve_Capacity_Cost(p,d) =
Peak_Targeted_Reserve_Capacity_Cost(d) × Peak_Shortfall_Share(p,d)

(b) Peak_Shared_Reserve_Capacity_Cost(p,d) =
Peak_Shared_Reserve_Capacity_Cost(d) × Peak_Capacity_Share(p,d)

(c) Peak_Targeted_Reserve_Capacity_Cost(d) is the cost of Peak Capacity-to be shared amongst those Market Participants who have not had sufficient Peak Capacity Credits allocated to them for Trading Day d where this cost is specified under clause 4.29.3(b);

(d) Peak_Shortfall_Share(p,d) = (max(0, PIRCR(p,d) – Participant_PCCA(p,d))) / ∑p∈P(max(0, PIRCR(p,d) – Participant_PCCA(p,d)))

(e) Peak_Shared_Reserve_Capacity_Cost(d) is the cost of Peak Capacity to be shared amongst all Market Participants for Trading Day d where this cost is specified under clause 4.29.3(c);

(f) Peak_Capacity_Share(p,d) = PIRCR(p,d) / $\sum_{p \in P}$PIRCR(p,d)

(g) P is the set of all Market Participants where p is a member of that set;

(h) PIRCR(p,d) is the Peak Individual Reserve Capacity Requirement for Market Participant p for the Trading Month in which Trading Day d falls, expressed in units of MW; and

(i) Participant_PCCA(p,d) is the sum of the Peak Capacity Credits allocated to Market Participant p in Trading Day d, in a Capacity Credit Allocation.

~~9.8.4. For the purposes of clause 9.8.2, Capacity_Purchaser_Payment(p,d) for Market Participant p for Trading Day d is:~~

~~Capacity_Purchaser_Payment(p,d) = Targeted_Reserve_Capacity_Cost(p,d)~~
~~+ Shared_Reserve_Capacity_Cost(p,d)~~

~~where:~~

~~(a) Targeted_Reserve_Capacity_Cost(p,d) = Targeted_Reserve_Capacity_Cost(d) × Shortfall_Share(p,d)~~

~~(b) Shared_Reserve_Capacity_Cost(p,d) = Shared_Reserve_Capacity_Cost(d) × Capacity_Share(p,d)~~

~~(c) Targeted_Reserve_Capacity_Cost(d) is the cost of Reserve Capacity to be shared amongst those Market Participants who have not had sufficient Capacity Credits allocated to them for Trading Day d where this cost is specified under clause 4.29.3(b);~~

~~(d) Shortfall_Share(p,d) = (max(0, IRCR(p,d) – Participant_CCA(p,d))) / ∑p∈P(max(0, IRCR(p,d) – Participant_CCA(p,d)))~~

~~(e) Shared_Reserve_Capacity_Cost(d) is the cost of Reserve Capacity to be shared amongst all Market Participants for Trading Day d where this cost is specified under clause 4.29.3(c);~~

~~(f) Capacity_Share(p,d) = IRCR(p,d) / $\sum_{p \in P}$IRCR(p,d)~~

~~(g) P is the set of all Market Participants where p is a member of that set;~~

~~(h) IRCR(p,d) is the Individual Reserve Capacity Requirement for Market Participant p for the Trading Month in which the Trading Day d falls, expressed in units of MW; and~~

~~(i) Participant_CCA(p,d) is the sum of the Capacity Credits allocated to Market Participant p in the Trading Day d, in a Capacity Credit Allocation.~~

9.8.4A. For the purposes of clause 9.8.2, Capacity_Security_Compensation(p,d) for Market Participant p for Trading Day d is:

$$Capacity_Security_Compensation(p,d) = Capacity_Security_Compensation(d) \times Peak_Capacity_Share(p,d)$$

where:

(a) Capacity_Security_Compensation(d) is the Reserve Capacity Security Compensation Amount for Trading Day d, as specified under clause 4.29.3(cB); and

(b) Peak_Capacity_Share(p,d) is the Peak Individual Reserve Capacity Requirement share for Market Participant p for Trading Day d, as specified under clause 9.8.4(f).

~~9.8.4A. For the purposes of clause 9.8.2, Capacity_Security_Compensation(p,d) for Market Participant p for Trading Day d is:~~

~~$Capacity_Security_Compensation(p,d)$~~
~~$= Capacity_Security_Compensation(d) \times Capacity_Share(p,d)$~~

~~where:~~

~~(a) Capacity_Security_Compensation(d) is the Reserve Capacity Security Compensation Amount for Trading Day d, as specified under clause 4.29.3(cB); and~~

~~(b) Capacity_Share(p,d) is the Individual Reserve Capacity Requirement share for Market Participant p for Trading Day d, as specified under clause 9.8.4(f).~~

9.8.5. The net payment to be made by AEMO under a Supplementary Capacity Contract to a person who is not a Market Participant will be settled by AEMO in accordance with contract conditions which are not required to be consistent with other settlement processes or prudential processes under these ESM Rules.

9.8.6. For the purposes of clause 9.8.2, Flexible_Capacity_Provider_Payment(p,d) for Market Participant p for Trading Day d is:

Flexible_Capacity_Provider_Payment(p,d)

= Flexible_Capacity_Payments(p,d) + Flexible_Supplementary_Capacity_Payment(p,d)

– Flexible_Capacity_Cost_Refund(p,d) + Flexible_Over_Allocation_Payment(p,d)

where:

(a) Flexible_Capacity_Payments(p,d) is calculated in accordance with clause 9.8.7;

(b) Flexible_Supplementary_Capacity_Payment(p,d) is the net payment to be made by AEMO under a Supplementary Capacity Contract to Market Participant p for Trading Day d, as specified by AEMO in accordance with clause 4.29.3(e)(i), for a contract relating solely to Flexible Capacity as specified by AEMO in accordance with clause 4.29.3(e)(iii);

(c) Flexible_Capacity_Cost_Refund(p,d) is the Flexible Capacity Cost Refund payable to AEMO by Market Participant p in respect of that Market Participant's Flexible Capacity Credits for Trading Day d, as specified in clause 4.29.3(d)(vii); and

(d) Flexible_Over_Allocation_Payment(p,d) is calculated in accordance with clause 9.8.8.

9.8.7. For the purposes of clause 9.8.6, Flexible_Capacity_Payments(p,d) is calculated as:

$$Flexible_Capacity_Payments(p,d) = \sum_{e \in FCCEntities(p,d)} \left((FCC(e,d) - FCCA(e,d)) \times EDFRCP(e,d) \right)$$

where:

(a) e∈FCCEntities(p,d) denotes all:

i. Separately Certified Components of Scheduled Facilities;

ii. Separately Certified Components of Semi-Scheduled Facilities; and

iii. Demand Side Programmes,

registered to Market Participant p on Trading Day d, and e is an entity in that set;

(b) FCC(e,d) is the number of Flexible Capacity Credits assigned to entity e for Trading Day d;

(c) FCCA(c,d) is the sum of the Flexible Capacity Credits associated with entity e for Trading Day d that have been allocated in a Capacity Credit Allocation;

(d) EDFRCP(e,d) is the Entity Daily Flexible Reserve Capacity Price associated with entity e in Trading Day d.

9.8.8. For the purposes of clause 9.8.6, Flexible_Over_Allocation_Payment(p,d) is calculated as:

Flexible_Over_Allocation_Payment(p,d) =
max (0, Participant_FCCA(p,d) – FIRCR(p,d)) ×
Flexible_Excess_Allocation_Price(p,d);

where:

(a) Participant_FCCA(p,d) is the sum of Flexible Capacity Credits allocated to Market Participant p in Trading Day d in Capacity Credit Allocations;

(b) FIRCR(p,d) is the Flexible Individual Reserve Capacity Requirement for Market Participant p for the Trading Month in which Trading Day d falls, expressed in units of MW; and

(c) Flexible_Excess_Allocation_Price(p,d) is zero if Participant_FCCA(p,d) = 0, and otherwise:

$$Flexible_Excess_Allocation_Price(p,d) = \frac{\sum_{c \in C(p,d)}\left(\sum_{e \in FCCEntities(d)}\left(FCCA(c,e,p,d) \times EDFRCP(e,d)\right)\right)}{\sum_{c \in C(p,d)}\left(\sum_{e \in FCCEntities(d)}\left(FCCA(c,e,p,d)\right)\right)}$$

where:

i. C(p,d) is the set of Capacity Credit Allocations made to Market Participant p in Trading Day d and c is a Capacity Credit Allocation within the set;

ii. e∈FCCEntities(d) denotes all registered:

1. Separately Certified Components of Scheduled Facilities;

2. Separately Certified Components of Semi-Scheduled Facilities;

3. Non-Scheduled Facilities; and

4. Demand Side Programmes,

on Trading Day d;

iii. FCCA(c,e,p,d) is the number of Flexible Capacity Credits associated with entity e that have been allocated to Market Participant p in Capacity Credit Allocation c in Trading Day d; and

iv. EDFRCP(e,d) is the Entity Daily Flexible Reserve Capacity Price associated with entity e in Trading Day d.

9.8.9. For the purposes of clause 9.8.2, Flexible_Capacity_Purchaser_Payment(p,d) for Market Participant p for Trading Day d is:

Flexible_Capacity_Purchaser_Payment(p,d) =
Flexible_Targeted_Reserve_Capacity_Cost(p,d) +
Flexible_Shared_Reserve_Capacity_Cost(p,d)

where:

(a) Flexible_Targeted_Reserve_Capacity_Cost(p,d) =
Flexible_Targeted_Reserve_Capacity_Cost(d) ×
Flexible_Shortfall_Share(p,d)

(b) Flexible_Shared_Reserve_Capacity_Cost(p,d) =
Flexible_Shared_Reserve_Capacity_Cost(d) ×
Flexible_Capacity_Share(p,d)

(c) Flexible_Targeted_Reserve_Capacity_Cost(d) is the cost of Flexible Capacity to be shared amongst those Market Participants who have not had sufficient Flexible Capacity Credits allocated to them for Trading Day d where this cost is specified under clause 4.29.3(bA);

(d) $Flexible_Shortfall_Share(p,d) = \frac{(\max(0,FIRCR(p,d) - Participant_FCCA(p,d)))}{\sum_{p \in P}(\max(0,FIRCR(p,d) - Participant_FCCA(p,d)))}$

(e) Flexible_Shared_Reserve_Capacity_Cost(d) is the cost of Flexible Capacity to be shared amongst all Market Participants for Trading Day d where this cost is specified under clause 4.29.3(cA);

(f) Flexible_Capacity_Share(p,d) = FIRCR(p,d) / $\sum_{p \in P}$FIRCR(p,d)

(g) P is the set of all Market Participants where p is a member of that set;

(h) FIRCR(p,d) is the Flexible Individual Reserve Capacity Requirement for Market Participant p for the Trading Month in which Trading Day d falls, expressed in units of MW; and

(i) Participant_FCCA(p,d) is the sum of the Flexible Capacity Credits allocated to Market Participant p in Trading Day d, in a Capacity Credit Allocation.

9.9. Settlement Calculations – Real-Time Energy

9.9.1. AEMO must calculate for each Market Participant the Real-Time Energy settlement amount for a Trading Day.

9.9.2. The Real-Time Energy settlement amount for Market Participant p for Trading Day d is:

$$RTE_SA(p,d) = \sum_{t \in d} RTE_SA(p,t)$$

where:

(a) RTE_SA(p,t) is the Real-Time Energy settlement amount calculated for AEMO to Market Participant p for Trading Interval t in accordance with clause 9.9.3; and

(b) $t \in d$ denotes all Trading Intervals t in Trading Day d.

9.9.3. The Real-Time Energy settlement amount for Market Participant p for Trading Interval t is:

$$RTE_SA(p,t) = EnergyTradingAmount(p,t) + EnergyUplift_Payable(p,t) - EnergyUplift_Recoverable(p,t)$$

where:

(a) EnergyTradingAmount(p,t) is the energy trading amount calculated for AEMO to Market Participant p for Trading Interval t in accordance with clause 9.9.4;

(b) EnergyUplift_Payable(p,t) is the energy uplift amount payable to Market Participant p for Trading Interval t as calculated in accordance with clause 9.9.6; and

(c) EnergyUplift_Recoverable(p,t) is the energy uplift recoverable from Market Participant p for Trading Interval t as calculated in accordance with clause 9.9.15.

9.9.4. The energy trading amount for Market Participant p for Trading Interval t is:

$$EnergyTradingAmount(p,t) = ReferenceTradingPrice(t) \times NetTradingQuantity(p,t)$$

where:

(a) ReferenceTradingPrice(t) is the Final Reference Trading Price for Trading Interval t; and

(b) NetTradingQuantity(p,t) is the Net Trading Quantity for Market Participant p for Trading Interval t as calculated in accordance with clause 9.9.5.

9.9.5. The Net Trading Quantity for a Market Participant p in Trading Interval t is:

$$\text{NetTradingQuantity}(p,t) = \left(\sum_{f \in p} \text{MeteredSchedule}(f,t)\right) - \text{NetContractPosition}(p,t)$$

where:

(a) MeteredSchedule(f,t) is the Metered Schedule for facility f for Trading Interval t as calculated in accordance with clause 9.5.2 or clause 9.5.3 as the case may be;

(b) $f \in p$ denotes all Registered Facilities f registered to Market Participant p and all Non-Dispatchable Loads associated with Market Participant p (including Synergy's Notional Wholesale Meter where Synergy is Market Participant p calculated in accordance with clause 9.5.3); and

(c) Net Contract Position(p,t) is the Net Contract Position for Market Participant p in Trading Interval t as calculated in accordance with clause 6.9.13.

9.9.6. The energy uplift amount payable to Market Participant p for Trading Interval t is:

$$\text{EnergyUplift_Payable}(p,t) = \sum_{f \in p} \text{EnergyUpliftPayment}(f,t)$$

where:

(a) EnergyUpliftPayment(f,t) is the Energy Uplift Payment in respect of Registered Facility f and Trading Interval t as calculated in accordance with clause 9.9.7; and

(b) $f \in p$ denotes all Registered Facilities f registered to Market Participant p.

9.9.7. The Energy Uplift Payment for Registered Facility f in Trading Interval t is:

$$\text{EnergyUpliftPayment}(f,t) = \sum_{DI \in t} \text{EnergyUpliftPayment}(f,DI)$$

where:

(a) EnergyUpliftPayment(f,DI) is the Energy Uplift Payments to that Registered Facility f in Dispatch Interval DI calculated in accordance with clause 9.9.8; and

(b) $DI \in t$ denotes all Dispatch Intervals DI in Trading Interval t.

9.9.8. The Energy Uplift Payment for Registered Facility f in Dispatch Interval DI is:

$$\text{EnergyUpliftPayment}(f,DI) = \text{IsMisPriced}(f,DI) \times \text{EnergyUpliftPrice}(f,DI) \times \text{EnergyUpliftQuantity}(f,DI)$$

where:

(a) IsMisPriced(f,DI) is the mispricing trigger for Registered Facility f in Dispatch Interval DI determined as either 1 or 0 calculated in accordance with clause 9.9.9;

(b) EnergyUpliftPrice(f,DI) is the Energy Uplift Price for Registered Facility f in Dispatch Interval DI calculated in accordance with clause 9.9.10; and

(c) EnergyUpliftQuantity(f,DI) is the Energy Uplift Quantity for Registered Facility f in Dispatch Interval DI calculated in accordance with clause 9.9.11.

9.9.9. The mispricing trigger for Registered Facility f in Dispatch Interval DI is:

$$\text{IsMisPriced}(f,DI) = \begin{cases} \text{EnergyUpliftOverride, if EnergyUpliftOverride} \geq 0 \\ 1, \text{ if RTMSuspFlag}(DI) = 1 \\ 1, \text{ if ClearedQuantity}(f,DI) > 0 \\ \text{and CongestionRental}(f,DI) > 0 \\ \text{and MarginalOfferPrice}(f,DI) > \text{Energy_MCP}(DI) \\ \text{and } f \notin \text{FacilitiesInBindingDownRampRate}(DI) \\ \text{and } f \notin \text{FacilitiesInBindingESSEnablementMinimum}(DI) \\ \text{and } \forall\, c\ (f \notin \text{FacilitiesInBindingNCESS}(c,DI)) \\ 0, \text{ otherwise} \end{cases}$$

~~$$\text{IsMisPriced}(f,DI) = \begin{cases} 1, \text{ if RTMSuspFlag}(DI) = 1 \\ 1, \text{ if ClearedQuantity}(f,DI) > 0 \text{ and} \\ \text{and CongestionRental}(f,DI) > 0 \\ \text{MarginalOfferPrice}(f,DI) > \text{Energy_MCP}(DI) \\ \text{and } f \notin \text{FacilitiesInBindingDownRampRate}(DI) \\ \text{and } f \notin \text{FacilitiesInBindingESSEnablementMinimum}(DI) \\ \text{and } \forall\, c\ (f \notin \text{FacilitiesInBindingNCESS}(c,DI)) \\ 0, \text{ otherwise} \end{cases}$$~~

where:

(a) EnergyUpliftOverride is the Energy Uplift Override Flag for Registered Facility f in Dispatch Interval DI;

~~(a) RTMSuspFlag(DI) is the RTM Suspension Flag for Dispatch Interval DI;~~

(aA) RTMSuspFlag(DI) is the RTM Suspension Flag for Dispatch Interval DI;

(aB) ClearedQuantity(f,DI) is the cleared energy quantity for Registered Facility f in Dispatch Interval DI as recorded in the relevant Dispatch Instruction (where this quantity can be a Dispatch Target, Dispatch Cap or Dispatch Forecast);

~~(aA) ClearedQuantity(f,DI) is the cleared energy quantity for Registered Facility f in Dispatch Interval DI as recorded in the relevant Dispatch Instruction (where this quantity can be a Dispatch Target, Dispatch Cap or Dispatch Forecast);~~

(b) CongestionRental(f,DI) is the Congestion Rental for Registered Facility f in Dispatch Interval DI in respect of a set of Network Constraints N as published under clause 7.13.1EA(b);

(c) MarginalOfferPrice(f,DI) is the highest Loss Factor Adjusted Price associated with any cleared (or scheduled) Price-Quantity Pair for In-Service Capacity in respect of a Market Participant's Real-Time Market Offer for energy that was dispatched for Registered Facility f in Dispatch Interval DI;

(d) Energy_MCP(DI) is the Final Energy Market Clearing Price for Dispatch Interval DI;

(e) FacilitiesInBindingDownRampRate(DI) is the set of Registered Facilities whose EOI Quantity is higher than it would otherwise be in Dispatch Interval DI as a result of a binding ramp rate constraint applied under clause 7.2.4(c);

(f) FacilitiesInBindingESSEnablementMinimum(DI) is the set of Registered Facilities whose EOI Quantity is constrained to its Enablement Minimum value in Dispatch Interval DI, as a result of a binding Essential System Service Enablement Minimum Constraint applied under clause 7.8.5(b)(i) for a Frequency Co-optimised Essential System Service other than RoCoF Control Service; and

(g) FacilitiesInBindingNCESS(c,DI) is the set of Registered Facilities provided under clause 5.9.1(b) for NCESS Contract c and Dispatch Interval DI.

9.9.10. The Energy Uplift Price for Registered Facility f in Dispatch Interval DI is:

$$\text{EnergyUpliftPrice}(f,DI) = \begin{cases} 0, \text{ if InServiceTrancheCount}=0 \\ \text{Max}\left(0,\left(\text{MarginalOfferPrice}(f,DI) - \text{ReferenceTradingPrice}(t)\right)\right), \text{ otherwise} \end{cases}$$

where:

(a) InServiceTrancheCount is the number of Price-Quantity Pairs for non-zero quantities of In-Service Capacity in the Real-Time Market Offer for energy for Registered Facility f in Dispatch Interval DI;

(b) MarginalOfferPrice(f,DI) is the highest Loss Factor Adjusted Price associated with any cleared (or scheduled) Price-Quantity Pair for In-Service Capacity in respect of a Market Participant's Real-Time Market Offer for energy that was dispatched for Registered Facility f in Dispatch Interval DI; and

~~(b) MarginalOfferPrice(f,DI) is:~~

~~i. the highest Loss Factor Adjusted Price associated with any cleared (or scheduled) Price-Quantity Pair for In-Service Capacity in respect~~

~~of a Market Participant's Real-Time Market Offer for energy that was dispatched for Registered Facility f in Dispatch Interval DI; or~~

~~ii. if AEMO has suspended the Real-Time Market under clause 7.11D.1, the highest price Price-Quantity Pair in respect of a Market Participant's Real-Time Market Submission for energy associated with the MW Injection or Withdrawal of Registered Facility f for Dispatch Interval DI as monitored by AEMO's SCADA system as prepared under clause 7.13.1E(a)(vi); and~~

(c) ReferenceTradingPrice(t) is the Final Reference Trading Price for Trading Interval t containing Dispatch Interval DI.

9.9.11. The Energy Uplift Quantity for Registered Facility f in Dispatch Interval DI is:

$$\text{EnergyUpliftQuantity}(f,DI) = \text{Max}(0, \widehat{\text{MeteredQuantity}}(f,DI))$$

where:

(a) $\widehat{\text{MeteredQuantity}}(f, DI)$ is the estimate of Injection or Withdrawal in MWh for Registered Facility f for a Dispatch Interval calculated in accordance with clause 9.9.12.

9.9.12. The metered quantity estimate of Injection or Withdrawal in MWh of Registered Facility f in Dispatch Interval DI is:

$$\widehat{\text{MeteredQuantity}}(f,DI) = \begin{cases} \dfrac{\text{SCADAMWh}(f,DI)}{\text{TotalSCADAMWh}(f,t)} \times \text{MeteredSchedule}(f,t), \\ \qquad \text{if TotalSCADAMWh}(f,t) \neq 0 \\ \dfrac{\text{MeteredSchedule}(f,t)}{6}, \text{ if TotalSCADAMWh}(f,t) = 0 \end{cases}$$

where:

(a) SCADAMWh(f,DI) is the MWh Injection or Withdrawal of Registered Facility f for Dispatch Interval DI as monitored by AEMO's SCADA system as prepared under clause 7.13.1E(a)(i);

(b) MeteredSchedule(f,t) is the Metered Schedule for Registered Facility f for Trading Interval t as calculated in accordance with clause 9.5.2; and

(c) TotalSCADAMWh(f,t) is the total MWh Injection or Withdrawal of Registered Facility f for Trading Interval t as calculated accordance with clause 9.9.13.

9.9.13. The total MWh Injection or Withdrawal of Registered Facility f for Trading Interval t is:

$$\text{TotalSCADAMWh}(f,t) = \sum_{DI \in t} \text{SCADAMWh}(f,DI)$$

where:

(a) SCADAMWh(f,DI) is the MWh Injection or Withdrawal of Registered Facility f for Dispatch Interval DI as monitored by AEMO's SCADA system as prepared under clause 7.13.1E(a)(i); and

(b) DI∈t denotes all Dispatch Intervals DI in Trading Interval t.

9.9.14. AEMO must calculate the total amount of energy uplift recoverable in a Trading Interval from all Energy Uplift Payments made to all Market Participants in that Trading Interval as follows:

$$\text{EnergyUplift_Recoverable}(t) = \sum_{p \in P} \text{EnergyUplift_Payable}(p,t)$$

where:

(a) EnergyUplift_Payable(p,t) is the energy uplift amount payable to Market Participant p for Trading Interval t as calculated in accordance with clause 9.9.6; and

(b) p∈P denotes all Market Participants.

9.9.15. The energy uplift recoverable from Market Participant p for Trading Interval t is:

$$\text{EnergyUplift_Recoverable}(p,t) = \text{EnergyUplift_Recoverable}(t) \times \text{ConsumptionShare}(p,t)$$

where:

(a) EnergyUplift_Recoverable(t) is the total amount of energy uplift recoverable in Trading Interval t from all Energy Uplift Payments made to all Market Participants in that Trading Interval calculated in accordance with clause 9.9.14; and

(b) ConsumptionShare(p,t) is the Consumption Share for Market Participant p for Trading Interval t as calculated in accordance with clause 9.5.6.

9.10. Settlement Calculations - Essential System Services

9.10.1. AEMO must calculate for each Rule Participant the Essential System Service settlement amount for a Trading Day.

9.10.2. The Essential System Service settlement amount for Rule Participant p for Trading Day d is:

$$\text{ESS_SA}(p,d) = \text{ESS_Payable}(p,d) - \text{ESS_Recoverable}(p,d)$$

where:

(a) ESS_Payable(p,d) is the Essential System Service amount payable to Market Participant p for Trading Day d calculated in accordance with clause 9.10.3; and

(b) ESS_Recoverable(p,d) is the Essential System Service amount recoverable from Rule Participant p for Trading Day d calculated in accordance with clause 9.10.28.

9.10.3. The Essential System Service amount payable to Market Participant p for Trading Day d is:

$$ESS_Payable(p,d) = CR_Payable(p,d) + CL_Payable(p,d) + RCS_Payable(p,d) + Regulation_Payable(p,d) + SRS_Payable(p,d) + NCESS_Payable(p,d) + FCESSUplift_Payable(p,d) + RCSUplift_Payable(p,d)$$

where:

(a) CR_Payable(p,d) is the Contingency Reserve Raise amount payable to Market Participant p for Trading Day d calculated in accordance with clause 9.10.4;

(b) CL_Payable(p,d) is the Contingency Reserve Lower amount payable to Market Participant p for Trading Day d calculated in accordance with clause 9.10.8;

(c) RCS_Payable(p,d) is the RoCoF Control Service amount payable to Market Participant p for Trading Day d calculated in accordance with clause 9.10.12;

(d) Regulation_Payable(p,d) is the Regulation amount payable to Market Participant p for Trading Day d calculated in accordance with clause 9.10.20;

(e) SRS_Payable(p,d) is the System Restart Service amount payable to Market Participant p for Trading Day d calculated in accordance with clause 9.10.25;

(f) NCESS_Payable(p,d) is the NCESS amount payable to Market Participant p for Trading Day d calculated in accordance with clause 9.10.27A;

(g) FCESSUplift_Payable(p,d) is the FCESS uplift amount payable to Market Participant p for Trading Day d calculated in accordance with clause 9.10.3A; and

(h) RCSUplift_Payable(p,d) is the RoCoF Control Service uplift amount payable to Market Participant p for Trading Day d calculated in accordance with clause 9.10.3Q.

9.10.3A. The FCESS uplift amount payable to Market Participant p for Trading Day d is:

$$FCESSUplift_Payable(p,d) = \sum_{f \in p} \sum_{t \in d} FCESSUpliftPayment(f,t)$$

where:

(a) FCESSUpliftPayment(f,t) is the FCESS Uplift Payment for Registered Facility f in Trading Interval t as calculated in accordance with clause 9.10.3B;

(b) f∈p denotes all Registered Facilities f registered to Market Participant p; and

(c) t∈d denotes all Trading Intervals t in Trading Day d.

9.10.3B. The FCESS Uplift Payment for Registered Facility f in Trading Interval t is:

$$\text{FCESSUpliftPayment}(f,t) = \sum_{DI \in t} \text{FCESSUpliftPayment}(f,DI)$$

where:

(a) FCESSUpliftPayment(f,DI) is the FCESS Uplift Payment for Registered Facility f in Dispatch Interval DI as calculated under clause 9.10.3C; and

(b) DI∈t denotes all Dispatch Intervals DI in Trading Interval t.

9.10.3C. The FCESS Uplift Payment for Registered Facility f in Dispatch Interval DI is:

$$\text{FCESSUpliftPayment}(f,DI) = \begin{cases} \text{Max}(0,\text{RTMDispatchCost}(f,DI) - \text{RTMBaseCompensation}(f,DI)), \\ \quad \text{if FCESSUpliftEligibleFlag}(f,DI) = 1 \\ 0, \text{ otherwise} \end{cases}$$

where:

(a) RTMDispatchCost(f,DI) is the estimated Real-Time Market dispatch cost based on Real-Time Market Offers for Registered Facility f in Dispatch Interval DI, calculated in accordance with clause 9.10.3D;

(b) RTMBaseCompensation(f,DI) is the Real-Time Market base compensation amount for Registered Facility f in Dispatch Interval DI, calculated in accordance with clause 9.10.3E; and

(c) FCESSUpliftEligibleFlag(f,DI) is the FCESS Uplift Payment eligibility flag for Registered Facility f in Dispatch Interval DI, calculated in accordance with clause 9.10.3F.

9.10.3D. The estimated Real-Time Market dispatch cost based on Real-Time Market Offers for Registered Facility f in Dispatch Interval DI is:

$$\text{RTMDispatchCost}(f,DI) = \left(\sum_{epq \in \text{EnergyOffer}(f,DI)} (\text{ClearedEnergyQty}(f,DI,epq) \times \text{EnergyPrice}(f,DI,epq)) + \sum_{m \in \text{FCESS}} \sum_{fpq \in \text{FCESSOffer}(m,f,DI)} (\text{ClearedQty}(m,f,DI,fpq) \times \text{FCESSPrice}(m,f,DI,fpq)) \right) \times \frac{5}{60}$$

where:

(a) epq∈EnergyOffer(f,DI) denotes all Price-Quantity Pairs for In-Service Capacity epq in the Real-Time Market Offer for energy for Registered Facility f in Dispatch Interval DI;

(b) ClearedEnergyQty(f,DI,epq) is the part of the quantity from Price-Quantity Pair epq that is included in the FCESS Minimum Dispatch Target for Registered Facility f in Dispatch Interval DI;

(c) EnergyPrice(f,DI,epq) is the price specified in Price-Quantity Pair epq for Registered Facility f in Dispatch Interval DI;

(d) m∈FCESS denotes each of the Contingency Reserve Raise, Contingency Reserve Lower, Regulation Raise and Regulation Lower Frequency Co-optimised Essential System Services;

(e) fpq∈FCESSOffer(m,f,DI) denotes all Price-Quantity Pairs for In-Service Capacity fpq in the Real-Time Market Offer for Registered Facility f in Dispatch Interval DI for Frequency Co-optimised Essential System Service m (if one exists);

(f) ClearedQty(m,f,DI,fpg) is the part of the quantity from Price-Quantity Pair fpq that is included in the relevant Essential System Service Enablement Quantity determined for Registered Facility f in Dispatch Interval DI in accordance with clauses 9.10.6(c), 9.10.10(c), 9.10.22(c) or 9.10.23(c) as applicable;

(g) FCESSPrice(m,f,DI,fpq) is the price specified in Price-Quantity Pair fpq for Registered Facility f in Dispatch Interval DI for Frequency Co-optimised Essential System Service m; and

(h) 5/60 represents the period of a Dispatch Interval in hours.

9.10.3E. The Real-Time Market base compensation amount for Registered Facility f in Dispatch Interval DI is:

$$\text{RTMBaseCompensation}(f,DI) = \left(\text{FCESSMinDispatchTarget}(f,DI) \times \text{ReferenceTradingPrice}(t) \times \text{LF}(f,DI) + \sum_{m \in FCESS} (\text{EnablementQty}(m,f,DI) \times \text{MCP}(m,DI) \times \text{PF}(m,f,DI)) \right) \times \frac{5}{60}$$

where:

(a) FCESSMinDispatchTarget(f,DI) is the FCESS Minimum Dispatch Target for Registered Facility f in Dispatch Interval DI calculated accordance with clause 9.10.3G;

(b) ReferenceTradingPrice(t) is the Final Reference Trading Price for the Trading Interval t that contains Dispatch Interval DI;

(c) LF(f,DI) is the Loss Factor applicable to the Measurement Point associated with Registered Facility f in Dispatch Interval DI;

(d) m∈FCESS denotes each of the Contingency Reserve Raise, Contingency Reserve Lower, Regulation Raise and Regulation Lower Frequency Co-optimised Essential System Services;

(e) EnablementQty(m,f,DI) is the Essential System Service Enablement Quantity for Registered Facility f in Dispatch Interval DI for Frequency Co-optimised Essential System Service m (as adjusted in accordance with clauses 9.10.6(c), 9.10.10(c), 9.10.22(c) or 9.10.23(c) as applicable);

(f) MCP(m,DI) is the final Market Clearing Price for Frequency Co-optimised Essential System Service m in Dispatch Interval DI;

(g) PF(m,f,DI) is the Facility Performance Factor for Registered Facility f in Dispatch Interval DI for Frequency Co-optimised Essential System Service m as determined by AEMO under clause 7.11D.2(b)(iv) or published under clauses 7.13.1B(k) or 7.13.1BA(j); and

(h) 5/60 represents the period of a Dispatch Interval in hours.

9.10.3F. The FCESS Uplift Payment eligibility flag for Registered Facility f in Dispatch Interval DI is:

$$\text{FCESSUpliftEligibleFlag}(f,DI) = \begin{cases} 1, \text{ if RTMSuspFlag}(DI)=0 \\ \text{and } f \in \text{EligibleFacilities}(DI) \\ \text{and IsMisPriced}(f,DI)=0 \\ \text{and DispatchTarget}(f,DI)>0 \\ \text{and } \forall\, c\ (f \notin \text{FacilitiesInBindingNCESS}(c,DI)) \\ \text{and } \sum_{m \in FCESS} \text{EnablementQty}(m,f,DI) > 0 \\ 0, \text{ otherwise} \end{cases}$$

where:

(a) RTMSuspFlag(DI) is the RTM Suspension Flag for Dispatch Interval DI;

(b) EligibleFacilities(DI) is the set of Scheduled Facilities and Semi-Scheduled Facilities in Dispatch Interval DI;

(c) IsMisPriced(f,DI) is the mispricing trigger for Registered Facility f in Dispatch Interval DI as calculated in accordance with clause 9.9.9;

(d) DispatchTarget(f,DI) is the Dispatch Target for Registered Facility f in Dispatch Interval DI;

(dA) FacilitiesInBindingNCESS(c,DI) is the set of Registered Facilities provided under clause 5.9.1(b) for NCESS Contract c and Dispatch Interval DI;

(e) m∈FCESS denotes each of the Contingency Reserve Raise, Contingency Reserve Lower, Regulation Raise and Regulation Lower Frequency Co-optimised Essential System Services; and

(f) EnablementQty(m,f,DI) is the Essential System Service Enablement Quantity for Registered Facility f in Dispatch Interval DI for Frequency Co-optimised Essential System Service m, determined in accordance with clauses 9.10.6(c), 9.10.10(c), 9.10.22(c) or 9.10.23(c) as applicable.

9.10.3G. The FCESS Minimum Dispatch Target for Registered Facility f in Dispatch Interval DI is:

$$\text{FCESSMinDispatchTarget}(f,DI) = \begin{cases} \max(0, \text{Raise_MinDT}(f,DI), \text{Lower_MinDT}(f,DI)), & \text{if FCESSUpliftEligibleFlag}(f,DI)=1 \\ 0, & \text{otherwise} \end{cases}$$

where:

(a) Raise_MinDT(f,DI) is the minimum theoretical Dispatch Target from which Registered Facility f could have provided its Essential System Service Enablement Quantities for Contingency Reserve Raise and Regulation Raise in Dispatch Interval DI, as calculated in accordance with clause 9.10.3H;

(b) Lower_MinDT(f,DI) is the minimum theoretical Dispatch Target from which Registered Facility f could have provided its Essential System Service Enablement Quantities for Contingency Reserve Lower and Regulation Lower in Dispatch Interval DI, as calculated in accordance with clause 9.10.3HA; and

(c) FCESSUpliftEligibleFlag(f,DI) is the FCESS Uplift Payment eligibility flag for Registered Facility f in Dispatch Interval DI, as calculated in accordance with clause 9.10.3F.

9.10.3H. The minimum theoretical Dispatch Target from which Registered Facility f could have provided its Essential System Service Enablement Quantities for Contingency Reserve Raise and Regulation Raise in Dispatch Interval DI is:

$$\text{Raise_MinDT}(f,DI) = \begin{cases} \max(\text{EM_CR}(f,DI), \text{EM_RR}(f,DI)), \\ \text{if CR_EnablementQuantity}(f,DI) > 0 \text{ and RR_EnablementQuantity}(f,DI) > 0 \\ \text{EM_CR}(f,DI), \text{ if CR_EnablementQuantity}(f,DI) > 0 \text{ and RR_EnablementQuantity} \leq 0 \\ \text{EM_RR}(f,DI), \text{ if RR_EnablementQuantity}(f,DI) > 0 \text{ and CR_EnablementQuantity} \leq 0 \\ 0, \text{ otherwise} \end{cases}$$

where:

(a) EM_CR(f,DI) is the Enablement Minimum for Contingency Reserve Raise for Registered Facility f in Dispatch Interval DI as specified in the relevant Real-Time Market Submission in accordance with clause 7.4.41(d) and adjusted by AEMO, if applicable, under clause 7.4.52;

(b) EM_RR(f,DI) is the Enablement Minimum for Regulation Raise for Registered Facility f in Dispatch Interval DI as specified in the relevant Real-Time Market Submission in accordance with clause 7.4.41(d) and adjusted by AEMO, if applicable, under clause 7.4.52;

(c) CR_EnablementQuantity(f,DI) is the quantity determined in accordance with clause 9.10.6(c) for Registered Facility f in Dispatch Interval DI; and

(d) RR_EnablementQuantity(f,DI) is the quantity determined in accordance with clause 9.10.22(c) for Registered Facility f in Dispatch Interval DI.

9.10.3HA. The minimum theoretical Dispatch Target from which Registered Facility f could have provided its Essential System Service Enablement Quantities for Contingency Reserve Lower and Regulation Lower in Dispatch Interval DI is:

$$\text{Lower_MinDT}(f,DI) = \begin{cases} \text{CL_EnablementQuantity}(f,DI) + \text{RL_EnablementQuantity}(f,DI) + \\ \max(\text{EM_CL}(f,DI), \text{EM_RL}(f,DI)), \\ \text{if CL_EnablementQuantity}(f,DI) > 0 \text{ and RL_EnablementQuantity}(f,DI) > 0 \\ \text{EM_CL}(f,DI) + \text{CL_EnablementQuantity}(f,DI), \\ \text{if CL_EnablementQuantity}(f,DI) > 0 \text{ and RL_EnablementQuantity}(f,DI) \leq 0 \\ \text{EM_RL}(f,DI) + \text{RL_EnablementQuantity}(f,DI), \\ \text{if RL_EnablementQuantity}(f,DI) > 0 \text{ and CL_EnablementQuantity}(f,DI) \leq 0 \\ 0, \text{ otherwise} \end{cases}$$

where:

(a) CL_EnablementQuantity(f,DI) is the quantity determined in accordance with clause 9.10.10(c) for Registered Facility f in Dispatch Interval DI;

(b) RL_EnablementQuantity(f,DI) is the quantity determined in accordance with clause 9.10.23(c) for Registered Facility f in Dispatch Interval DI;

(c) EM_CL(f,DI) is the Enablement Minimum for Contingency Reserve Lower for Registered Facility f in Dispatch Interval DI as specified in the relevant Real-Time Market Submission in accordance with clause 7.4.41(d) and adjusted by AEMO, if applicable, under clause 7.4.52; and

(d) EM_RL(f,DI) is the Enablement Minimum for Regulation Lower for Registered Facility f in Dispatch Interval DI as specified in the relevant Real-Time Market Submission in accordance with clause 7.4.41(d) and adjusted by AEMO, if applicable, under clause 7.4.52.

9.10.3I. The number of Frequency Co-optimised Essential System Services to be allocated a share of the FCESS Uplift Payment for Registered Facility f in Dispatch Interval DI is:

$$\text{FCESSCount}(f,DI) = \begin{cases} \text{CREnabledFlag}(f,DI) + \text{CLEnabledFlag}(f,DI) + \text{RREnabledFlag}(f,DI) + \text{RLEnabledFlag}(f,DI), \\ \qquad \text{if FCESSUpliftEligibleFlag}(f,DI) = 1 \\ 0, \text{ otherwise} \end{cases}$$

where:

(a) CREnabledFlag(f,DI) is:

i. 1 if CR_EnablementQuantity(f,DI), determined in accordance with clause 9.10.6(c) for Registered Facility f in Dispatch Interval DI, is greater than zero; and

ii. zero otherwise;

(b) CLEnabledFlag(f,DI) is:

i. 1 if CL_EnablementQuantity(f,DI), determined in accordance with clause 9.10.10(c) for Registered Facility f in Dispatch Interval DI, is greater than zero; and

ii. zero otherwise;

(c) RREnabledFlag(f,DI) is:

i. 1 if RR_EnablementQuantity(f,DI), determined in accordance with clause 9.10.22(c) for Registered Facility f in Dispatch Interval DI, is greater than zero; and

ii. zero otherwise;

(d) RLEnabledFlag(f,DI) is:

i. 1 if RL_EnablementQuantity(f,DI), determined in accordance with clause 9.10.23(c) for Registered Facility f in Dispatch Interval DI, is greater than zero; and

ii. zero otherwise; and

(e) FCESSUpliftEligibleFlag(f,DI) is the FCESS Uplift Payment eligibility flag for Registered Facility f in Dispatch Interval DI, as calculated in accordance with clause 9.10.3F.

9.10.3J. The share of the FCESS Uplift Payment for Registered Facility f in Dispatch Interval DI to be allocated to each applicable Frequency Co-optimised Essential System Service is:

$$\text{FCESSUplift_Share}(f,DI) = \begin{cases} 0, \text{ if FCESSCount}(f,DI) = 0 \\ \dfrac{\text{FCESSUpliftPayment}(f,DI)}{\text{FCESSCount}(f,DI)}, \text{otherwise} \end{cases}$$

where:

(a) FCESSUpliftPayment(f,DI) is the FCESS Uplift Payment for Registered Facility f in Dispatch Interval DI as calculated under clause 9.10.3C; and

(b) FCESSCount(f,DI) is the number of Frequency Co-optimised Essential System Services to be allocated a share of the FCESS Uplift Payment for Registered Facility f in Dispatch Interval DI as calculated under clause 9.10.3I.

9.10.3K. The share of the FCESS Uplift Payment for Registered Facility f in Dispatch Interval DI to be allocated to Contingency Reserve Raise is:

$$\text{FCESSUplift_CR}(f,DI) = \begin{cases} \text{FCESSUplift_Share}(f,DI) \times \text{CREnabledFlag}(f,DI), \\ \quad \text{if FCESSUpliftEligibleFlag}(f,DI) = 1 \\ 0, \text{ otherwise} \end{cases}$$

where:

(a) FCESSUplift_Share(f,DI) is the share of the FCESS Uplift Payment for Registered Facility f in Dispatch Interval DI to be allocated to each applicable Frequency Co-optimised Essential System Service, as calculated under clause 9.10.3J;

(b) CREnabledFlag(f,DI) is the value calculated for Registered Facility f in Dispatch Interval DI under clause 9.10.3I(a); and

(c) FCESSUpliftEligibleFlag(f,DI) is the FCESS Uplift Payment eligibility flag for Registered Facility f in Dispatch Interval DI, as calculated in accordance with clause 9.10.3F.

9.10.3L. The share of the FCESS Uplift Payment for Registered Facility f in Dispatch Interval DI to be allocated to Contingency Reserve Lower is:

$$\text{FCESSUplift_CL}(f,DI) = \begin{cases} \text{FCESSUplift_Share}(f,DI) \times \text{CLEnabledFlag}(f,DI), \\ \quad \text{if FCESSUpliftEligibleFlag}(f,DI) = 1 \\ 0, \text{ otherwise} \end{cases}$$

where:

(a) FCESSUplift_Share(f,DI) is the share of the FCESS Uplift Payment for Registered Facility f in Dispatch Interval DI to be allocated to each applicable Frequency Co-optimised Essential System Service, determined under clause 9.10.3J;

(b) CLEnabledFlag(f,DI) is the value calculated for Registered Facility f in Dispatch Interval DI under clause 9.10.3I(b); and

(c) FCESSUpliftEligibleFlag(f,DI) is the FCESS Uplift Payment eligibility flag for Registered Facility f in Dispatch Interval DI, as calculated in accordance with clause 9.10.3F.

9.10.3M. [Blank]

9.10.3N. The share of the FCESS Uplift Payment for Registered Facility f in Dispatch Interval DI to be allocated to Regulation Raise is:

$$FCESSUplift_RR(f,DI) = \begin{cases} FCESSUplift_Share(f,DI) \times RREnabledFlag(f,DI), \\ \quad \text{if } FCESSUpliftEligibleFlag(f,DI) = 1 \\ 0, \text{ otherwise} \end{cases}$$

where:

(a) FCESSUplift_Share(f,DI) is the share of the FCESS Uplift Payment for Registered Facility f in Dispatch Interval DI to be allocated to each applicable Frequency Co-optimised Essential System Service, determined under clause 9.10.3J;

(b) RREnabledFlag(f,DI) is the value calculated for Registered Facility f in Dispatch Interval DI under clause 9.10.3I(c); and

(c) FCESSUpliftEligibleFlag(f,DI) is the FCESS Uplift Payment eligibility flag for Registered Facility f in Dispatch Interval DI, as calculated in accordance with clause 9.10.3F.

9.10.3O. The share of the FCESS Uplift Payment for Registered Facility f in Dispatch Interval DI to be allocated to Regulation Lower is:

$$FCESSUplift_RL(f,DI) = \begin{cases} FCESSUplift_Share(f,DI) \times RLEnabledFlag(f,DI), \\ \quad \text{if } FCESSUpliftEligibleFlag(f,DI) = 1 \\ 0, \text{ otherwise} \end{cases}$$

where:

(a) FCESSUplift_Share(f,DI) is the share of the FCESS Uplift Payment for Registered Facility f in Dispatch Interval DI to be allocated to each applicable Frequency Co-optimised Essential System Service, determined under clause 9.10.3J;

(b) RLEnabledFlag(f,DI) is the value calculated for Registered Facility f in Dispatch Interval DI under clause 9.10.3I(d); and

(c) FCESSUpliftEligibleFlag(f,DI) is the FCESS Uplift Payment eligibility flag for Registered Facility f in Dispatch Interval DI, as calculated in accordance with clause 9.10.3F.

9.10.3P. AEMO must, as soon as practicable after each Settlement Statement Date, publish on the WEM Website the FCESS Uplift Payment for each Scheduled

Facility or Semi-Scheduled Facility for each Dispatch Interval in the relevant Trading Week, and the share of each FCESS Uplift Payment allocated to each Frequency Co-optimised Essential System Service.

9.10.3Q. The RoCoF Control Service uplift amount payable to Market Participant p for Trading Day d is:

$$RCSUplift_Payable(p,d) = \sum_{f \in p} \sum_{t \in d} RCSUpliftPayment(f,t)$$

where:

(a) RCSUpliftPayment(f,t) is the RCS Uplift Payment for Registered Facility f in Trading Interval t as calculated in accordance with clause 9.10.3R;

(b) $f \in p$ denotes all Registered Facilities f registered to Market Participant p; and

(c) $t \in d$ denotes all Trading Intervals t in Trading Day d.

9.10.3R. The RCS Uplift Payment for Registered Facility f in Trading Interval t is:

$$RCSUpliftPayment(f,t) = \sum_{DI \in t} RCSUpliftPayment(f,DI)$$

where:

(a) RCSUpliftPayment(f,DI) is the RCS Uplift Payment for Registered Facility f in Dispatch Interval DI as calculated under clause 9.10.3S; and

(b) $DI \in t$ denotes all Dispatch Intervals DI in Trading Interval t.

9.10.3S. The RCS Uplift Payment for Registered Facility f in Dispatch Interval DI is:

$$RCSUpliftPayment(f,DI) = RCSUpliftEligibleFlag(f,DI) \times EnergyUpliftPrice(f,DI) \times EnergyUpliftQuantity(f,DI)$$

where:

(a) RCSUpliftEligibleFlag(f,DI) is the RCS Uplift Payment eligibility flag for Registered Facility f in Dispatch Interval DI, calculated in accordance with clause 9.10.3T;

(b) EnergyUpliftPrice(f,DI) is the Energy Uplift Price for Registered Facility f in Dispatch Interval DI calculated in accordance with clause 9.9.10; and

(c) EnergyUpliftQuantity(f,DI) is the Energy Uplift Quantity for Registered Facility f in Dispatch Interval DI calculated in accordance with clause 9.9.11.

9.10.3T. The RCS Uplift Payment eligibility flag for Registered Facility f in Dispatch Interval DI is:

$$\text{RCSUpliftEligibleFlag}(f,DI) = \begin{cases} \text{RCSUpliftOverride, if RCSUpliftOverride} \geq 0 \\ 1, \text{ if RTMSuspFlag}(DI)=0 \\ \text{and } f \in \text{FacilitiesInBindingRCSProvision}(DI) \\ \text{and IsMisPriced}(f,DI)=0 \\ \text{and FCESSUpliftEligibleFlag}=0 \\ \text{and ClearedQuantity}(f,DI)>0 \\ \text{and } \forall\, c\ (f \notin \text{FacilitiesInBindingNCESS}(c,DI)) \\ \text{and MarginalOfferPrice}(f,DI) > \text{Energy_MCP}(DI) \\ 0, \text{ otherwise} \end{cases}$$

~~$$\text{RCSUpliftEligibleFlag}(f,DI) = \begin{cases} 1, \text{ if RTMSuspFlag}(DI)=0 \\ \text{and } f \in \text{FacilitiesInBindingRCSProvision}(DI) \\ \text{and IsMisPriced}(f,DI)=0 \\ \text{and FCESSUpliftEligibleFlag}=0 \\ \text{and ClearedQuantity}(f,DI)>0 \\ \text{and } \forall\, c\ (f \notin \text{FacilitiesInBindingNCESS}(c,DI)) \\ \text{and MarginalOfferPrice}(f,DI) > \text{Energy_MCP}(DI) \\ 0, \text{ otherwise} \end{cases}$$~~

where:

(a) RCSUpliftOverride is the RCS Uplift Override Flag for Registered Facility f in Dispatch Interval DI;

(aA) RTMSuspFlag(DI) is the RTM Suspension Flag for Dispatch Interval DI;

~~(a) RTMSuspFlag(DI) is the RTM Suspension Flag for Dispatch Interval DI;~~

(b) FacilitiesInBindingRCSProvision(DI) is the set of Scheduled Facilities and Semi-Scheduled Facilities that are subject to a binding RCS Provision Constraint Equation in Dispatch Interval DI;

(c) IsMisPriced(f,DI) is the mispricing trigger for Registered Facility f in Dispatch Interval DI, as calculated in accordance with clause 9.9.9;

(d) FCESSUpliftEligibleFlag is the FCESS Uplift Payment eligibility flag for Registered Facility f in Dispatch Interval DI, as calculated in accordance with clause 9.10.3F;

(e) ClearedQuantity(f,DI) is the cleared energy quantity for Registered Facility f in Dispatch Interval DI as recorded in the relevant Dispatch Instruction (where this quantity can be a Dispatch Target, Dispatch Cap or Dispatch Forecast);

(f) FacilitiesInBindingNCESS(c,DI) is the set of Registered Facilities provided under clause 5.9.1(b) for NCESS Contract c and Dispatch Interval DI;

(g) MarginalOfferPrice(f,DI) is the highest Loss Factor Adjusted Price associated with any cleared (or scheduled) Price-Quantity Pair for In-Service Capacity in respect of a Market Participant's Real-Time Market Offer for energy that was dispatched for Registered Facility f in Dispatch Interval DI; and

(h) Energy_MCP(DI) is the Final Energy Market Clearing Price for Dispatch Interval DI.

9.10.4. The Contingency Reserve Raise amount payable to Market Participant p for Trading Day d is:

$$CR_Payable(p,d) = \sum_{f \in p} \sum_{t \in d} CR_Payable(f,t)$$

where:

(a) CR_Payable(f,t) is the Contingency Reserve Raise amount payable for Registered Facility f in Trading Interval t as calculated in accordance with clause 9.10.5;

(b) $f \in p$ denotes all Registered Facilities f registered to Market Participant p; and

(c) $t \in d$ denotes all Trading Intervals t in Trading Day d.

9.10.5. The Contingency Reserve Raise amount payable for Registered Facility f in Trading Interval t is:

$$CR_Payable(f,t) = \sum_{DI \in t} CR_Payable(f,DI)$$

where:

(a) CR_Payable(f,DI) is the Contingency Reserve Raise amount payable for Registered Facility f in Dispatch Interval DI as calculated in accordance with clause 9.10.6; and

(b) $DI \in t$ denotes all Dispatch Intervals DI in Trading Interval t.

9.10.6. The Contingency Reserve Raise amount payable for Registered Facility f in Dispatch Interval DI is:

$$CR_Payable(f,DI) = CR_MCP(DI) \times \frac{5}{60} \times CR_EnablementQuantity(f, DI) \times CR_PerformanceFactor(f, DI) + CR_AvailabilityPayment(f,DI) - CR_SESSMRefund(f,DI)$$

where:

(a) CR_MCP(DI) is the Final Contingency Reserve Raise Market Clearing Price for Dispatch Interval DI;

(b) 5/60 represents the period of a Dispatch Interval in hours;

(c) CR_EnablementQuantity(f,DI) is:

i. subject to clause 9.10.6(c)(ii) the Essential System Service Enablement Quantity for Registered Facility f in Dispatch Interval DI

for Contingency Reserve Raise as published under clause 7.13.1E(c); or

ii. if Registered Facility f is subject to a Planned Outage or a Forced Outage in Dispatch Interval DI and in AEMO's view the sum of the quantities of Contingency Reserve Raise offered in the relevant Market Participant's Real-Time Market Submission in respect of Registered Facility f for Dispatch Interval DI does not accurately reflect Registered Facility f's capability to provide Contingency Reserve Raise, then AEMO's reasonable estimate of Registered Facility f's MW capability to provide Contingency Reserve Raise in Dispatch interval DI;

(d) CR_PerformanceFactor(f,DI) is the relevant Facility Performance Factor for Registered Facility f in Dispatch Interval DI as determined by AEMO under clause 7.11D.2(b)(iv) or published under clauses 7.13.1B(k) or 7.13.1BA(j);

(e) CR_AvailabilityPayment(f,DI) is the SESSM Availability Payment to be made for Registered Facility f under each relevant SESSM Award in Dispatch Interval DI, as calculated following the steps set out in Appendix 2C and as finally calculated in clause 2.8(a) of Appendix 2C; and

(f) CR_SESSMRefund(f,DI) is the refund payable by Market Participant p in respect of their Registered Facility f for Registered Facility f not meeting the SESSM Availability Requirements in Dispatch Interval DI in respect of Contingency Reserve Raise set out in each relevant SESSM Award as calculated following the steps set out in Appendix 2C and as finally calculated in clause 2.8(b) of Appendix 2C.

9.10.7. The Contingency Reserve Raise amount payable in Dispatch Interval DI is:

$$CR_Payable(DI) = \sum_{f \in Facilities} CR_Payable(f,DI) + \sum_{f \in Facilities} FCESSUplift_CR(f,DI)$$

where:

(a) CR_Payable(f,DI) is the Contingency Reserve Raise amount payable for Registered Facility f in Dispatch Interval DI calculated in accordance with clause 9.10.6;

(b) FCESSUplift_CR(f,DI) is the share of the FCESS Uplift Payment for Registered Facility f in Dispatch Interval DI to be allocated to Contingency Reserve Raise, determined under clause 9.10.3K; and

(c) f∈Facilities denotes all Registered Facilities f.

9.10.8. The Contingency Reserve Lower amount payable to Market Participant p for Trading Day d is:

$$CL_Payable(p,d) = \sum_{f \in p} \sum_{t \in d} CL_Payable(f,t)$$

where:

(a) CL_Payable(f,t) is the Contingency Reserve Lower amount payable for Registered Facility f in Trading Interval t as calculated in accordance with clause 9.10.9;

(b) $f \in p$ denotes all Registered Facilities f registered to Market Participant p; and

(c) $t \in d$ denotes all Trading Intervals t in Trading Day d.

9.10.9. The Contingency Reserve Lower amount payable for Registered Facility f in Trading Interval t is:

$$\text{CL_Payable}(f,t) = \sum_{DI \in t} \text{CL_Payable}(f,DI)$$

where:

(a) CL_Payable(f,DI) is the Contingency Reserve Lower amount payable for Registered Facility f in Dispatch Interval DI as calculated in accordance with clause 9.10.10; and

(b) $DI \in t$ denotes all Dispatch Intervals DI in Trading Interval t.

9.10.10. The Contingency Reserve Lower amount payable for Registered Facility f in Dispatch Interval DI is:

$$\text{CL_Payable}(f,DI) = \text{CL_MCP}(DI) \times \frac{5}{60} \times \text{CL_EnablementQuantity}(f, DI) \times \text{CL_PerformanceFactor}(f, DI) + \text{CL_AvailabilityPayment}(f,DI) - \text{CL_SESSMRefund}(f,DI)$$

where:

(a) CL_MCP(DI) is the Final Contingency Reserve Lower Market Clearing Price for Dispatch Interval DI;

(b) 5/60 represents the period of a Dispatch Interval in hours;

(c) CL_EnablementQuantity(f,DI) is:

i. subject to clause 9.10.10(c)(ii) the Essential System Service Enablement Quantity for Registered Facility f in Dispatch Interval DI for Contingency Reserve Lower as published under clause 7.13.1E(c); or

ii. if Registered Facility f is subject to a Planned Outage or a Forced Outage in Dispatch Interval DI and in AEMO's view the sum of the quantities of Contingency Reserve Lower offered in the relevant Market Participant's Real-Time Market Submission in respect of Registered Facility f for Dispatch Interval DI does not accurately reflect Registered Facility f's capability to provide Contingency Reserve Lower, then AEMO's reasonable estimate of Registered

Facility f's MW capability to provide Contingency Reserve Lower in Dispatch interval DI;

(d) CL_PerformanceFactor(f,DI) is the relevant Facility Performance Factor for Registered Facility f in Dispatch Interval DI as determined by AEMO under clause 7.11D.2(b)(iv) or published under clauses 7.13.1B(k) or 7.13.1BA(j);

(e) CL_AvailabilityPayment(f,DI) is the SESSM Availability Payment to be made for Registered Facility f under each relevant SESSM Award in Dispatch Interval DI, as calculated following the steps set out in Appendix 2C and as finally calculated in clause 2.8(a) of Appendix 2C; and

(f) CL_SESSMRefund(f,DI) is the refund payable by Market Participant p in respect of their Registered Facility f for Registered Facility f not meeting the SESSM Availability Requirements in Dispatch Interval DI in respect of Contingency Reserve Lower set out in in each relevant SESSM Award as calculated following the steps set out in Appendix 2C and as finally calculated in clause 2.8(b) of Appendix 2C.

9.10.11. The total cost of procuring Contingency Reserve Lower in Dispatch Interval DI is:

$$CL_Payable(DI) = \sum_{f \in Facilities} CL_Payable(f,DI) + FCESSUplift_CL(f,DI)$$

where:

(a) CL_Payable(f,DI) is the Contingency Reserve Lower amount payable for Registered Facility f in Dispatch Interval DI as calculated in accordance with clause 9.10.10;

(b) FCESSUplift_CL(f,DI) is the share of the FCESS Uplift Payment for Registered Facility f in Dispatch Interval DI to be allocated to Contingency Reserve Lower, determined under clause 9.10.3L; and

(c) f∈Facilities denotes all Registered Facilities f.

9.10.11A. The total cost of procuring Contingency Reserve Lower in Trading Interval t is:

$$CL_Payable(t) = \sum_{DI \in t} CL_Payable(DI)$$

where:

(a) DI∈t denotes all Dispatch Intervals DI in Trading Interval t; and

(b) CL_Payable(DI) is the total cost of procuring Contingency Reserve Lower in Dispatch Interval DI, determined under clause 9.10.11.

9.10.12. The RoCoF Control Service amount payable to Market Participant p for Trading Day d is:

$$RCS_Payable(p,d) = \sum_{f \in p} \sum_{t \in d} RCS_Payable(f,t)$$

where:

(a) RCS_Payable(f,t) is the RoCoF Control Service amount payable for Registered Facility f in Trading Interval t as calculated in accordance with clause 9.10.13;

(b) $f \in p$ denotes all Registered Facilities f registered to Market Participant p; and

(c) $t \in d$ denotes all Trading Intervals t in Trading Day d.

9.10.13. The RoCoF Control Service amount payable for Registered Facility f in Trading Interval t is:

$$\text{RCS_Payable}(f,t) = \sum_{DI \in t} \text{RCS_Payable}(f,DI)$$

where:

(a) RCS_Payable(f,DI) is the RoCoF Control Service amount payable for Registered Facility f in Dispatch Interval DI as calculated in accordance with clause 9.10.14; and

(b) $DI \in t$ denotes all Dispatch Intervals DI in Trading Interval t.

9.10.14. The RoCoF Control Service amount payable for Registered Facility f in Dispatch Interval DI is:

$$\text{RCS_Payable}(f,DI) = \text{RCS_MCP}(DI) \times \frac{5}{60} \times \text{RCS_EnablementQuantity}(f, DI) \times \text{RCS_PerformanceFactor}(f, DI) + \text{RCS_AvailabilityPayment}(f,DI) - \text{RCS_SESSMRefund}(f,DI)$$

where:

(a) RCS_MCP(DI) is the Final RoCoF Control Service Market Clearing Price for Dispatch Interval DI;

(b) 5/60 represents the period of a Dispatch Interval in hours;

(c) RCS_EnablementQuantity(f,DI) is:

i. subject to clause 9.10.14(c)(ii) the Essential System Service Enablement Quantity for Registered Facility f in Dispatch Interval DI for RoCoF Control Service as published under clause 7.13.1E(c); or

ii. if Registered Facility f is subject to a Planned Outage or a Forced Outage in Dispatch Interval DI and in AEMO's view the sum of the quantities of RoCoF Control Service offered in the relevant Market Participant's Real-Time Market Submission in respect of Registered Facility f for Dispatch Interval DI does not accurately reflect Registered Facility f's capability to provide RoCoF Control Service, then AEMO's reasonable estimate of Registered Facility f's MWs capability to provide RoCoF Control Service in Dispatch interval DI;

(d) RCS_PerformanceFactor(f,DI) is the relevant Facility Performance Factor for Registered Facility f in Dispatch Interval DI as determined by AEMO under clause 7.11D.2(b)(iv) or published under clauses 7.13.1B(k) or 7.13.1BA(j);

(e) RCS_AvailabilityPayment(f,DI) is the SESSM Availability Payment to be made for Registered Facility f under each relevant SESSM Award in Dispatch Interval DI, as calculated following the steps set out in Appendix 2C and as finally calculated in clause 2.8(a) of Appendix 2C; and

(f) RCS_SESSMRefund(f,DI) is the refund payable by Market Participant p in respect of their Registered Facility f for Registered Facility f not meeting the SESSM Availability Requirements in Dispatch Interval DI in respect of RoCoF Control Service set out in each relevant SESSM Award as calculated following the steps set out in Appendix 2C and as finally calculated in clause 2.8(b) of Appendix 2C.

9.10.15. The cost of procuring RoCoF Control Service in Dispatch Interval DI is:

$$\text{RCS_Payable}(\text{DI}) = \sum_{\text{f}\in\text{Facilities}} \text{RCS_Payable}(\text{f,DI}) + \text{RCSUpliftPayment}(\text{f,DI})$$

where:

(a) RCS_Payable(f,DI) is the RoCoF Control Service amount payable for Registered Facility f in Dispatch Interval DI as calculated in accordance with clause 9.10.14;

(b) RCSUpliftPayment(f,DI) is the RCS Uplift Payment for Registered Facility f in Dispatch Interval DI as calculated in accordance with clause 9.10.3S; and

(c) f∈Facilities denotes all Registered Facilities f.

9.10.16. AEMO must calculate the cost of procuring the Minimum RoCoF Control Requirement component of RoCoF Control Service in Dispatch Interval DI. Subject to clause 9.10.17, the cost of procuring the Minimum RoCoF Control Requirement component of RoCoF Control Service in Dispatch Interval DI is:

$$\text{MinRCS_Payable}(\text{DI}) = \text{RCS_Payable}(\text{DI}) \times \frac{\text{MinRoCoFControlRequirement}(\text{DI})}{\text{RoCoFControlRequirement}(\text{DI})}$$

where:

(a) RCS_Payable(DI) is the cost of procuring RoCoF Control Service in Dispatch Interval DI as calculated in accordance with clause 9.10.15;

(b) MinRoCoFControlRequirement(DI) is the Minimum RoCoF Control Requirement in Dispatch Interval DI as published by AEMO under clauses 7.13.1B(f) or 7.13.1BA(e); and

(c) RoCoFControlRequirement(DI) is the RoCoF Control Requirement in Dispatch Interval DI as published by AEMO under clauses 7.13.1B(h) or 7.13.1BA(q).

9.10.17. AEMO must calculate the cost of procuring the Minimum RoCoF Control Requirement component of RoCoF Control Service in Dispatch Interval DI, MinRCS_Payable(DI), as zero if the RoCoF Control Requirement in Dispatch Interval DI is zero.

9.10.18. The cost associated with procuring the Minimum RoCoF Control Requirement component of RoCoF Control Service in Trading Interval t is:

$$\text{MinRCS_Payable}(t) = \sum_{DI \in t} \text{MinRCS_Payable}(DI)$$

where:

(a) MinRCS_Payable(DI) is the cost of procuring the Minimum RoCoF Control Requirement component of RoCoF Control Service in Dispatch Interval DI as calculated in accordance with clause 9.10.16; and

(b) $DI \in t$ denotes all Dispatch Intervals DI in Trading Interval t.

9.10.19. The cost of procuring the Additional RoCoF Control Requirement component of RoCoF Control Service in Dispatch Interval DI is:

$$\text{AdditionalRCS_Payable}(DI) = \text{RCS_Payable}(DI) - \text{MinRCS_Payable}(DI)$$

where:

(a) RCS_Payable(DI) is the cost of procuring RoCoF Control Service in Dispatch Interval DI as calculated in accordance with clause 9.10.15; and

(b) MinRCS_Payable(DI) is the cost of procuring the Minimum RoCoF Control Requirement component of RoCoF Control Service in Dispatch Interval DI as calculated in accordance with clause 9.10.16.

9.10.20. The Regulation amount payable to Market Participant p for Trading Day d is:

$$\text{Regulation_Payable}(p,d) = \sum_{f \in p} \sum_{t \in d} \text{Regulation_Payable}(f,t)$$

where:

(a) Regulation_Payable(f,t) is the Regulation amount payable for Registered Facility f in Trading Interval t as calculated in accordance with clause 9.10.21;

(b) $f \in p$ denotes all Registered Facilities f registered to Market Participant p; and

(c) $t \in d$ denotes all Trading Intervals t in Trading Day d.

9.10.21. The Regulation amount payable for Registered Facility f in Trading Interval t is:

$$\text{Regulation_Payable}(f,t) = \sum_{DI \in t} \left(\text{RR_Payable}(f,DI) + \text{RL_Payable}(f,DI)\right)$$

where:

(a) RR_Payable(f,DI) is the Regulation Raise amount payable for Registered Facility f in Dispatch Interval DI as calculated in accordance with clause 9.10.22;

(b) RL_Payable(f,DI) is the Regulation Lower amount payable for Registered Facility f in Dispatch Interval DI as calculated in accordance with clause 9.10.23; and

(c) $DI \in t$ denotes all Dispatch Intervals DI in Trading Interval t.

9.10.22. The Regulation Raise amount payable for Registered Facility f in Dispatch Interval DI is:

$$\text{RR_Payable}(f,DI) = \text{RR_MCP}(DI) \times \frac{5}{60} \times \text{RR_EnablementQuantity}(f, DI) \times \text{RR_PerformanceFactor}(f, DI) + \text{RR_AvailabilityPayment}(f,DI) - \text{RR_SESSMRefund}(f,DI)$$

where:

(a) RR_MCP(DI) is the Final Regulation Raise Market Clearing Price for Dispatch Interval DI;

(b) 5/60 represents the period of a Dispatch Interval in hours;

(c) RR_EnablementQuantity(f,DI) is:

i. subject to clause 9.10.22(c)(ii) the Essential System Service Enablement Quantity for Registered Facility f in Dispatch Interval DI for Regulation Raise as published under clause 7.13.1E(c); or

ii. if Registered Facility f is subject to a Planned Outage or a Forced Outage in Dispatch Interval DI and in AEMO's view the sum of the quantities of Regulation Raise offered in the relevant Market Participant's Real-Time Market Submission in respect of Registered Facility f for Dispatch Interval DI does not accurately reflect Registered Facility f's capability to provide Regulation Raise, then AEMO's reasonable estimate of Registered Facility f's MW capability to provide Regulation Raise in Dispatch Interval DI;

(d) RR_PerformanceFactor(f,DI) is the relevant Facility Performance Factor for Registered Facility f in Dispatch Interval DI as determined by AEMO under clause 7.11D.2(b)(iv) or published under clauses 7.13.1B(k) or 7.13.1BA(j);

(e) RR_AvailabilityPayment(f,DI) is the SESSM Availability Payment to be made for Registered Facility f under each relevant SESSM Award in

Dispatch Interval DI, as calculated following the steps set out in Appendix 2C and as finally calculated in clause 2.8(a) of Appendix 2C; and

(f) RR_SESSMRefund(f,DI) is the refund payable by Market Participant p in respect of their Registered Facility f for Registered Facility f not meeting the SESSM Availability Requirements in Dispatch Interval DI in respect of Regulation Raise set out in each relevant SESSM Award as calculated following the steps set out in Appendix 2C and as finally calculated in clause 2.8(b) of Appendix 2C.

9.10.23. The Regulation Lower amount payable for Registered Facility f in Dispatch Interval DI is:

$$RL_Payable(f,DI) = RL_MCP(DI) \times \frac{5}{60} \times RL_EnablementQuantity(f, DI) \times RL_PerformanceFactor(f, DI) + RL_AvailabilityPayment(f,DI) - RL_SESSMRefund(f,DI)$$

where:

(a) RL_MCP(DI) is the Final Regulation Lower Market Clearing Price for Dispatch Interval DI;

(b) 5/60 represents the period of a Dispatch Interval in hours;

(c) RL_EnablementQuantity(f,DI) is:

i. subject to clause 9.10.23(c)(ii) the Essential System Service Enablement Quantity for Registered Facility f in Dispatch Interval DI for Regulation Lower as published under clause 7.13.1E(c); or

ii. if Registered Facility f is subject to a Planned Outage or a Forced Outage in Dispatch Interval DI and in AEMO's view the sum of the quantities of Regulation Lower offered in the relevant Market Participant's Real-Time Market Submission in respect of Registered Facility f for Dispatch Interval DI does not accurately reflect Registered Facility f's capability to provide Regulation Lower, then AEMO's reasonable estimate of Registered Facility f's MW capability to provide Regulation Lower in Dispatch Interval DI;

(d) RL_PerformanceFactor(f,DI) is the relevant Facility Performance Factor for Registered Facility f in Dispatch Interval DI as determined by AEMO under clause 7.11D.2(b)(iv) or published under clauses 7.13.1B(k) or 7.13.1BA(j);

(e) RL_AvailabilityPayment(f,DI) is the SESSM Availability Payment to be made for Registered Facility f under each relevant SESSM Award in Dispatch Interval DI, as calculated following the steps set out in Appendix 2C and as finally calculated in clause 2.8(a) of Appendix 2C; and

(f) RL_SESSMRefund(f,DI) is the refund payable by Market Participant p in respect of their Registered Facility f for Registered Facility f not meeting

the SESSM Availability Requirements in Dispatch Interval DI in respect of Regulation Lower set out in each relevant SESSM Award as calculated following the steps set out in Appendix 2C and as finally calculated in clause 2.8(b) of Appendix 2C.

9.10.24. The total cost of procuring Regulation in Trading Interval t is:

$$\text{Regulation_Payable}(t) = \sum_{f \in \text{Facilities}} \text{Regulation_Payable}(f,t) + \sum_{f \in \text{Facilities}} \sum_{DI \in t} \text{FCESSUplift_RR}(f,DI) + \sum_{f \in \text{Facilities}} \sum_{DI \in t} \text{FCESSUplift_RL}(f,DI)$$

where:

(a) Regulation_Payable(f,t) is the Regulation amount payable for Registered Facility f in Trading Interval t as calculated in accordance with clause 9.10.21;

(b) FCESSUplift_RR(f,DI) is the share of the FCESS Uplift Payment for Registered Facility f in Dispatch Interval DI to be allocated to Regulation Raise, determined under clause 9.10.3N;

(c) FCESSUplift_RL(f,DI) is the share of the FCESS Uplift Payment for Registered Facility f in Dispatch Interval DI to be allocated to Regulation Lower, determined under clause 9.10.3O;

(d) f∈Facilities denotes all Registered Facilities f; and

(e) DI∈t denotes all Dispatch Intervals DI in Trading Interval t.

9.10.25. The System Restart Services amount payable to Market Participant p for Trading Day d is:

$$\text{SRS_Payable}(p,d) = \sum_{t \in d} \text{SRS_Payable}(p,t)$$

where:

(a) SRS_Payable(p,t) is the System Restart Services amount payable to Market Participant p for System Restart Services in Trading Interval t as calculated in accordance with clause 9.10.26; and

(b) t∈d denotes all Trading Intervals t in Trading Day d.

9.10.26. The System Restart Services amount payable to Market Participant p for System Restart Services in Trading Interval t is:

$$\text{SRS_Payable}(p,t) = \sum_{c \in p} \text{SRS_Payable}(c,t)$$

where:

(a) SRS_Payable(c,t) is the applicable dollar amount payable to Market Participant p in Trading Interval t for System Restart Services under each relevant System Restart Service Contract to which Market Participant p is a counterparty; and

(b) c∈p denotes all System Restart Service Contracts to which Market Participant p is a counterparty.

9.10.27. The total cost of procuring System Restart Services in Trading Interval t is:

$$\text{SRS_Payable(t)} = \sum_{p \in P} \text{SRS_Payable(p,t)}$$

where:

(a) SRS_Payable(p,t) is the System Restart Services amount payable to Market Participant p for System Restart Services in Trading Interval t as calculated in accordance with clause 9.10.26; and

(b) p∈P denotes all Market Participants.

9.10.27A. The NCESS amount payable to Market Participant p for Trading Day d is:

$$\text{NCESS_Payable(p,d)} = \sum_{t \in d} \text{NCESS_Payable(p,t)}$$

where:

(a) NCESS_Payable(p,t) is the NCESS amount payable to Market Participant p for NCESS in Trading Interval t as calculated in accordance with clause 9.10.27B; and

(b) t∈d denotes all Trading Intervals t in Trading Day d.

9.10.27B. The NCESS amount payable to Market Participant p for NCESS in Trading Interval t is:

$$\text{NCESS_Payable(p,t)} = \sum_{DI \in t} \text{NCESS_Payable(p,DI)}$$

where:

(a) NCESS_Payable(p,DI) is the applicable dollar amount payable to Market Participant p in Dispatch Interval DI for NCESS, as calculated under clause 9.10.27C; and

(b) DI∈t denotes all Dispatch Intervals in Trading Interval t.

9.10.27C. The NCESS amount payable to Market Participant p for NCESS in Dispatch Interval DI is:

$$\text{NCESS_Payable(p,DI)} = \sum_{c \in p} \text{NCESS_Payable(c,DI)}$$

where:

(a) NCESS_Payable(c,DI) is the applicable dollar amount payable to Market Participant p in Dispatch Interval DI for NCESS under each relevant NCESS Contract which Market Participant p has entered into with AEMO as provided under clause 5.9.1; and

(b) c∈p denotes all NCESS Contracts to which Market Participant p is a counterparty.

9.10.27D. The residual cost of procuring NCESS in Trading Interval t is:

$$\text{NCESS_Payable}(t) = \sum_{p \in P} \text{NCESS_Payable}(p,t) - \sum_{p \in P} \text{NCESS_Shared}(p,t)$$

where:

(a) NCESS_Payable(p,t) is the NCESS amount payable to Market Participant p for NCESS in Trading Interval t as calculated in accordance with clause 9.10.27B;

(b) p∈P denotes all Market Participants; and

(c) NCESS_Shared(p,t) is the NCESS amount payable to Market Participant p for NCESS in Trading Interval t calculated under clause 4.28.4A.

9.10.28. The Essential System Service amount recoverable from Rule Participant p for Trading Day d is:

$$\text{ESS_Recoverable}(p,d) = \text{CR_Recoverable}(p,d) + \text{CL_Recoverable}(p,d) + \text{RCS_Recoverable}(p,d) + \text{Regulation_Recoverable}(p,d) + \text{SRS_Recoverable}(p,d) + \text{NCESS_Recoverable}(p,d)$$

where:

(a) CR_Recoverable(p,d) is the Contingency Reserve Raise amount recoverable from Market Participant p for Trading Day d calculated in accordance with clause 9.10.29;

(b) CL_Recoverable(p,d) is the Contingency Reserve Lower amount recoverable from Market Participant p for Trading Day d calculated in accordance with clause 9.10.31;

(c) RCS_Recoverable(p,d) is the RoCoF Control Service amount recoverable from Rule Participant p for Trading Day d calculated in accordance with clause 9.10.33;

(d) Regulation_Recoverable(p,d) is the Regulation amount recoverable from Market Participant p for Trading Day d calculated in accordance with clause 9.10.35;

(e) SRS_Recoverable(p,d) is the System Restart Service amount recoverable from Market Participant p for Trading Day d calculated in accordance with clause 9.10.40; and

(f) NCESS_Recoverable(p,d) is the NCESS amount recoverable from Market Participant p for Trading Day d calculated in accordance with clause 9.10.44.

9.10.29. The Contingency Reserve Raise amount recoverable from Market Participant p for Trading Day d is:

$$\text{CR_Recoverable}(p,d) = \sum_{t \in d} \text{CR_Recoverable}(p,t)$$

where:

(a) CR_Recoverable(p,t) is the Contingency Reserve Raise amount recoverable from Market Participant p for Trading Interval t calculated in accordance with clause 9.10.30; and

(b) $t \in d$ denotes all Trading Intervals t in Trading Day d.

9.10.30. The Contingency Reserve Raise amount recoverable from Market Participant p for Trading Interval t is:

$$\text{CR_Recoverable}(p,t) = \sum_{DI \in t} \begin{cases} \text{CR_Payable}(DI) \times \text{RTMSuspShare}(p,DI), & \text{if RTMSuspFlag}(DI)=1 \\ \text{CR_Payable}(DI) \times \text{CR_Cost_Share}(p,DI), & \text{otherwise} \end{cases}$$

where:

(a) CR_Payable(DI) is the total cost of procuring Contingency Reserve Raise in Dispatch Interval DI calculated in accordance with clause 9.10.7;

(b) CR_Cost_Share(p,DI) is Market Participant p's share of the total cost of procuring Contingency Reserve Raise in Dispatch Interval DI as calculated following the steps set out in Appendix 2A and as finally calculated in clause 5.2 of Appendix 2A;

(c) RTMSuspFlag(DI) is the RTM Suspension Flag for Dispatch Interval DI;

(d) RTMSuspShare(p,DI) is Market Participant p's share of the total cost of procuring Contingency Reserve Raise when AEMO has suspended the Real-Time Market under clause 7.11D.1 for Dispatch Interval DI as calculated in clause 9.10.30A; and

(e) $DI \in t$ denotes all Dispatch Intervals DI in Trading Interval t.

9.10.30A. Market Participant p's share of the total cost of procuring Contingency Reserve Raise and the Additional RoCoF Control Requirement component of RoCoF Control Service when AEMO has suspended the Real-Time Market under clause 7.11D.1 for Dispatch Interval DI is:

$$\text{RTMSuspShare}(p,DI) = \frac{\text{SuspParticipantQuantity}(p,DI)}{\text{SuspContributingQuantity}(DI)}$$

where:

(a) SuspParticipantQuantity(p,DI) is the contributing quantity of Market Participant p in Dispatch Interval DI, calculated in accordance with clause 9.10.30B; and

(b) SuspContributingQuantity(DI) is the total contributing quantity in Dispatch Interval DI, calculated in accordance with clause 9.10.30D.

9.10.30B. Market Participant p's contributing quantity to the total cost of procuring Contingency Reserve Raise and the Additional RoCoF Control Requirement component of RoCoF Control Service when AEMO has suspended the Real-Time Market under clause 7.11D.1 for Dispatch Interval DI is:

$$\text{SuspParticipantQuantity}(p,DI) = \sum_{f \in p} \text{SuspFacilityQuantity}(f,DI)$$

where:

(a) SuspFacilityQuantity(f,DI) is the contributing quantity of CR Facility f in Dispatch Interval DI, calculated in accordance with clause 9.10.30C; and

(b) $f \in p$ denotes all CR Facilities f associated with Market Participant p in Dispatch Interval DI.

9.10.30C. CR Facility f's contributing quantity to the total cost of procuring Contingency Reserve Raise and the Additional RoCoF Control Requirement component of RoCoF Control Service when AEMO has suspended the Real-Time Market under clause 7.11D.1 for Dispatch Interval DI is:

$$\text{SuspFacilityQuantity}(f, DI) = \begin{cases} \max(0, \text{FacilityQuantity}(f,DI)), & \text{if EOIQuantity}(f,DI) > 10 \text{ MW} \\ 0, & \text{otherwise} \end{cases}$$

where:

(a) FacilityQuantity(f,DI) is the Metered Schedule of CR Facility f in the Trading Interval in which Dispatch Interval DI falls; and

(b) EOIQuantity(f,DI) is the EOI Quantity of CR Facility f in Dispatch Interval DI.

9.10.30D. The total contributing quantity to the cost of procuring Contingency Reserve Raise and the Additional RoCoF Control Requirement component of RoCoF Control Service when AEMO has suspended the Real-Time Market under clause 7.11D.1 for Dispatch Interval DI:

$$\text{SuspContributingQuantity}(DI) = \sum_{p \in P} \text{SuspParticipantQuantity}(p,DI)$$

where:

(a) SuspParticipantQuantity(p,DI) is the contributing quantity of Market Participant p in the Dispatch Interval DI, calculated in accordance with clause 9.10.30B; and

(b) $p \in P$ denotes all Market Participants.

9.10.31. The Contingency Reserve Lower amount recoverable from Market Participant p for Trading Day d is:

$$CL_Recoverable(p,d) = \sum_{t \in d} CL_Recoverable(p,t)$$

where:

(a) CL_Recoverable(p,t) is the Contingency Reserve Lower amount recoverable from Market Participant p for Trading Interval t as calculated in accordance with clause 9.10.32; and

(b) $t \in d$ denotes all Trading Intervals t in Trading Day d.

9.10.32. The Contingency Reserve Lower amount recoverable from Market Participant p for Trading Interval t is:

$$CL_Recoverable(p,t) = CL_Facility_Recoverable(p,t) + CL_GL_Recoverable(p,t)$$

where:

(a) CL_Facility_Recoverable(p,t) is the Contingency Reserve Lower amount recoverable from Market Participant p for Trading Interval t in respect of its CL Facilities, calculated in accordance with clause 9.10.32A; and

(b) CL_GL_Recoverable(p,t) is the Contingency Reserve Lower amount recoverable from Market Participant p for Trading Interval t in respect of Market Participant p's share of Generic Load in Trading Interval t, calculated in accordance with clause 9.10.32B.

9.10.32A. The Contingency Reserve Lower amount recoverable from Market Participant p for Trading Interval t in respect of its CL Facilities is:

$$CL_Facility_Recoverable(p,t) = \begin{cases} 0, \text{ if } \sum_{DI \in t} RTMSuspFlag(DI) > 0 \\ \sum_{DI \in t} CL_Payable(DI) \times CL_Cost_Share(p,DI), \text{ otherwise} \end{cases}$$

where:

(a) RTMSuspFlag(DI) is the RTM Suspension Flag for Dispatch Interval DI;

(b) CL_Payable(DI) is the total cost of procuring Contingency Reserve Lower in Dispatch Interval DI calculated in accordance with clause 9.10.11;

(c) CL_Cost_Share(p,DI) is Market Participant p's share of the total cost of procuring Contingency Reserve Lower in Dispatch Interval DI in respect of its CL Facilities as calculated following the steps set out in Appendix 2E and as finally calculated in clause 5.6 of Appendix 2E; and

(d) DI∈t denotes all Dispatch Intervals DI in Trading Interval t.

9.10.32B. The Contingency Reserve Lower amount recoverable from Market Participant p in respect of Market Participant p's share of Generic Load in Trading Interval t is:

CL_GL_Recoverable(p,t) = CL_GL_Recoverable(t)× CL_GL_Share(p,t)

where:

(a) CL_GL_Recoverable(t) is the total cost of procuring Contingency Reserve Lower allocated to Generic Load in Trading Interval t, calculated in accordance with clause 9.10.32C; and

(b) CL_GL_Share(p,t) is Market Participant p's share of the cost of procuring Contingency Reserve Lower allocated to Generic Load in Trading Interval t, calculated in accordance with clause 9.10.32D.

9.10.32C. The total cost of procuring Contingency Reserve Lower allocated to Generic Load in Trading Interval t is:

$$CL_GL_Recoverable(t) = CL_Payable(t) - \sum_{p \in P} CL_Facility_Recoverable(p,t)$$

where:

(a) CL_Payable(t) is the total cost of procuring Contingency Reserve Lower in Trading Interval t, calculated in accordance with clause 9.10.11A;

(b) CL_Facility_Recoverable(p,t) is the Contingency Reserve Lower amount recoverable from Market Participant p for Trading Interval t in respect of its CL Facilities, calculated in accordance with clause 9.10.32A; and

(c) p∈P denotes all Market Participants.

9.10.32D. Market Participant p's share of the cost of procuring Contingency Reserve Lower allocated to Generic Load in Trading Interval t is:

$$CL_GL_Share(p,t) = \frac{CL_GL_Contributing_Quantity(p,t)}{CL_GL_Total_Contributing_Quantity(t)}$$

where:

(a) CL_GL_Contributing_Quantity(p,t) is the quantity calculated for Market Participant p in Trading Interval t in accordance with clause 9.10.32E; and

(b) CL_GL_Total_Contributing_Quantity(t) is the quantity calculated for Trading Interval t in accordance with clause 9.10.32G.

9.10.32E. Market Participant p's Contingency Reserve Lower Generic Load contributing quantity in Trading Interval t is:

$$CL_GL_Contributing_Quantity(p,t) = \begin{cases} PriorAverageCLGLCQ(p,t), & if\ LowInjectionFlag(t) = 1 \\ \left|min\left(0, NWM_Metered_Schedule(t)\right)\right| + \sum_{f \in p}\left|min\left(0, Metered_Schedule(f,t)\right)\right|, & if \sum_{DI \in t} RTMSuspFlag(DI) > 0 \\ \left|min\left(0, NWM_Metered_Schedule(t)\right)\right| + \sum_{f \in p}\left|min\left(0, max\left(-1 \times CL_Threshold \times 0.5, Metered_Schedule(f,t)\right)\right)\right|, & otherwise \end{cases}$$

where:

(a) PriorAverageCLGLCQ(p,t) is the average of the Contingency Reserve Lower Generic Load contributing quantities determined for Market Participant p under this clause 9.10.32E for Trading Intervals commencing at the same time of day on the same day of the week as Trading Interval t in the four Trading Weeks immediately prior to the Trading Week containing Trading Interval t;

(b) LowInjectionFlag(t) is the Low Injection Flag determined for Trading Interval t in accordance with clause 9.5.5A;

(c) NWM_Metered_Schedule(t) is:

i. the Metered Schedule of the Notional Wholesale Meter in Trading Interval t, if Market Participant p is Synergy; and

ii. zero, otherwise;

(d) f∈p denotes all Scheduled Facilities, Semi-Scheduled Facilities, Non-Scheduled Facilities and Non-Dispatchable Loads (excluding Synergy's Notional Wholesale Meter) of Market Participant p in Trading Interval t;

(e) CL_Threshold is the CL Threshold;

(f) Metered_Schedule(f,t) is the Metered Schedule of Facility f in Trading Interval t;

(g) DI∈t denotes all Dispatch Intervals DI in Trading Interval t; and

(h) RTMSuspFlag(DI) is the RTM Suspension Flag for Dispatch Interval DI.

~~9.10.32E. Market Participant p's Contingency Reserve Lower Generic Load contributing quantity in Trading Interval t is:~~

~~$$CL_GL_Contributing_Quantity(p,t) = \begin{cases} \left|min(0, NWM_Metered_Schedule(t))\right| + \sum_{f \in p} \left|min(0, Metered_Schedule(f,t))\right|, if \sum_{DI \in t} RTMSuspFlag(DI) > 0 \\ \left|min(0, NWM_Metered_Schedule(t))\right| + \sum_{f \in p} \left|min\left(0, max\left(-1 \times CL_Threshold \times 0.5, Metered_Schedule(f,t)\right)\right)\right|, otherwise \end{cases}$$~~

~~where:~~

~~(a) NWM_Metered_Schedule(t) is:~~

~~i. the Metered Schedule of the Notional Wholesale Meter in Trading Interval t, if Market Participant p is Synergy; and~~

~~ii. zero, otherwise;~~

~~(b) f∈p denotes all Scheduled Facilities, Semi-Scheduled Facilities, Non-Scheduled Facilities and Non-Dispatchable Loads (excluding Synergy's Notional Wholesale Meter) of Market Participant p in Trading Interval t;~~

~~(c) CL_Threshold is the CL Threshold;~~

~~(d) Metered_Schedule(f,t) is the Metered Schedule of Facility f in Trading Interval t;~~

~~(e) DI∈t denotes all Dispatch Intervals DI in Trading Interval t; and~~

~~(f) RTMSuspFlag(DI) is the RTM Suspension Flag for Dispatch Interval DI.~~

9.10.32F. [Blank]

9.10.32G. The total Contingency Reserve Lower Generic Load contributing quantity across all Market Participants in Trading Interval t is:

$$CL_GL_Total_Contributing_Quantity(t) = \sum_{p \in P} CL_GL_Contributing_Quantity(p,t)$$

where:

(a) CL_GL_Contributing_Quantity(p,t) is the quantity calculated for Market Participant p in Trading Interval t in accordance with clause 9.10.32E; and

(b) p∈P denotes all Market Participants.

9.10.33. The RoCoF Control Service amount recoverable from Rule Participant p for Trading Day d is:

$$RCS_Recoverable(p,d) = \sum_{t \in d} RCS_Recoverable(p,t)$$

where:

(a) RCS_Recoverable(p,t) is the RoCoF Control Service amount recoverable from Rule Participant p for Trading Interval t as calculated in accordance with clause 9.10.34; and

(b) t∈d denotes all Trading Intervals t in Trading Day d.

9.10.34. The RoCoF Control Service amount recoverable from Rule Participant p for Trading Interval t is:

$$RCS_Recoverable(p,t) = MinRCS_Recoverable(p,t) + \sum_{DI \in t} AdditionalRCS_Recoverable(p,DI)$$

where:

(a) MinRCS_Recoverable(p,t) is the cost of procuring the Minimum RoCoF Control Requirement component of RoCoF Control Service in Trading Interval t recoverable from Rule Participant p calculated in accordance with clause 9.10.42; and

(b) AdditionalRCS_Recoverable(p,DI) is the cost of procuring the Additional RoCoF Control Requirement component of RoCoF Control Service in Dispatch Interval DI recoverable from Rule Participant p calculated in accordance with clause 9.10.43; and

(c) DI∈t denotes all Dispatch Intervals DI in Trading Interval t.

9.10.35. The Regulation amount recoverable from Market Participant p for Trading Day d is:

$$Regulation_Recoverable(p,d) = \sum_{t \in d} Regulation_Recoverable(p,t)$$

where:

(a) Regulation_Recoverable(p,t) is the Regulation amount recoverable from Market Participant p for Trading Interval t as calculated in accordance with clause 9.10.36; and

(b) t∈d denotes all Trading Intervals t in Trading Day d.

9.10.36. The Regulation amount recoverable from Market Participant p for Trading Interval t is:

$$Regulation_Recoverable(p,t) = Regulation_Payable(t) \times Regulation_Share(p,t)$$

where:

(a) Regulation_Payable(t) is the total cost of Regulation for Trading Interval t as calculated in accordance with clause 9.10.24; and

(b) Regulation_Share(p,t) is Market Participant p's share of the total cost of Regulation payable for Trading Interval t as calculated in accordance with clause 9.10.37.

9.10.37. Market Participant p's share of the total cost of Regulation payable for Trading Interval t is:

$$\text{Regulation_Share}(p,t) = \frac{\text{RegulationContributingQuantity}(p,t)}{\text{RegulationContributingQuantity}(t)}$$

where:

(a) RegulationContributingQuantity(p,t) is the quantity calculated in accordance with clause 9.10.38; and

(b) RegulationContributingQuantity(t) is the quantity calculated in accordance with clause 9.10.39.

9.10.38. Market Participant p's Regulation contributing quantity in Trading Interval t is:

$$RegulationContributingQuantity(p,t) = \begin{cases} PriorAverageRCQ(p,t), & if\ LowInjectionFlag(t) = 1 \\ \sum_{SSF \in p} |MeteredSchedule(SSF,t)| + \\ \sum_{NSF \in p} |MeteredSchedule(NSF,t)| + \\ \sum_{NDL \in p} |MeteredSchedule(NDL,t)|, & otherwise \end{cases}$$

where:

(a) PriorAverageRCQ(p,t) is the average of the Regulation contributing quantities determined for Market Participant p under this clause 9.10.38 for Trading Intervals commencing at the same time of day on the same day of the week as Trading Interval t in the four Trading Weeks immediately prior to the Trading Week containing Trading Interval t;

(b) LowInjectionFlag(t) is the Low Injection Flag determined for Trading Interval t in accordance with clause 9.5.5A;

(c) MeteredSchedule(SSF,t) is the Metered Schedule of Semi-Scheduled Facility, SSF, in Trading Interval t;

(d) SSF∈p denotes all Semi-Scheduled Facilities, SSF, registered to Market Participant p;

(e) MeteredSchedule(NSF,t) is the Metered Schedule of Non–Scheduled Facility, NSF, in Trading Interval t;

(f) NSF∈p denotes all Non-Scheduled Facilities, NSF, registered to Market Participant p;

(g) MeteredSchedule(NDL,t) is the Metered Schedule of Non-Dispatchable Load, NDL, in Trading Interval t; and

(h) NDL∈p denotes all Non-Dispatchable Loads, NDL, associated with Market Participant p (including Synergy's Notional Wholesale Meter where Synergy is Market Participant p).

~~9.10.38. Market Participant p's Regulation contributing quantity in Trading Interval t is:~~

~~$$RegulationContributingQuantity(p,t) = \sum_{SSF \in p} |MeteredSchedule(SSF,t)| + \sum_{NSF \in p} |MeteredSchedule(NSF,t)| + \sum_{NDL \in p} |MeteredSchedule(NDL,t)|$$~~

~~where:~~

~~(a) MeteredSchedule(SSF,t) is the Metered Schedule of Semi-Scheduled Facility, SSF, in Trading Interval t;~~

~~(b) SSF∈p denotes all Semi-Scheduled Facilities, SSF, registered to Market Participant p;~~

~~(c) MeteredSchedule(NSF,t) is the Metered Schedule of Non-Scheduled Facility, NSF, in Trading Interval t;~~

~~(d) NSF∈p denotes all Non-Scheduled Facilities, NSF, registered to Market Participant p;~~

~~(e) MeteredSchedule(NDL,t) is the Metered Schedule of Non-Dispatchable Load, NDL, in Trading Interval t; and~~

~~(f) NDL∈p denotes all Non-Dispatchable Loads, NDL, associated with Market Participant p (including Synergy's Notional Wholesale Meter where Synergy is Market Participant p).~~

9.10.39. The Regulation contributing quantity in Trading Interval t is:

$$RegulationContributingQuantity(t) = \sum_{p \in P} RegulationContributingQuantity(p,t)$$

where:

(a) RegulationContributingQuantity(p,t) is Market Participant p's Regulation contributing quantity in Trading Interval t calculated in accordance with clause 9.10.38; and

(b) p∈P denotes all Market Participants.

9.10.40. The System Restart Service amount recoverable from Market Participant p for Trading Day d is:

$$SRS_Recoverable(p,d) = \sum_{t \in d} SRS_Recoverable(p,t)$$

where:

(a) SRS_Recoverable(p,t) is the System Restart Service amount recoverable from Market Participant p for Trading Interval t in accordance clause 9.10.41; and

(b) $t \in d$ denotes all Trading Intervals t in Trading Day d.

9.10.41. The System Restart Service amount recoverable from Market Participant p for Trading Interval t is:

$$SRS_Recoverable(p,t) = SRS_Payable(t) \times ConsumptionShare(p,t)$$

where:

(a) SRS_Payable(t) is the total cost of procuring System Restart Services in Trading Interval t as calculated in accordance with clause 9.10.27; and

(b) ConsumptionShare(p,t) is the Consumption Share for Market Participant p in Trading Interval t as calculated in accordance with clause 9.5.6.

9.10.42. The cost of procuring the Minimum RoCoF Control Requirement component of RoCoF Control Service recoverable from Rule Participant p in Trading Interval t is:

$$MinRCS_Recoverable(p,t) = MinRCS_Payable(t) \times MinRCSShare(p,t)$$

where:

(a) MinRCS_Payable(t) is the total cost of procuring the Minimum RoCoF Control Requirement component of RoCoF Control Service in Trading Interval t as calculated in accordance with clause 9.10.18; and

(b) MinRCSShare(p,t) is Rule Participant p's share of the cost of procuring the Minimum RoCoF Control Requirement component of RoCoF Control Service in Trading Interval t as calculated following the steps set out in Appendix 2B and as finally calculated in clause 2.8 of Appendix 2B.

9.10.43. The cost of procuring the Additional RoCoF Control Requirement component of RoCoF Control Service recoverable from Rule Participant p in Dispatch Interval DI is:

$$AdditionalRCS_Recoverable(p,DI) = \begin{cases} AdditionalRCS_Payable(DI) \times RTMSuspShare(p,DI), & \text{if } RTMSuspFlag(DI)=1 \\ AdditionalRCS_Payable(DI) \times CR_Cost_Share(p,DI), & \text{otherwise} \end{cases}$$

where:

(a) AdditionalRCS_Payable(DI) is the total cost of procuring the Additional RoCoF Control Requirement component of RoCoF Control Service in Dispatch Interval DI as calculated in accordance with clause 9.10.19;

(b) RTMSuspShare(p,DI) is Market Participant p’s share of procuring the SESSM Awards for RoCoF Control Service in Dispatch Interval DI where AEMO has suspended the Real-Time Market under clause 7.11D.1, as calculated in accordance with clause 9.10.30A;

(c) RTMSuspFlag(DI) is the RTM Suspension Flag for Dispatch Interval DI; and

(d) CR_Cost_Share(p,DI) is Market Participant p's share of procuring the Additional RoCoF Control Requirement component of RoCoF Control Service in Dispatch Interval DI as calculated following the steps set out in Appendix 2A and as finally calculated in clause 5.2 of Appendix 2A.

9.10.44. The NCESS amount recoverable from Market Participant p for Trading Day d is:

$$\text{NCESS_Recoverable}(p, d) = \sum_{t \in d} \text{NCESS_Recoverable}(p,t)$$

where:

(a) NCESS_Recoverable(p,t) is the NCESS amount recoverable from Market Participant p for Trading Interval t in accordance with clause 9.10.45; and

(b) $t \in d$ denotes all Trading Intervals t in Trading Day d.

9.10.45. The NCESS amount recoverable from Market Participant p for Trading Interval t is:

$$\text{NCESS_Recoverable}(p,t) = \text{NCESS_Payable}(t) \times \text{ConsumptionShare}(p,t)$$

where:

(a) NCESS_Payable(t) is the residual cost of procuring NCESS in Trading Interval t as calculated in accordance with clause 9.10.27D; and

(b) ConsumptionShare(p,t) is the Consumption Share for Market Participant p in Trading Interval t as calculated in accordance with clause 9.5.6.

9.11. Settlement Calculations - Outage Compensation

9.11.1. AEMO must calculate for each Market Participant the Outage Compensation settlement amount for a Trading Day. Outage Compensation must be settled in the first Adjustment Process following the date on which a determination is made under clause 3.18H.5 that Outage Compensation is payable to a Market Participant.

9.11.2. The Outage Compensation settlement amount for Market Participant p for Trading Day d is:

$$\text{OC_SA}(p,d) = \text{OC_Payable}(p,d) - \text{OC_Recoverable}(p,d)$$

where:

(a) OC_Payable(p,d) is the Outage Compensation payable to Market Participant p for Trading Day d calculated in accordance with clause 9.11.3; and

(b) OC_Recoverable(p,d) is the amount recoverable in respect of Outage Compensation from Market Participant p for Trading Day d calculated in accordance with clause 9.11.6.

9.11.3. The Outage Compensation payable to Market Participant p for Trading Day d is:

$$OC_Payable(p,d) = \sum_{t \in d} OC_Payable(p,t)$$

where:

(a) OC_Payable(p,t) is the Outage Compensation payable to Market Participant p for Trading Interval t and is calculated in accordance with clause 9.11.4; and

(b) $t \in d$ denotes all Trading Intervals t in Trading Day d.

9.11.4. The Outage Compensation payable to Market Participant p for Trading Interval t is:

$$OC_Payable(p,t) = \sum_{f \in p} OC_Payable(f,t)$$

where:

(a) OC_Payable(f,t) is the Outage Compensation payable for Registered Facility f in Trading Interval t as calculated under clause 3.18H.5(c); and

(b) $f \in p$ denotes all Registered Facilities f registered to Market Participant p.

9.11.5. The total Outage Compensation payable for Trading Interval t is:

$$OC_Payable(t) = \sum_{p \in P} OC_Payable(p,t)$$

where:

(a) OC_Payable(p,t) is the Outage Compensation payable to Market Participant p for Trading Interval t; and

(b) $p \in P$ denotes all Market Participants.

9.11.6. The Outage Compensation recoverable from Market Participant p for Trading Day d is:

$$OC_Recoverable(p,d) = \sum_{t \in d} OC_Recoverable(p,t)$$

where:

(a) OC_Recoverable (p,t) is the Outage Compensation recoverable from Market Participant p for Trading Interval t as calculated in accordance with clause 9.11.7; and

(b) $t \in d$ denotes all Trading Intervals t in Trading Day d.

9.11.7. The amount recoverable in respect of Outage Compensation from Market Participant p for Trading Interval t is:

$$OC_Recoverable(p,t) = OC_Payable(t) \times ConsumptionShare(p,t)$$

where:

(a) OC_Payable(t) is the total Outage Compensation payable in Trading Interval t as calculated in accordance with clause 9.11.5; and

(b) ConsumptionShare(p,t) is the amount for Market Participant p in Trading Interval t as calculated in a accordance with clause 9.5.6.

9.11A. Settlement Calculations – Market Suspension Compensation

9.11A.1. AEMO must calculate the Market Suspension Compensation settlement amount for each Market Participant for a Trading Day.

9.11A.2. Market Suspension Compensation settlement amounts must be settled by AEMO in the first Adjustment Process following the date the Economic Regulation Authority notified AEMO of a Market Participant Excess Amount under clause 7.12.2(b) or Market Participant Deficit Amount under clause 7.12.8(b), as applicable.

9.11A.3. The Market Suspension Compensation settlement amount for Market Participant p for Trading Day d is:

$$MSC_SA(p,d) = MPDA(p,d) – MPEA(p,d) – MSDA_Recoverable(p,d) + MSEA_Rebate(p,d)$$

where:

(a) MPDA(p,d) is the Market Participant Deficit Amount payable to Market Participant p for Trading Day d in accordance with clause 9.11A.4;

(b) MPEA(p,d) is the Market Participant Excess Amount recoverable from Market Participant p for Trading Day d in accordance with clause 9.11A.5;

(c) MSDA_Recoverable(p,d) is the Market Suspension Deficit Amount recoverable from Market Participant p for Trading Day d in accordance with clause 9.11A.6; and

(d) MSEA_Rebate(p,d) is the Market Suspension Excess Amount payable to Market Participant p for Trading Day d in accordance with clause 9.11A.9.

9.11A.4. The Market Participant Deficit Amount payable to Market Participant p for Trading Day d is:

$$MPDA(p,d) = \sum_{t \in d} MPDA(p,t)$$

where:

(a) MPDA(p,t) is the Market Participant Deficit Amount payable to Market Participant p in Trading Interval t, as notified to AEMO by the Economic Regulation Authority under clause 7.12.8(b); and

(b) $t \in d$ denotes all Trading Intervals t in Trading Day d.

9.11A.5. The Market Participant Excess Amount recoverable from Market Participant p for Trading Day d is:

$$MPEA(p,d) = \sum_{t \in d} MPEA(p,t)$$

where:

(a) MPEA(p,t) is the Market Participant Excess Amount recoverable from Market Participant p in Trading Interval t, as notified to AEMO by the Economic Regulation Authority under clause 7.12.2(b); and

(b) $t \in d$ denotes all Trading Intervals t in Trading Day d.

9.11A.6. The Market Suspension Deficit Amount recoverable from Market Participant p for Trading Day d is:

$$MSDA_Recoverable(p,d) = \sum_{t \in d} MSDA_Recoverable(p,t)$$

where:

(a) MSDA_Recoverable(p,t) is the Market Suspension Deficit Amount recoverable from Market Participant p in Trading Interval t in accordance with clause 9.11A.7; and

(b) $t \in d$ denotes all Trading Intervals t in Trading Day d.

9.11A.7. The Market Suspension Deficit Amount recoverable from Market Participant p for Trading Interval t is:

$$MSDA_Recoverable(p,t) = MSDA_Recoverable(t) \times ConsumptionShare(p,t)$$

where:

(a) MSDA_Recoverable(t) is the Market Suspension Deficit Amount recoverable in Trading Interval t in accordance with clause 9.11A.8; and

(b) ConsumptionShare(p,t) is the Consumption Share for Market Participant p in Trading Interval t as calculated in clause 9.5.6.

9.11A.8. The Market Suspension Deficit Amount recoverable for Trading Interval t is:

$$MSDA_Recoverable(t) = \sum_{p \in P} MPDA(p,t)$$

where:

(a) MPDA(p,t) is the Market Participant Deficit Amount payable to Market Participant p in Trading Interval t, as notified to AEMO by the Economic Regulation Authority under clause 7.12.8(b); and

(b) $p \in P$ denotes all Market Participants.

9.11A.9. The Market Suspension Excess Amount payable to Market Participant p for Trading Day d is:

$$MSEA_Rebate(p,d) = \sum_{t \in d} MSEA_Rebate(p,t)$$

where:

(a) MSEA_Rebate(p,t) is the Market Suspension Excess Amount payable to Market Participant p in Trading Interval t in accordance with clause 9.11A.10; and

(b) $t \in d$ denotes all Trading Intervals t in Trading Day d.

9.11A.10. The Market Suspension Excess Amount payable to Market Participant p for Trading Interval t is:

$$MSEA_Rebate(p,t) = MSEA_Rebate(t) \times ConsumptionShare(p,t)$$

where:

(a) MSEA_Rebate(t) is the Market Suspension Excess Amount payable in Trading Interval t in accordance with clause 9.11A.11; and

(b) ConsumptionShare(p,t) is the Consumption Share for Market Participant p in Trading Interval t as calculated in clause 9.5.6.

9.11A.11. The Market Suspension Excess Amount payable for Trading Interval t is:

$$MSEA_Rebate(t) = \sum_{p \in P} MPEA(p,t)$$

where:

(a) MPEA(p,t) is the Market Participant Excess Amount recoverable from Market Participant p in Trading Interval t, as notified to AEMO by the Economic Regulation Authority under clause 7.12.2(b); and

(b) $p \in P$ denotes all Market Participants.

9.12. Settlement Calculations - Market Participant Market Fees, Market Participant Coordinator Fees and Market Participant Regulator Fees

9.12.1. AEMO must calculate for each Market Participant the Market Participant fee settlement amount for a Trading Day.

9.12.2. The applicable Market Participant fee settlement amount for Market Participant p for Trading Day d is:

$$MPF_SA(p,d) = -MPMF_SA(p,d) - MPRF_SA(p,d) - MPCF_SA(p,d)$$

where:

(a) MPMF_SA(p,d) is the Market Participant Market Fees settlement amount for Market Participant p for Trading Day d calculated in accordance with clause 9.12.3;

(b) MPRF_SA(p,d) is the Market Participant Regulator Fees settlement amount for Market Participant p for Trading Day d calculated in accordance with clause 9.12.4; and

(c) MPCF_SA(p,d) is the Market Participant Coordinator Fees settlement amount for Market Participant p for Trading Day d calculated in accordance with clause 9.12.4A.

9.12.3. The Market Participant Market Fees settlement amount for Market Participant p for Trading Day d is:

$$MPMF_SA(p,d) = MarketFeeRate(d) \times ParticipantContribution(p,d)$$

where:

(a) MarketFeeRate(d) is the charge per MWh for AEMO's services determined as the Market Participant Market Fee rate in accordance with clause 2.24.2 for the year in which Trading Day d falls; and

(b) ParticipantContribution(p,d) is calculated in accordance with clause 9.12.5.

9.12.4. The Market Participant Regulator Fees settlement amount for Market Participant p for Trading Day d is:

$$MPRF_SA(p,d) = RegulatorFeeRate(d) \times ParticipantContribution(p,d)$$

where:

(a) RegulatorFeeRate(d) is the charge per MWh for funding the Economic Regulation Authority's activities with respect to the Wholesale Electricity Market and other functions under these ESM Rules and the Regulations determined as the Market Participant Regulator Fee rate in accordance with clause 2.24.2 for the year in which Trading Day d falls; and

(b) ParticipantContribution(p,d) is calculated in accordance with clause 9.12.5.

9.12.4A. The Market Participant Coordinator Fees settlement amount for Market Participant p for Trading Day d is:

$$MPCF_SA(p,d) = CoordinatorFeeRate(d) \times ParticipantContribution(p,d)$$

where:

(a) CoordinatorFeeRate(d) is the charge per MWh for funding the Coordinator's activities with respect to the Wholesale Electricity Market and other functions under these ESM Rules and the Regulations determined as

the Market Participant Coordinator Fee rate in accordance with clause 2.24.2 for the year in which Trading Day d falls; and

(b) ParticipantContribution(p,d) is calculated in accordance with clause 9.12.5.

9.12.5. The Participant Contribution for Market Participant p in Trading Day d is:

$$\text{ParticipantContribution}(p,d) = \sum_{t \in d} \sum_{f \in p} |\text{MeteredSchedule}(f,t)|$$

where:

(a) MeteredSchedule(f,t) is the Metered Schedule for facility f in Trading Interval t;

(b) $t \in d$ denotes all Trading Intervals t in Trading Day d; and

(c) $f \in p$ denotes all Registered Facilities f registered to Market Participant p and all Non-Dispatchable Loads associated with Market Participant p (including Synergy's Notional Wholesale Meter where Synergy is Market Participant p calculated in accordance with clause 9.5.3).

9.13. Settlement Calculations - Service Fees

9.13.1. AEMO must determine a Service Fee Settlement Amount for a Trading Day payable to AEMO, to the Coordinator and to the Economic Regulation Authority.

9.13.2. The Service Fee Settlement Amount payable to AEMO for Trading Day d is:

$$\text{SFMF_SA}(d) = \sum_{p \in P} \text{MPMF_SA}(p,d)$$

where:

(a) MPMF_SA(p,d) is the Market Participant Market Fees settlement amount for Market Participant p for Trading Day d as calculated in clause 9.12.3; and

(b) $p \in P$ denotes all Market Participants.

9.13.3. The Service Fee Settlement Amount payable to the Economic Regulation Authority for Trading Day d is:

$$\text{SFRF_SA}(d) = \sum_{p \in P} \text{MPRF_SA}(p,d)$$

where:

(a) MPRF_SA(p,d) is the Market Participant Regulator Fees settlement amount for Market Participant p for Trading Day d as calculated in clause 9.12.4; and

(b) p∈P denotes all Market Participants.

9.13.4 The Service Fee Settlement Amount payable to the Coordinator for Trading Day d is:

$$SFCF_SA(d) = \sum_{p \in P} MPCF_SA(p,d)$$

where:

(a) MPCF_SA(p,d) is the Market Participant Coordinator Fees settlement amount for Market Participant p for Trading Day d as calculated in clause 9.12.4A; and

(b) p∈P denotes all Market Participants.

Settlement Statements

9.14. Settlement Statements

9.14.1. AEMO must provide Settlement Statements to Market Participants and to each Network Operator in accordance with the settlement timeline in section 9.3.

9.14.2. A Settlement Statement must include:

(a) details of the Trading Days to which the Settlement Statement relates;

(b) details of the Rule Participant to which the Settlement Statement relates;

(c) for each Dispatch Interval of each Trading Day to which the Settlement Statement relates:

i. cleared energy quantity in MW as recorded in the relevant Dispatch Instruction (where this quantity can be a Dispatch Target, Dispatch Cap or Dispatch Forecast);

ii. the value of all Energy Uplift Payments made for the Market Participant for each of its Registered Facilities including the Energy Uplift Price and Energy Uplift Quantity for each Registered Facility;

iii. the Final Energy Market Clearing Price;

iv. the value of all final Market Clearing Prices of all Frequency Co-optimised Essential System Services;

(d) for each Trading Interval of each Trading Day to which the Settlement Statement relates:

i. for a Market Participant:

1. the STEM clearing Price;

2. the STEM quantity scheduled for the Market Participant; and

3. the STEM settlement amount for the Market Participant for the Trading Interval calculated in accordance with clause 9.7.3, where this may be a positive amount, negative amount or a zero amount;

ii. the Bilateral Contract quantities for the Market Participant;

iii. the Net Contract Position of the Market Participant;

iv. the meter reading for each facility associated with the Market Participant (other than any meters associated with the Notional Wholesale Meter);

v. in the case of Synergy:

1. Notional Wholesale Meter values; and

2. the total quantity of energy deemed to have been supplied by its Registered Facilities;

vi. for a Market Participant, the value of the Final Reference Trading Price; and

vii. the Net Trading Quantity for the Market Participant;

(e) details of amounts calculated for the Rule Participant for a Trading Day under sections 9.6 and sections 9.8 to 9.12 with respect to, as applicable:

i. net settlement amount;

ii. Reserve Capacity settlement amount;

iii. Real-Time Energy settlement amount;

iv. Essential System Services settlement amount;

v. Outage Compensation settlement amount; and

vi. Market Participant Market Fees and Market Participant Regulator Fees settlement amounts;

(f) details of any Capacity Credits allocated to the Market Participant from another Market Participant in accordance with sections 4.30 and 4.31;

(g) details of any Capacity Credits allocated to another Market Participant from the Market Participant in accordance with sections 4.30 and 4.31;

(h) details of any reductions in payments in the preceding Trading Week under clause 9.20.4 as a result of a Rule Participant being in default;

(i) details of any payments to the Rule Participant as a result of AEMO recovering funds not paid to the Rule Participant in previous Trading Weeks under clause 9.20.4 as a result of a Rule Participant being in default;

(j) in regard to Default Levy re-allocations, as defined in accordance with clause 9.20.11:

i. the total amount of Default Levy paid by that Rule Participant during the Financial Year, with supporting calculations;

ii. the adjusted allocation of those Default Levies to be paid by that Rule Participant, with supporting calculations; and

iii. the net adjustment be made;

(k) [Blank]

(l) whether the statement is an adjusted Settlement Statement and replaces a previously issued Settlement Statement;

(m) in the case of an adjusted Settlement Statement, details of all adjustments made to a previously issued Settlement Statement relative to the first Settlement Statement issued for that Trading Week with an explanation of the reasons for the adjustments;

(n) the net dollar amount owed by the Rule Participant to AEMO for the billing period (i.e. the Trading Days covered by the Settlement Statement) where this may be a positive amount, a negative amount or a zero amount as the case may be;

(o) any interest applied in accordance with clause 9.1.4; and

(p) all applicable taxes.

9.15. Adjustment Process

9.15.1. When undertaking an Adjustment Process AEMO must:

(a) recalculate the amounts included in the Relevant Settlement Statements in accordance with this Chapter 9 but taking into account any:

i. revised meter data which has been provided by Metering Data Agents;

ii. actions arising from a Notice of Disagreement;

iii. resolution of a Notice of Dispute;

iv. revised Market Participant Market Fee rate or Market Participant Regulator Fee rate;

v. adjustment required for GST purposes under clause 9.1.3;

vi. revised value that AEMO reasonably considers to be in compliance with these ESM Rules and accurate; and

vii. other relevant value that has been revised in accordance with the ESM Rules; and

(b) provide adjusted Settlement Statements to Rule Participants for Relevant Settlement Statements on the Relevant Settlement Adjustment Date.

9.15.2. Where AEMO decides that it will use a revised value, as contemplated under clause 9.15.1(a)(vi), in the final adjusted Settlement Statement (to be issued on Settlement Adjustment Date 3 for a Trading Week), AEMO must, as soon as practicable, notify the relevant Rule Participant of the proposed revised value and the reason for its decision.

9.15.3. Subject to clause 9.15.4, an adjusted Settlement Statement must be in the same form as the original Settlement Statement, but where data is modified between the issuance of the original Settlement Statement and the adjusted Settlement Statement, AEMO must record adjusted settlement values in the adjusted Settlement Statement and provide an explanation of any changes on request.

9.15.4. An adjusted Settlement Statement must include details of the adjustment to be paid by or to the Rule Participant, being:

(a) the adjustment which will need to be paid by or to the Rule Participant to put the Rule Participant in the position it would have been in at the time payment was made in respect of the original Settlement Statement if the adjusted Settlement Statement had been issued as the original Settlement Statement (but taking into account any adjustments previously made under this section 9.15); plus

(b) interest on the amount referred to in clause 9.15.4(a) calculated in accordance with clause 9.1.4.

9.15.5. In recalculating amounts as part of an Adjustment Process, AEMO may use the version of the settlement calculation software current at the time of the recalculation.

9.15.6. At the same time as AEMO provides a Rule Participant with an adjusted Settlement Statement under clause 9.15.1(b), it must also provide that Rule Participant with an Invoice reflecting the adjusted Settlement Statement and the amounts referred to in clause 9.15.4.

9.15.7. The Settlement Date for a Settlement Statement issued under clause 9.15.1(b) is the date upon which transactions covered by that Settlement Statement are settled and must be no later than the second Business Day following the date of issue of the Invoice described in clause 9.15.6.

9.15.8. If, for an Adjustment Process, the Service Fee Settlement Amount payable to AEMO under clause 9.13.2 based on the adjusted Market Participant Market Fees settlement amount is less than the Service Fee Settlement Amount payable to AEMO under clause 9.13.2 for the last Settlement Statement for that period, AEMO must make available the shortfall amount from the fund established under clause 9.18.9 for the purpose of meeting AEMO’s obligations under clause 9.18.8.

9.15.9. AEMO and the Economic Regulation Authority must agree and implement an arrangement to apply for any Adjustment Process where the Service Fee Settlement Amount payable to the Economic Regulation Authority under clause 9.13.3 based on the adjusted Market Participant Regulator Fees settlement amount is less than the Service Fee Settlement Amount payable to the Economic Regulation Authority under clause 9.13.3 for the last Settlement Statement for that period. The arrangement must require:

(a) the Economic Regulation Authority to return the shortfall amount to AEMO by 10:00 AM on the relevant Settlement Date; and

(b) AEMO, if the Economic Regulation Authority fails to provide the shortfall amount to AEMO by 10:00 AM on the relevant Settlement Date, to make available the shortfall amount from the fund established under clause 9.18.9 for the purpose of meeting AEMO's obligations under clause 9.18.8.

9.15.10. AEMO and the Coordinator must agree and implement an arrangement to apply for any Adjustment Process where the Service Fee Settlement Amount payable to the Coordinator under clause 9.13.4 based on the adjusted Market Participant Coordinator Fees settlement amount is less than the Service Fee Settlement Amount payable to the Coordinator under clause 9.13.4 for the last Settlement Statement for that period. The arrangement must require:

(a) the Coordinator to return the shortfall amount to AEMO by 10:00 AM on the relevant Settlement Date; and

(b) AEMO, if the Coordinator fails to provide the shortfall amount to AEMO by 10:00 AM on the relevant Settlement Date, to make available the shortfall amount from the fund established under clause 9.18.9 for the purpose of meeting AEMO's obligations under clause 9.18.8.

9.16. Notices of Disagreement

9.16.1. A Rule Participant may under this section 9.16 issue a Notice of Disagreement in respect of a Settlement Statement by the relevant Settlement Disagreement Deadline.

9.16.2. The Settlement Disagreement Deadline for a Trading Week is 5:00 PM on the first Business Day of the forty-fifth (45th) week following that Trading Week. A Rule Participant has until this time to lodge a Notice of Disagreement with AEMO pertaining to any amount related to the relevant Settlement Statement for that Trading Week including, for the avoidance of doubt, an adjusted Settlement Statement in relation to that Trading Week issued on any of Settlement Adjustment Date 1 or Settlement Adjustment Date 2.

9.16.3. A Notice of Disagreement must be submitted to AEMO in accordance with the WEM Procedure specified in clause 9.2.1.

9.16.4. Upon receipt of a Notice of Disagreement, AEMO must confirm receipt within one Business Day.

9.16.5. A Notice of Disagreement must include:

(a) details of the Settlement Statement and Trading Day to which the Notice of Disagreement relates;

(b) details of the Rule Participant to which the Notice of Disagreement relates; and

(c) a list of information in the Settlement Statement with which the Rule Participant disagrees, including:

i. the reason for the disagreement; and

ii. what the Rule Participant believes the correct value should be, if this is known,

and must comply with any format that may be specified in the WEM Procedure specified in clause 9.2.1.

9.16.6. AEMO may, if it reasonably considers it is required to assess or resolve a Notice of Disagreement, request clarification or further information regarding any aspect of the Notice of Disagreement submitted under this section 9.16 from the submitting Rule Participant. A Rule Participant must comply with a request under this clause 9.16.6.

9.16.7. If a Notice of Disagreement relates to information provided to AEMO by a Metering Data Agent or SCADA data provided by a Network Operator then as soon as practicable, but not later than five Business Days after AEMO confirms receipt of the Notice of Disagreement, AEMO must:

(a) notify the Metering Data Agent or Network Operator (as applicable) of any item of information provided by them to which the Notice of Disagreement relates;

(b) notify the Metering Data Agent or Network Operator (as applicable) of the time and date by which AEMO requires a response, where the date is to be no later than 60 days after the date on which AEMO confirmed receipt of the Notice of Disagreement; and

(c) require the Metering Data Agent or Network Operator (as applicable) to investigate the accuracy of the item and to provide a response by the time specified under clause 9.16.7(b):

i. reporting on the actions taken to investigate the accuracy of the item; and

ii. if applicable, providing a revised value for the item that the Metering Data Agent or Network Operator (as applicable) considers to be in compliance with these ESM Rules and accurate.

9.16.8. If a Notice of Disagreement relates to any item of information developed by AEMO, then:

(a) if the information relates to values that are inputs to the settlement process AEMO must determine a value for the item, which may be a revised value, that it reasonably considers to be in compliance with these ESM Rules and accurate; or

(b) if the information relates to values that are outputs to the settlement process AEMO must review its settlement calculations and assess whether any errors were made.

9.16.9. AEMO must, as soon as practicable, but within 20 Business Days of receipt of a Notice of Disagreement respond to a Rule Participant who issued a Notice of Disagreement indicating the actions (if any) AEMO will take in response to the Notice of Disagreement, where such actions may include:

(a) revising information provided to AEMO by Metering Data Agents and Network Operators (as applicable), and the reasons provided to AEMO for those revisions, in accordance with clause 9.16.7;

(b) revising information developed by AEMO and used as an input to the settlement process, and the reason for the revision, as determined in accordance with clause 9.16.8; and

(c) indicating whether AEMO considers an error was made in the settlement calculations that has produced an incorrect Settlement Statement.

9.16.10. AEMO may extend the deadline to respond to a Notice of Disagreement in clause 9.16.9 where it requires additional time to respond to the Notice of Disagreement, including additional time to assess relevant information or determine the actions it will take. Where AEMO decides to extend the deadline to respond to a Notice of Disagreement, it must notify the Rule Participant that submitted the Notice of Disagreement within 20 Business Days of receiving the Notice of Disagreement:

(a) that AEMO has decided to extend the deadline to respond to the Notice of Disagreement in clause 9.16.9;

(b) the reasons for its decision; and

(c) subject to clause 9.16.11, the time by which AEMO will respond to the Notice of Disagreement.

9.16.11. AEMO must not extend the deadline to respond to a Notice of Disagreement under clause 9.16.10 to a date that is later than the earlier to occur of:

(a) 60 Business Days after the receipt of the Notice of Disagreement; and

(b) Settlement Adjustment Date 3.

9.16.12. If a Rule Participant is not satisfied with AEMO's response to a Notice of Disagreement, it may issue a Notice of Dispute to AEMO in accordance with section 9.17.

9.17. Settlement Disputes

9.17.1. Subject to clause 9.17.2, a Rule Participant may only issue a Notice of Dispute in regard to a Settlement Statement after:

(a) having raised a Notice of Disagreement with respect to a Settlement Statement; and

(b) AEMO having given a response under clause 9.16.9 in respect of the Notice of Disagreement with which the Rule Participant is not satisfied.

9.17.2. A Rule Participant may issue a Notice of Dispute in regard to an adjusted Settlement Statement for a Trading Week issued on Settlement Adjustment Date 3, but only in respect of an adjustment first made by AEMO to that Settlement Statement and not in respect of any other matter.

Invoicing and Payment

9.18. Invoicing and Payment

9.18.1. Invoices must be issued to Rule Participants by AEMO in accordance with the timelines specified under clauses 9.3.3 and 9.15.6.

9.18.2. An Invoice must include:

(a) all Settlement Statements (including adjusted Settlement Statements) to which the Invoice relates;

(b) the net amount to be paid to or by AEMO (including applicable taxes). A positive amount is to be paid by the Rule Participant to AEMO and a negative amount is to be paid by AEMO to the Rule Participant;

(c) the payment date and time; and

(d) any amounts outstanding, including from overdue payments, in relation to previous Settlement Statements.

9.18.3. AEMO must maintain an account with an institution that meets either of the requirements specified in clause 2.38.6(a) for the sole purpose of settling market transactions, where this account is to be maintained at a branch of the institution located in Western Australia.

9.18.4. AEMO must:

(a) nominate and publish the electronic funds transfer ("**EFT**") facility that must be used by Rule Participants for the purpose of some or all settlements under these ESM Rules; and

(b) determine, where applicable, and publish the minimum cost charged by the EFT facility for processing a transaction on the WEM Website.

9.18.5. Unless otherwise authorised by AEMO, all Rule Participants must use the EFT facility nominated by AEMO under clause 9.18.4 for the purpose of settlements under these ESM Rules and the payment of Market Fees to AEMO to the extent nominated by AEMO.

9.18.6. If an Invoice indicates that a Rule Participant owes to AEMO an amount payable greater than the Minimum Transaction Cost, then the Rule Participant must pay the full amount to AEMO (in cleared funds) by 10:00 AM on the date determined in accordance with clauses 9.3.4 and 9.15.7 (as applicable), whether or not it disputes the amount indicated to be payable.

9.18.7. Late payments by Rule Participants accrue interest calculated in accordance with clause 9.1.4.

9.18.8. If an Invoice indicates that AEMO owes to a Rule Participant an amount payable greater than the Minimum Transaction Cost, then AEMO must make available the full amount to the Rule Participant (in cleared funds) by 2:00 PM on the date specified in the Invoice in accordance with clauses 9.3.4 and 9.15.7 (as applicable), except as provided for in section 9.20.

9.18.9. AEMO must establish, in its books, a separate fund in which it will credit all Service Fee Settlement Amounts payable to AEMO under these ESM Rules.

9.18.10. The Service Fee Settlement Amount owing to AEMO will be taken to have been paid when it is transferred into the account established by AEMO for the purpose of meeting its obligations under clause 9.18.9.

9.18.11. AEMO may apply money from the fund established under clause 9.18.9 to meet the costs incurred in carrying out its functions or obligations under these ESM Rules.

9.18.12. Notwithstanding this section 9.18, AEMO is not required to render an Invoice to a Network Operator where the net amount to be paid to or by AEMO is zero.

9.18.13. AEMO must publish on the WEM Website summary information pertaining to the account maintained by AEMO for market settlement for each Trading Week ending in the preceding 24 calendar months (excluding any Trading Weeks ending on or before New WEM Commencement Day):

(a) the total income received for transactions related to:

i. the STEM in accordance with section 9.7;

ii. the Reserve Capacity Mechanism in accordance with section 9.8;

iii. Real-Time Energy in accordance with section 9.9;

iv. Essential System Services in accordance with section 9.10;

v. Outage Compensation in accordance with section 9.11;

vi. Market Participant fees in accordance with section 9.12;

vii. Service fees in accordance with section 9.13;

viii. a single value for all other income; and

ix. Market Suspension Compensation in accordance with section 9.11A; and

(b) the total outgoings paid for transactions for:

i. the STEM in accordance with section 9.7;

ii. the Reserve Capacity Mechanism in accordance with section 9.8;

iii. Supplementary Capacity Contracts in accordance with section 9.8;

iv. Real-Time Energy in accordance with section 9.9;

v. Essential System Services in accordance with section 9.10;

vi. Outage Compensation in accordance with section 9.11;

vii. Market Participant fees in accordance with section 9.12;

viii. Service fees in accordance with section 9.13;

ix. a single value for all other expenses; and

x. Market Suspension Compensation in accordance with section 9.11A.

Default and Settlement in Default Situations

9.19. Default

9.19.1. For the purposes of these ESM Rules, a "**Suspension Event**" occurs in relation to a Market Participant, as applicable, if:

(a) the Market Participant fails to make a payment under these ESM Rules before the time it is due;

(b) the Market Participant is in breach of a Prudential Obligation;

(c) AEMO has drawn on a Credit Support in relation to the Market Participant and payment under the Credit Support is not received by AEMO within 90 minutes of being requested;

(d) it is unlawful for the Market Participant to comply with any of its obligations under the ESM Rules or any other obligation owed to the Economic Regulation Authority or the Market Participant claims that it is unlawful for it to do so;

(e) it is unlawful for a provider of Credit Support in relation to the Market Participant to comply with any of its obligations under the Credit Support or any other obligation owed to AEMO or the provider claims that it is unlawful for it to do so;

(f) an authorisation from a government body necessary to enable the Market Participant to carry on a business or activity related to its participation in the Wholesale Electricity Market ceases to be in full force and effect;

(g) an authorisation from a government body necessary for the provider of Credit Support in relation to the Market Participant to carry on the business of providing credit support ceases to be in full force and effect;

(h) the Market Participant ceases or threatens to cease to carry on its business or a substantial part of its business related to its participation in the Wholesale Electricity Market;

(i) the provider of Credit Support in relation to the Market Participant ceases or threatens to cease to carry on its business of providing Credit Support;

(j) the Market Participant is insolvent within the meaning of clause 9.19.2;

(k) a provider of Credit Support in relation to the Market Participant is insolvent within the meaning of clause 9.19.2;

(l) a resolution is passed or any steps are taken to pass a resolution for the winding up or dissolution of the Market Participant or a provider of Credit Support in relation to that Market Participant; or

(m) the Market Participant or a provider of Credit Support in relation to the Market Participant is dissolved.

9.19.2. A person is insolvent for the purposes of clause 9.19.1 if :

(a) the person states that it is insolvent or insolvent under administration (each as defined in the Corporations Act) or that it is unable to pay from its own money its debts when they fall due for payment;

(b) the person is protected from creditors under any statute or enters into an arrangement (including a scheme of arrangement), composition or compromise with, or assignment for the benefit of, all or any class of its creditors or members or a moratorium involving any of them;

(c) an application or order for winding up or dissolution is made in respect of the person;

(d) a controller (as defined in the Corporations Act), administrator, provisional liquidator, liquidator, trustee in bankruptcy or person having a similar or

analogous function under the laws of any relevant jurisdiction is appointed in respect of the person or any of the person's property (as the case may be);

(e) the person is taken to be unable to pay its debts when they fall due for payment under any applicable legislation;

(f) any action is taken by, or in connection with, the person which is preparatory to, or could result in, any of the events described in clauses 9.19.2(b), 9.19.2(c), 9.19.2(d) or 9.19.2(e);

(g) the person is the subject of an event described in section 459C(2) or section 585 of the Corporations Act (or the person makes a statement from which AEMO reasonably deduces the person is so subject); or

(h) notice under section 601AB(3) of the Corporations Act is given in relation to the person.

9.19.3. If a Market Participant becomes aware that a Suspension Event has occurred in relation to it, then the Market Participant must promptly notify AEMO, giving full details of the event.

9.19.4. If AEMO becomes aware that a Suspension Event has occurred in relation to a Market Participant and the Suspension Event has not been remedied, then AEMO must as soon as practicable:

(a) subject to clause 9.19.5, issue a notice ("**Cure Notice**"), requiring that the Suspension Event be remedied within 24 hours from the time the Cure Notice is issued; and

(b) if it has not already done so, Draw Upon any Credit Support held in relation to that Market Participant for the amount which AEMO determines is actually or contingently owing by the Market Participant to AEMO under these ESM Rules.

9.19.5. Where AEMO has given a Cure Notice to a Market Participant in respect of a Suspension Event described in clauses 9.19.1(a) or 9.19.1(b), AEMO may extend the deadline for remedying the Suspension Event by up to five Business Days from the date on which the Suspension Event occurred if AEMO considers that:

(a) the Market Participant can pay all outstanding amounts, and comply in full with the Prudential Obligations, before the end of the extended deadline; and

(b) the Market Participant is not capable of doing so within the 24 hours following the issuance of the Cure Notice.

9.19.6. Where AEMO has given a Cure Notice to a Market Participant in respect of a Suspension Event described in any of clauses 9.19.1(c) to 9.19.1(m), AEMO may

extend the deadline for remedying the Suspension Event for such period as AEMO considers appropriate if AEMO considers that:

(a) the Market Participant will be able to remedy the Suspension Event before the end of the extended deadline; and

(b) the Market Participant is not capable of doing so within the 24 hours following the issuance of the Cure Notice.

9.19.7. If a Market Participant does not remedy a Suspension Event before the deadline specified in clause 9.19.4(a) (as extended, if applicable, under clauses 9.19.5 or 9.19.6), then AEMO may issue a Suspension Notice to the relevant Market Participant in which case section 2.32 applies.

9.20. Settlement in Default Situations

9.20.1. If a Rule Participant fails to make a payment under these ESM Rules to AEMO before it is due, then AEMO may, as applicable, Draw Upon any Credit Support held in relation to that Rule Participant to meet the payment.

9.20.2. If, under Part 5.7B of the Corporations Act or another law relating to insolvency or the protection of creditors or similar matters, AEMO is required to disgorge or repay an amount, or pay an amount equivalent to an amount, paid by a Rule Participant under the ESM Rules:

(a) AEMO may Draw Upon any Credit Support held by AEMO in relation to the Rule Participant for the amount disgorged, repaid or paid ("**Repaid Amount**"); and

(b) If AEMO is not able to recover all or part of the Repaid Amount by drawing upon Credit Support held by AEMO in relation to the Rule Participant, then AEMO must raise a Repaid Amount Levy from all Market Participants (other than from Market Participants with unrecovered Payment Defaults) to recover the remainder of the Repaid Amount. AEMO will determine the amount to be paid by each Market Participant, having regard to the absolute value of the MWh of generation or consumption, determined in accordance with the Metered Schedules, for each Market Participant for Trading Intervals during the most recent Trading Week for which Settlement Statements have been issued, as a proportion of the total of those values for all Market Participants (other than Market Participants with unrecovered Payment Defaults).

9.20.2A. AEMO must notify each relevant Market Participant of the amount it must pay in respect of the Repaid Amount Levy as determined in accordance with clause 9.20.2(b) within six Business Days of AEMO being notified of the requirement to provide the Repaid Amount under clause 9.20.2.

9.20.2B. A Market Participant must pay the full amount notified by AEMO under clause 9.20.2A to AEMO (in cleared funds) by 10:00 AM on the eighth Business Day after the date of AEMO's notification under clause 9.20.2A, whether or not the Market Participant disputes the amount required to be paid.

9.20.2C. By the end of the second month following the end of a Financial Year, AEMO must re-allocate any Repaid Amount Levies raised during that Financial Year as follows:

(a) AEMO will determine the sum of the Repaid Amount Levies raised by AEMO during the Financial Year;

(b) AEMO will determine the aggregate Repaid Amount Levy amount which should have been paid by each Market Participant, having regard to the absolute value of the MWh of generation or consumption, as determined in accordance with the Metered Schedules for each Market Participant (excluding Market Participants with unrecovered Payment Defaults) for Trading Intervals during the Financial Year as a proportion of the total of those values for all these Market Participants;

(c) AEMO must compare the amount determined for the Market Participant under clause 9.20.2C(b) with the total of the amounts the Market Participant has paid to AEMO under clause 9.20.2B;

(d) AEMO must determine an appropriate adjustment to put each Market Participant in the position it would have been in had it paid the amount determined under clause 9.20.2C(b) instead of the amounts actually paid under clause 9.20.2B; and

(e) AEMO must include that adjustment in the Settlement Statement for the most recently completed Trading Week.

9.20.3. Notwithstanding anything else in these ESM Rules, if at any time the total amount received by AEMO from Rule Participants in cleared funds, including any payments from AEMO on behalf of the Economic Regulation Authority under clause 9.15.9 and the Coordinator under clause 9.15.10 (“**Total Amount**”) is not sufficient to make the payments which AEMO is required to make under these ESM Rules (for example, as a result of default by one or more Rule Participants), then AEMO’s liability to make those payments is limited to the Total Amount.

9.20.4. AEMO must apply the Total Amount as follows.

(a) First, AEMO must apply the Total Amount to satisfy:

i. payment of Service Fee Settlement Amounts to AEMO, the Economic Regulation Authority and the Coordinator (including as contemplated by clause 9.18.10); and

ii. payments which AEMO is required to make under Supplementary Capacity Contracts or to a provider of a System Restart Contract

with AEMO, up to a maximum for any party of the net amount which, if sufficient funds were available, would be payable to that party,

but if the Total Amount is not sufficient to satisfy all of these payments then AEMO must reduce the payments proportionally. Each payment will be based on the proportion that the Total Amount bears to the amount that would have been required to make all payments.

(b) Second, AEMO must apply the remainder to pay the net amounts (after the application of clause 9.20.4(a)) which, if sufficient funds were available, it would owe to Rule Participants in accordance with clause 9.18, where those amounts are reduced by applying the following formula:

$AAP = (NAP / TNAP) \times MAA$

where:

i. AAP is the reduced amount actually payable by AEMO to a Rule Participant in respect of the relevant Trading Week;

ii. NAP is the net amount that would have been payable by AEMO to the Rule Participant (after the application of clause 9.20.4(a)) but for the application of this clause 9.20.4(b), in respect of the relevant Trading Week;

iii. TNAP is the total net amount payable by AEMO to all Rule Participants (after the application of clause 9.20.4(a)) but for the application of this clause 9.20.4(b), in respect of the relevant Trading Week, calculated by summing all values of NAP; and

iv. MAA is the remainder of the Total Amount available for payment by AEMO after the application of clause 9.20.4(a).

9.20.5. If AEMO has reduced any payment under clause 9.20.4 as a result of a Payment Default and, within five Business Days of the Payment Default, it has received full or partial payment of the overdue amount, then AEMO must within one Business Day apply the amount received (including any interest paid under clause 9.18.7 in respect of the Payment Default) as follows.

(a) First, AEMO must apply the amount received to pay parties who suffered a reduction under clause 9.20.4(a). The amount payable by AEMO to each party is equal to the amount by which that party's payment was originally reduced under clause 9.20.4(a), adjusted to reflect interest accrued in accordance with clause 9.1.4 and any payments already made under this clause 9.20.5. However, if the amount received by AEMO is less than the total amount payable to these parties then AEMO must reduce the payments proportionally. Each payment will be based on the proportion that the amount received by AEMO bears to the total amount payable under this clause 9.20.5(a).

(b) Second, AEMO must apply the remainder on a pro-rata basis to all Rule Participants who suffered a reduction under clause 9.20.4(b). The amount to be paid to each relevant Rule Participant is determined by applying the formula in clause 9.20.4(b), but as if:

i. AAP referred to the amount to be paid to each relevant Rule Participant;

ii. MAA referred to the remainder of the full or partial payment after the application of clause 9.20.5(a); and

iii. NAP and TNAP have the same values as when the reduction was calculated.

9.20.6. If, five Business Days after a Payment Default, AEMO is yet to recover in full the overdue amount, then it must raise a Default Levy from all Market Participants (other than from Market Participants with unrecovered Payment Defaults) to cover the remaining shortfall (including interest calculated in accordance with clause 9.18.7). AEMO will determine the amount to be paid by each Market Participant, having regard to the absolute value of the MWh of generation or consumption, determined in accordance with the Metered Schedules, for each Market Participant for Trading Intervals during the most recent Trading Week for which Settlement Statements have been issued, as a proportion of the total of those values for all Market Participants (other than Market Participants with unrecovered Payment Defaults).

9.20.7. AEMO must notify each relevant Market Participant of the amount it must pay in respect of the Default Levy as determined in accordance with clause 9.20.6 within six Business Days of the Payment Default occurring.

9.20.8. A Market Participant must pay the full amount notified by AEMO under clause 9.20.7 to AEMO (in cleared funds) by 10:00 AM of the eighth Business Day following the date of the Payment Default, whether or not it disputes the amount notified.

9.20.9. By 2:00 PM on the eighth Business Day following the date of a Payment Default, AEMO is to allocate the total of the Default Levy amounts received under clause 9.20.8 as follows.

(a) First, AEMO must apply the total amount received to pay parties who suffered a reduction under clause 9.20.4(a). The amount payable by AEMO to each party is equal to the amount by which that party's payment was originally reduced under clause 9.20.4(a), adjusted to reflect interest accrued in accordance with clause 9.1.4 and any payments already made under clause 9.20.5 or this clause 9.20.9. However, if the amount received by AEMO is less than the total amount payable to these parties then AEMO must reduce the payments proportionally. Each payment will be based on the proportion that the total amount received by AEMO bears to

the total amount that would have been required to make all payments under this clause 9.20.9(a).

(b) Second, AEMO must apply the remainder on a pro-rata basis to all Rule Participants who suffered a reduction under clause 9.20.4(b). The amount to be paid to each relevant Rule Participant is determined by applying the formula in clause 9.20.4(b), but as if:

i. AAP referred to the amount to be paid to each relevant Rule Participant;

ii. MAA referred to the remainder of the total of the Default Levy amounts received under clause 9.20.8 after the application of clause 9.20.9(a); and

iii. NAP and TNAP have the same values as when the reduction was calculated.

9.20.10. If a Market Participant pays part or all of a Default Levy after the date and time prescribed in clause 9.20.8 but within five Business Days of that date, then AEMO must within one Business Day apply the amount received in accordance with clause 9.20.9 as if it was an amount received under clause 9.20.8.

9.20.11. By the end of the second month following the end of a Financial Year, AEMO must re-allocate any Default Levies raised during that Financial Year as follows:

(a) AEMO will determine the aggregate of the shortfalls in respect of which it raised Default Levies during the Financial Year less any subsequent amounts recovered and refunded under clause 9.20.12;

(b) AEMO will determine the aggregate Default Levy amount which should have been paid by each Market Participant, having regard to the absolute value of the MWh of generation or consumption, as determined in accordance with the Metered Schedules for each Market Participant (excluding Market Participants with unrecovered Payment Defaults) for Trading Intervals during the Financial Year as a proportion of the total of those values for all these Market Participants;

(c) AEMO must compare the amount determined for the Market Participant under clause 9.20.11(b) with the total of the amounts which the Market Participant actually paid under clause 9.20.8;

(d) AEMO must determine an appropriate adjustment to put each Market Participant in the position it would have been in had it paid the amount determined under clause 9.20.11(b) instead of the amounts actually paid under clause 9.20.8; and

(e) AEMO must include that adjustment in the Settlement Statement for the most recently completed Trading Week.

9.20.12. If, after raising a Default Levy in respect of a Payment Default in accordance with clause 9.20.6, AEMO recovers all or part of the relevant shortfall from the defaulting Rule Participant, then it must use the amount recovered to refund Default Levy amounts paid under clause 9.20.8 in respect of the Payment Default as soon as practicable but not later than the end of the calendar month following the month in which the amount is recovered. AEMO will determine the amount to be refunded to each Market Participant which paid a Default Levy amount under clause 9.20.8 in respect of the Payment Default (as adjusted, if applicable, under clause 9.20.11). In determining the amount to be refunded to a Market Participant, AEMO must have regard to:

(a) the amount recovered; and

(b) the Default Levy amount paid by the Market Participant under clause 9.20.8 (as adjusted, if applicable, under clause 9.20.11) as a proportion of the total of those amounts paid by all Market Participants.

Civil Penalty Amount Distribution

9.21. Civil Penalty Amount Distribution

9.21.1. For the purpose of regulation 37(aa) of the ESM Regulations, if a civil penalty is imposed on a Rule Participant for a breach of these ESM Rules, the Civil Penalty Amount received by AEMO must be distributed in accordance with these ESM Rules.

9.21.2. If a civil penalty is issued, AEMO must distribute the Civil Penalty Amount as soon as practicable after receiving the Civil Penalty Amount and the instructions provided by the Economic Regulation Authority under clause 2.13.43, and in accordance with those instructions.

9.21.3. AEMO must pay interest on any Civil Penalty Amount it holds prior to distribution under clause 9.21.2. Interest accrues daily at the Bank Bill Rate from (and including) the date that AEMO receives the Civil Penalty Amount up to (but excluding) the settlement date for distribution of the Civil Penalty Amount. AEMO must include the interest accrued with each payment made under clause 9.21.2.

10 Market Information

Information Policy

10.1. Record Retention

10.1.1. The Coordinator, the Economic Regulation Authority and Rule Participants must retain any information or documents that are required to be collected, produced or exchanged under these ESM Rules or the WEM Procedures for a period of seven years from the date it is created, or such longer period as may be required by law.

10.2. Information Confidentiality Status

10.2.1. Subject to clause 10.2.1B, an Information Manager must, in accordance with the ESM Rules and WEM Procedures, determine the confidentiality status for each type of Market Information it is responsible for under clause 10.2.12.

10.2.1A. No confidentiality status will be given to information, documents or data disclosed to the Coordinator, the Economic Regulation Authority, AEMO or a Network Operator if that information, documents or data is not Market Information.

10.2.1B. An Information Manager is not required to determine the confidentiality status of a type of Market Information for which it is responsible if the Information Manager:

(a) has not been requested to disclose the type of Market Information to any requesting party under section 10.4;

(b) is not required to disclose the type of Market Information to any other party under these ESM Rules or a WEM Procedure; and

(c) treats the type of Market Information as Confidential Information for the purposes of clauses 10.2.9 and 10.4.2.

10.2.2. The classes of confidentiality status are:

(a) Public Information, in which case the Market Information may be made available to any person by any person; and

(b) Confidential Information, in which case the Market Information may only be disclosed in accordance with clauses 10.4.4 and 10.4.19, or as otherwise required under these ESM Rules and the WEM Procedures.

10.2.3. Subject to clause 10.2.5, an Information Manager must classify Market Information as Confidential Information if:

(a) the Information Manager is not required to classify the Market Information as Public Information under clause 10.2.4; and

(b) the Market Information:

i. is contained in a contract to which the Rule Participant is a counterparty, but only insofar as the Market Information is specified in the contract as being confidential under the contract;

ii. could, in the reasonable opinion of the Information Manager, pose a material risk to Power System Security or Power System Reliability if disclosed;

iii. reveals personal details about an individual, but excluding their name and business contact details (including company name and address details, position, telephone numbers, mobile numbers and email addresses) that forms part of Market Information that is not confidential;

iv. could, in the reasonable opinion of the Information Manager (or Coordinator in the case of a dispute under section 10.5), cause commercial detriment to a Rule Participant or another person if disclosed; or

v. is otherwise specified as Confidential Information under these ESM Rules.

10.2.4. Market Information must be classified as Public Information if it is:

(a) specified as Public Information under these ESM Rules;

(b) required to be published or otherwise made publicly available under these ESM Rules; or

(c) available in the public domain, other than by reason of a breach of these ESM Rules or by any other unlawful means.

10.2.5. Clause 10.2.3 does not prevent the disclosure or publication of Market Information if it is aggregated, arranged or combined with other data or information such that it does not reveal any Confidential Information. Market Information that is aggregated, arranged or combined with other data or information such that it does not reveal any Confidential Information is deemed to be Market Information that is classified as Public Information.

10.2.6. Without limiting clause 10.2.4, an Information Manager must classify Market Information as Public Information if the Information Manager does not consider that the Market Information is required to be classified as Confidential Information under clause 10.2.3.

10.2.7. A Rule Participant may make a submission to an Information Manager about Market Information that the Rule Participant considers to be Confidential Information if:

(a) the Rule Participant is an Information Stakeholder for the Market Information; and

(b) the confidentiality status of the Market Information is not required to be Public Information under clause 10.2.4.

A submission must include the Rule Participant's reasoning for classifying the Market Information as Confidential Information against the criteria in clause 10.2.3.

10.2.7A. A Rule Participant is an Information Stakeholder for Market Information if:

(a) the Market Information explicitly relates to the Rule Participant or its Facilities, activities or contractual arrangements;

(b) where clause 10.2.7A(a) does not apply, the Rule Participant or its Facilities, activities or contractual arrangements would otherwise be able to be identified from the Market Information; or

(c) the Market Information relates to information, data or documents that a third party provided to the Rule Participant and the Rule Participant is under a duty or obligation (however described) to that third party to keep the relevant information, data or documents confidential.

10.2.8. A submission from a Rule Participant made under clause 10.2.7 must be considered by the Information Manager (or the Coordinator in the case of a dispute under section 10.5) when classifying Market Information. However the Information Manager (or Coordinator in the case of a dispute under section 10.5) will not be bound by any submission made by a Rule Participant in making its determination.

10.2.9. Subject to clauses 10.4.4 and 10.4.19, and unless otherwise required or permitted by these ESM Rules, the Coordinator, the Economic Regulation Authority and Rule Participants must not disclose Confidential Information to any person.

10.2.10. The Coordinator may document in a WEM Procedure guidance for Information Managers to assist with determining the confidentiality status of Market Information in accordance with clause 10.2.3.

10.2.11. Only one party may be the Information Manager for a type of Market Information, and the Information Manager may only be the Coordinator, the Economic Regulation Authority, AEMO or a Network Operator.

10.2.12. Subject to clause 10.2.11, the Information Manager for a type of Market Information is:

(a) in the first instance, the party who is required to publish the Market Information in accordance with these ESM Rules or the WEM Procedures;

(b) if clause 10.2.12(a) does not apply, then the party who produces the Market Information in accordance with these ESM Rules or the WEM Procedures;

(c) if neither of clauses 10.2.12(a) or 10.2.12(b) apply, then the party who receives the Market Information under these ESM Rules or the WEM Procedures; or

(d) if none of clauses 10.2.12(a), 10.2.12(b) or 10.2.12(c) apply, or it is unclear who the Information Manager is under clauses 10.2.12(a), 10.2.12(b) and 10.2.12(c), then the Coordinator may determine the Information Manager.

10.3. Public Website Requirements

10.3.1. The Coordinator, the Economic Regulation Authority, AEMO and each Network Operator must maintain a website for the purpose of publishing Market Information as required under these ESM Rules or the WEM Procedures.

10.3.2. Subject to clause 10.4.7, the Coordinator, the Economic Regulation Authority, AEMO or a Network Operator must not require a fee for Market Information required to be disclosed or published by the Coordinator, the Economic Regulation Authority, AEMO or the Network Operator in accordance with these ESM Rules or the WEM Procedures.

10.3.3. Subject to clause 10.3.4, Market Information required to be published must, where practical, be maintained on an Information Manager's website for as long as that Market Information is required to be retained in accordance with clause 10.1.1.

10.3.4. If the Information Manager determines that it is no longer practical or efficient to maintain Market Information on a website in accordance with clause 10.3.3, the Information Manager must retain the Market Information as required by clause 10.1.1 and make the Market Information available at no cost to any person on application.

10.4. Managing Market Information

10.4.1. The Coordinator, the Economic Regulation Authority and each Rule Participant must:

(a) manage Market Information in accordance with this section 10.4;

(b) take all reasonable measures to protect any Confidential Information that is in its possession from unauthorised use or disclosure; and

(c) if it is made aware that the Confidential Information has come into its possession erroneously, take reasonable steps to destroy that Confidential Information.

10.4.2. The Coordinator, the Economic Regulation Authority, AEMO and each Network Operator may only use Confidential Information in its possession to the extent that it considers it is required to perform its functions under sections 2.1A, 2.2A, 2.2C or 2.2D, as applicable.

10.4.3. Clause 10.4.1(b) does not prevent the disclosure of information by the Coordinator, the Economic Regulation Authority or a Rule Participant ("**disclosing party**") to:

(a) an employee or officer of the disclosing party, or a related body corporate of the disclosing party; or

(b) a legal or other professional adviser, auditor or other consultant of the disclosing party, who requires the Market Information in relation to the performance of the disclosing party's functions or obligations under these ESM Rules, or for the purpose of advising the disclosing party in respect of these functions or obligations,

provided that the disclosing party ensures that these persons are under equivalent obligations of confidence to the disclosing party as those provided in these ESM Rules.

10.4.4. Despite any other clauses in this Chapter 10:

(a) an Information Manager is not prevented from allowing a Rule Participant access to Market Information that, other than by reason of a breach of these ESM Rules or other unlawful means, should already be known to that Rule Participant;

(b) a Rule Participant is not prevented from publishing or otherwise disclosing Market Information in its possession which relates solely to the Rule Participant or the Rule Participant's Facilities or activities;

(c) a Rule Participant is not prevented from disclosing Confidential Information to a person where it is necessary to ensure the safety of personnel, equipment or the power system; and

(d) the Coordinator, the Economic Regulation Authority or a Rule Participant is not prevented from disclosing Confidential Information to a third party as required under applicable law.

10.4.4A. An Information Manager may disclose Confidential Information without receiving a request under clause 10.4.6, if the party receiving the Confidential Information is:

(a) the Coordinator or the Economic Regulation Authority; or

(b) AEMO or a Network Operator, and the Confidential Information is required by AEMO or a Network Operator (as relevant) to carry out its functions under these ESM Rules or a WEM Procedure.

10.4.5. An Information Manager may, at its discretion, publish on its website a list outlining its proposed classification for each type of Market Information the Information Manager is responsible for. This classification shall not be binding on the Information Manager or the Coordinator in the case of a dispute under section 10.5.

Requesting access to Market Information

10.4.6. Where Market Information is not already available in the public domain, any person may request access to that Market Information by submitting a written request to the Information Manager.

10.4.6A. A request submitted under clause 10.4.6 must specify the details of how the request meets any of the criteria specified in clause 10.4.19.

10.4.7. Where Market Information is not required to be published or otherwise disclosed in accordance with these ESM Rules or a WEM Procedure, an Information Manager may charge a person a fee for providing Market Information disclosed in accordance with this section 10.4, where that fee may not exceed the Information Manager's reasonable costs, not otherwise included in its budget, of:

(a) collation and transmission of information or documents; and

(b) preparation of documents not otherwise required by these ESM Rules, or other applicable law or regulation.

10.4.8. An Information Manager may not charge the Coordinator, the Economic Regulation Authority, AEMO or a Network Operator for Market Information requested in accordance with these ESM Rules.

10.4.9. If the Coordinator, the Economic Regulation Authority, AEMO or a Network Operator:

(a) receives a request for Market Information under clause 10.4.6; and

(b) is not the Information Manager for that Market Information,

then it must:

(c) refer the requesting party to the appropriate Information Manager or the Coordinator; and

(d) take no further action on the request under this section 10.4.

Managing the disclosure of Public Information

10.4.10. If the Information Manager considers that the Market Information requested under clause 10.4.6 is Public Information, it must, subject to clauses 10.4.11 and 10.4.16(c) and section 10.5, if it continues to possess the Market Information, disclose the relevant Market Information to the requesting party within 20 Business Days of receiving the request.

10.4.11. If a submission was made by an Information Stakeholder under clause 10.2.7 that Market Information requested under clause 10.4.6 is Confidential Information, and the Information Manager has deemed the Market Information to be Public Information and intends to provide it to the requesting party under clause 10.4.10:

(a) the Information Manager must, within 10 Business Days of receiving the request under clause 10.4.6, notify the Information Stakeholder in writing:

i. that it intends to disclose the Market Information to the requesting party, specifying the time and nature of the intended disclosure;

ii. its reasons for the Market Information not being Confidential Information; and

iii. that the Information Stakeholder may lodge a dispute with the Coordinator within five Business Days if it disagrees with the Information Manager's assessment;

(b) if, had the Information Manager determined that the requested Market Information was Confidential Information (which it has not):

i. the Information Manager would be required to disclose the Market Information to the requesting party under clause 10.4.19; and

ii. no Information Stakeholder would be permitted to dispute the disclosure of the Market Information to the requesting party under clause 10.4.19A,

the Information Manager must:

iii. disclose the Market Information to the requesting party within the timeframe specified in clause 10.4.10; and

iv. if the Market Information is disclosed to the requesting party:

1. before the deadline for lodging a dispute under clause 10.4.14 in respect of the request; or

2. before the Coordinator has made a determination on any dispute that was lodged under clause 10.4.14 in respect of the request,

notify the requesting party when the Market Information is disclosed that, because the confidentiality status of the Market Information is, or could be, subject to a dispute, the requesting party must treat the Market Information as Confidential Information until the Information Manager or the Coordinator has notified the requesting party of the final confidentiality status for the relevant Market Information; and

(c) if clause 10.4.11(b) does not apply, the Information Manager must not disclose the Market Information to the requesting party during the timeframe referred to in clause 10.4.11(a)(iii).

10.4.12. [Blank]

10.4.13. [Blank]

10.4.14. If the Information Stakeholder disagrees with the assessment specified by the Information Manager in a notification under clause 10.4.11(a), the Information Stakeholder may provide the Coordinator and the Information Manager with a notice of dispute within the timeframe specified in clause 10.4.11(a)(iii).

10.4.15. A notice of dispute provided under clause 10.4.14 must be in writing and must contain:

(a) the date on which the notice of dispute was issued;

(b) the identity of the Information Stakeholder issuing the notice of dispute;

(c) the identities of any other relevant parties to the dispute;

(d) the details of the Market Information in dispute, including the Information Stakeholder's reasoning for disputing the Information Manager's assessment; and

(e) the contact person for the Information Stakeholder issuing the dispute, and their contact details.

10.4.16. If:

(a) an Information Manager issues a notification to one or more Information Stakeholders under clause 10.4.11(a) in respect of a specific request for Market Information under clause 10.4.6; and

(b) no Information Stakeholder issues a notice of dispute under clause 10.4.14 in respect of the request within the timeframe specified under clause 10.4.11(a)(iii) for the relevant notification,

the Information Manager must:

(c) if it has already disclosed the Market Information to the requesting party under clause 10.4.11(b)(iii), notify the requesting party that the relevant Market Information is Public Information; or

(d) otherwise, disclose the Market Information to the requesting party within the timeframe specified in clause 10.4.10.

10.4.17. If an Information Stakeholder issues a notice of dispute under clause 10.4.14, then:

(a) the Coordinator and the Information Manager must acknowledge the notice of dispute within one Business Day of receiving the notice of dispute;

(b) the Coordinator must determine the dispute in accordance with section 10.5; and

(c) except where clause 10.4.11(b) applies, the Information Manager must not disclose the Market Information to the requesting party while the dispute is being determined.

Managing disclosure of Confidential Information

10.4.18. If the Information Manager considers that the Market Information requested under clause 10.4.6 is Confidential Information, it must:

(a) if required under clause 10.4.19, disclose the Market Information to the requesting party within 20 Business Days of receiving the request; or

(b) advise the requesting party that the Market Information is Confidential Information and is unable to be disclosed within 10 Business Days of receiving the request.

10.4.19. Subject to clauses 10.4.20, 10.4.21 and 10.4.25(c) and section 10.5, the Information Manager must disclose Confidential Information that has been requested under clause 10.4.6 to the requesting party if:

(a) the Information Manager has the written consent of each relevant Information Stakeholder;

(b) the Confidential Information is required to be disclosed by or under any law or a stock exchange having jurisdiction over the Rule Participant;

(c) disclosure of the Confidential Information is required by an order of a court, tribunal, arbiter, the Electricity Review Board or another judicial body having jurisdiction to compel the disclosure of Confidential Information;

(d) the disclosure of the Confidential Information to the requesting party is necessary for the safety of personnel, equipment or the power system;

(e) the requesting party is the Economic Regulation Authority or the Coordinator;

(f) the requesting party is AEMO or the relevant Network Operator and the Confidential Information is required by that party to carry out its functions under these ESM Rules or a WEM Procedure; or

(g) in the reasonable opinion of the Information Manager (or Coordinator in a dispute under Section 10.5), the benefit to electricity consumers of the disclosure of the Confidential Information to the requesting party outweighs any commercial detriment that may be caused by the disclosure.

10.4.19A. An Information Stakeholder for Market Information may dispute the disclosure of that Market Information to a requesting party under clause 10.4.19 if:

(a) the Market Information is being disclosed because the Information Manager considers the request meets the criteria in clause 10.4.19(g); and

(b) the Information Manager is not the Coordinator.

10.4.20. If an Information Manager intends to disclose Market Information requested under clause 10.4.6 in accordance with clause 10.4.19, and an Information Stakeholder

is permitted to dispute the disclosure of the Market Information under clause 10.4.19A, the Information Manager must:

(a) within 10 Business Days of receiving the request under clause 10.4.6, notify each applicable Information Stakeholder in writing:

i. that it intends to disclose the Market Information to the requesting party, specifying the time and nature of the intended disclosure;

ii. its reasons for the Market Information being disclosed to the requesting party under clause 10.4.19; and

iii. that the Information Stakeholder may lodge a dispute with the Coordinator within five Business Days if it disagrees with the Information Manager's assessment; and

(b) not disclose the Market Information to the requesting party during the timeframe referred to in clause 10.4.20(a)(iii).

10.4.21. If an Information Stakeholder wishes to lodge a dispute in relation to a notification received under clause 10.4.20(a), it must provide the Coordinator and the Information Manager with a notice of dispute within the timeframe specified in clause 10.4.20(a)(iii).

10.4.22. If the Information Manager advises a party requesting Market Information that the Market Information is Confidential Information that cannot be disclosed under clause 10.4.19, the requesting party may provide the Coordinator and the Information Manager with a notice of dispute regarding the assessment by the Information Manager of either:

(a) confidentiality under clause 10.2.3; or

(b) eligibility for disclosure under clause 10.4.19.

10.4.23. A notice of dispute lodged under clauses 10.4.21 or 10.4.22 must be in writing and contain:

(a) the date on which the notice of dispute was issued;

(b) the identity of the Rule Participant or person issuing the notice of dispute;

(c) the identities of any other relevant parties to the dispute;

(d) the details of the Market Information in dispute, including the Information Stakeholder's or requesting party's, as applicable, reasoning for disputing the Information Manager's assessment; and

(e) the contact person for the Rule Participant or person issuing the dispute, and their contact details.

10.4.24. If:

(a) an Information Manager issues a notification to one or more Information Stakeholders under clause 10.4.20(a) in respect of a specific request for Market Information under clause 10.4.6; and

(b) no Information Stakeholder issues a notice of dispute under clause 10.4.21 in respect of the request within the timeframe specified under clause 10.4.20(a)(iii) for the relevant notification,

the Information Manager must disclose the Market Information to the requesting party within the timeframe specified in clause 10.4.18(a).

10.4.25. If a dispute is lodged in accordance with clauses 10.4.21 or 10.4.22, then:

(a) the Coordinator and the Information Manager must acknowledge the notice of dispute within one Business Day of receiving the notice of dispute;

(b) the Coordinator must determine the dispute in accordance with section 10.5; and

(c) the Information Manager must not disclose the Market Information under dispute to the requesting party while the dispute is being determined.

10.4.26. When an Information Manager discloses Market Information under clause 10.4.4A or to a requesting party in response to a request under clause 10.4.6, the Information Manager must identify any Market Information that is classified as Confidential Information.

10.5. Resolving Disputes Regarding the Disclosure of Market Information

10.5.1. If the Coordinator receives notice of a dispute in accordance with clauses 10.4.14, 10.4.21 or 10.4.22, the Coordinator must resolve the dispute in accordance with this section 10.5.

10.5.2. The Coordinator must document in a WEM Procedure the process for resolving a dispute under this section 10.5.

10.5.3. If the Coordinator considers that a notice of dispute received under clauses 10.4.14, 10.4.21 or 10.4.22 lacks sufficient substance or is trivial, or that the dispute is frivolous or vexatious, the Coordinator may dismiss the dispute and the original decision of the Information Manager will be final.

10.5.4. The Coordinator must conduct reasonable consultation with the Information Manager, each relevant Information Stakeholder and the requesting party as part of the dispute resolution process.

10.5.5. The Coordinator must make her or his determination on a dispute against the requirements in clauses 10.2.3, 10.2.4, 10.2.5, 10.2.6, 10.2.8 and 10.4.19.

10.5.6. Within 20 Business Days of being notified of a dispute, the Coordinator must inform the parties to the dispute in writing of either:

(a) the Coordinator's determination; or

(b) if more time is required for a determination, the expected date for that determination.

10.5.7. If the timeframe for a determination is extended under clause 10.5.6(b), the Coordinator must deliver her or his determination within that extended timeframe.

10.5.8. The Coordinator's determination:

(a) must, where applicable, classify the relevant Market Information as Public Information or Confidential Information; and

(b) may, if the Market Information is Confidential Information, direct the Information Manager to:

i. disclose all or part of the Market Information to the requesting party;

ii. disclose all or part of the Market Information to the requesting party with conditions attached; or

iii. not release or disclose the Market Information to the requesting party.

10.5.9. Until the Coordinator has made a determination under clause 10.5.8, the Market Information in dispute will be deemed to be Confidential Information and may not be disclosed by the Information Manager to any party, except as otherwise required under these ESM Rules.

10.5.10. Where the Coordinator makes a determination under clause 10.5.8, the Coordinator must:

(a) advise the parties to the dispute of the outcome; and

(b) publish her or his determination on the Coordinator's Website, redacting any commercially sensitive or other Confidential Information.

10.5.11. A determination published under clause 10.5.10 must include the nature of the Market Information that has been determined to be Public Information or Confidential Information, and any submissions or justification put forward by the parties to the dispute or any other parties consulted by the Coordinator.

10.5.12. If the Coordinator makes a determination in accordance with clauses 10.5.8(a), 10.5.8(b)(i) or 10.5.8(b)(ii), the Information Manager must disclose the specified Market Information to the requesting party in accordance with the determination within 10 Business Days.

10.5.13. If the Coordinator makes a determination in accordance with clause 10.5.8(b)(iii) the Information Manager must not disclose the Market Information to the requesting party.

10.5.14. If a dispute is lodged under clauses 10.4.14, 10.4.21 or 10.4.22, but the Coordinator has already made a prior determination on the same type of Market Information on the same or similar grounds as those specified in the dispute, the Coordinator is not required to determine the dispute in accordance with this section 10.5 and may direct the parties to the dispute to her or his relevant determination.

Market Information to be Published by Information Managers

10.6. Public Information

10.6.1. The confidentiality status for the following Market Information under section 10.2 is Public Information and the relevant Information Manager must make each item of information available from or via its website after that item of information becomes available to it:

(a) the precise basis for determining the Bank Bill Rate;

(b) details of resolved disputes, including all Public Information associated with the dispute, but not parts of the resolution or information associated with the resolution which contain Confidential Information;

(c) public consultation proceedings;

(d) public reports pertaining to the Wholesale Electricity Market issued by the relevant Information Manager;

(e) reports pertaining to the Wholesale Electricity Market produced by the Electricity Review Board and the Minister;

(f) event reports explaining what happened during unusual market or dispatch events but not any parts of such reports which contain Confidential Information;

(g) summary information on disputes in progress that may impact other Rule Participants;

(h) for each Trading Week which has been settled under Chapter 9, the information provided by AEMO to each Network Operator under clause 5.9.2; and

(i) for each Trading Week which has been settled under Chapter 9, for each AEMO-procured NCESS Contract in effect during that Trading Week:

i. details of each enablement or dispatch event under the NCESS Contract, including the relevant times and enablement or dispatch quantities; and

ii. for each Dispatch Interval in the Trading Week, the payment made by AEMO for services provided under the NCESS Contract as provided to the settlement system under clause 5.9.1(c).

10.6.2. Market Information required to be published on an Information Manager's website under clause 10.6.1 is in addition to any other Market Information that is required to be published under other provisions of these ESM Rules and the WEM Procedures.

11. Glossary

~~**12 Peak SWIS Trading Intervals**: Means, for a Hot Season, the 3 Trading Intervals with the highest Total Sent Out Generation on each of the 4 Trading Days with the highest maximum demand in that Hot Season, as published by AEMO in accordance with clause 4.1.23A, where the maximum demand for a Trading Day is the highest Total Sent Out Generation for any Trading Interval in that Trading Day.~~

3 High-Ramp Trading Days: For a Trading Month, means the three Trading Days with the highest Four-Hour Demand Increase, as published by AEMO under clause 4.1.23BA.

4 Peak SWIS Trading Intervals: Means, for a Trading Month, the 4 Trading Intervals in the relevant Trading Month with the highest Total Sent Out Generation, as published by AEMO in accordance with clause 4.1.23B. For the purposes of calculating the 4 Peak SWIS Trading Intervals, when ordering Trading Intervals from highest to lowest Total Sent Out Generation, if there are two or more Trading Intervals with the same Total Sent Out Generation, then AEMO shall select the earliest Trading Intervals.

~~**4 Peak SWIS Trading Intervals**: Means, for a Trading Month, the 4 Trading Intervals in the relevant Trading Month with the highest Total Sent Out Generation, as published by AEMO in accordance with clause 4.1.23B.~~

Acceptable Credit Criteria: The criteria set out in clause 2.38.6.

Access Code: The code established by the Minister under section 104 of the Electricity Industry Act 2004.

Access Proposal: Has the meaning given in clause 4.2.7(b)(ii)(1).

Accumulated Time Error: Means in respect of a frequency measurement of the SWIS, the integral over time of the difference between 20 milliseconds and the inverse of that frequency measurement, starting from a time determined by AEMO, and recorded by AEMO in its SCADA system.

Additional RoCoF Control Requirement: The smallest quantity of RoCoF Control Service additional to the Minimum RoCoF Control Requirement that meets the requirement in clause 3.10.3 while maximizing the overall value of Real-Time Market trading under clause 7.2.4.

Adjusted Baseline Method: A variant of the Relevant Demand methodology in Appendix 10 where the Relevant Demand of a Demand Side Programme is calculated under step 4.1(a) of Appendix 10.

Adjustment Process: Has the meaning given in clause 9.3.5.

AEMO or **Australian Energy Market Operator**: Means the Australian Energy Market Operator Limited (ACN 072 010 327).

AEMO Deposit Rate: A rate equal to the rate received by AEMO for the Security Deposit. (AEMO must use reasonable endeavours to obtain a rate which reflects reasonable commercial terms as regards to other deposit rates available at the time.)

AEMO Intervention Event: An event where AEMO intervenes in the Real-Time Market by issuing a direction in accordance with clause 3.4.4(c), clause 3.4.4(d), clause 3.4.5, clause 3.5.5(a), clause 3.5.5(b), clause 7.7.4(b), or clause 7.7.5.

AEMO-procured NCESS Contract: A contract between AEMO and a Market Participant or Ancillary Service Provider for the provision of an NCESS.

AEMO Regulations: Means the *Australian Energy Market Operator (Functions) Regulations 2015*.

AEMO Transition Date: Means 8:00 AM on 30 November 2015.

Affected Dispatch Interval: A Dispatch Interval for which the Dispatch Algorithm has been used to determine Dispatch Targets, Dispatch Caps and Market Clearing Prices, but the Dispatch Inputs included manifestly incorrect data that AEMO reasonably considers have caused material differences in Market Clearing Prices.

Aggregated Facility: A group of Facilities of the type defined in clause 2.29.1B(c), aggregated under section 2.30, and treated as a single Facility for the purpose of these ESM Rules.

Allowable Revenue: Means the allowable revenue for AEMO in performing its functions set out in clause 2.1A.2 as determined by the Economic Regulation Authority in accordance with section 2.22A.

Alternative Network Constraint Equation: A Constraint Equation formulation for a Network Constraint other than a Fully Co-optimised Network Constraint Equation.

Amending Rules: Has the meaning given in clause 2.4.1(c).

Application Fee: A fee determined by AEMO under clause 2.24.2.

Approval to Generate Notification: Means the notification issued by the Network Operator to a Market Participant in accordance with clause 3A.8.11 granting final approval to a Transmission Connected Generating System to generate electricity.

Arrangement for Access: When used in the context of a “covered network” (as that term is defined in the Access Code) means an “access contract” (as that term is defined in the Access Code). When used in the context of a network which is not a “covered network” (as that term is defined in the Access Code) means any commercial arrangement through which “access” (as that term is defined in the Access Code) to that network is obtained.

Associated Load: Has the meaning given in clause 2.29.5G.

Associated Load Baseline Energy: For an Associated Load of a Demand Side Programme in a Trading Interval, the value in MWh determined in step 5.1 of Appendix 10.

Association Period: Has the meaning given in clause 2.29.5G.

Authorised Officer: In respect of a Rule Participant, means:

(a) "Officer" as defined in Section 9 of the Corporations Act;

(b) a person designated as an "executive officer" of the Rule Participant under section 43 of the Government Trading Enterprises Act 2023; or

(c) for a Rule Participant that is not a body corporate, a person who is legally able to bind that Rule Participant.

Automatic Generation Control System (AGC): The system into which Dispatch Targets or Dispatch Caps are entered and processed by AEMO for Registered Facilities operating on automatic generation control.

Availability Curve: A curve developed by AEMO under clause 4.5.10(e).

Availability Declaration: A declaration included with a STEM Submission or Standing STEM Submission and which includes the information described in clause 6.6.2A(b).

Availability Declaration Exemption: Means a condition specified in clause 3.18B.4.

Availability Duration Gap: For a Capacity Year, the value most recently determined by AEMO under Part B of Appendix 11.

Availability Duration Gap Load Scenario: For a Capacity Year, the load scenario determined by AEMO under clause 4.5.13(eC)(i).

Available Capacity: For a Registered Facility in a Dispatch Interval, Injection or Withdrawal capacity that the Market Participant is not expecting to make ready for dispatch in the Dispatch Interval, but expects to be able to make ready for dispatch in the Dispatch Interval if given notice before the relevant Start Decision Cutoff, allowing for expected operating conditions and the effect of any Outages that have not been rejected for the Registered Facility. To avoid doubt, Available Capacity is not limited by the expected availability of intermittent fuels for an Intermittent Generating System such as wind.

Available Capacity Scenario: The Scenario that is identical to the Reference Scenario for a Dispatch Interval or Pre-Dispatch Interval in a Market Schedule except that it includes any capacity offered as Available Capacity in Real-Time Market Submissions for which the relevant Start Decision Cutoff has not yet passed.

AZ: Means the ratio of excess Reserve Capacity to the Reserve Capacity Requirement for a Reserve Capacity Cycle that is determined to be sufficiently high for the Reserve Capacity Price to be zero.

Bank Bill Rate: The rate set by AEMO:

(a) at approximately 10:00am on any given Business Day to apply for that day; or

(b) if the relevant day is not a Business Day, or AEMO does not set a rate for that day, on the previous Business Day on which a rate was set under paragraph (a),

(based on an industry standard market indicator, details of which must be published by AEMO).

Base ESS Quantity: For a Dispatch Interval and a SESSM Award where there is a non-zero SESSM Availability Payment, the quantity of the relevant Frequency Co-optimised Essential System Service which the Facility would have been capable of providing if not granted the SESSM Award, and which must be offered in addition to the SESSM Availability Quantity.

Benchmark Flexible Technology: In respect of a Reserve Capacity Cycle, a notional new Facility of the Facility Technology Type which is expected to be able to provide Flexible Capacity at the lowest annual capital cost and annual fixed operating and maintenance costs as determined by the Coordinator under clause 4.16.11.

Benchmark Peak Technology: In respect of a Reserve Capacity Cycle, a notional new Facility of the Facility Technology Type which is expected to be able to provide Peak Capacity at the lowest annual capital cost and annual fixed operating and maintenance costs as determined by the Coordinator under clause 4.16.11.

Benchmark Technology: In respect of a Reserve Capacity Cycle, the Benchmark Flexible Technology or the Benchmark Peak Technology or both (as the context requires).

Benchmark Reserve Capacity Price: In respect of a Reserve Capacity Cycle, the Peak Benchmark Reserve Capacity Price or the Flexible Benchmark Reserve Capacity Price or both (as the context requires).

Bilateral Contract: A contract formed between any two persons for the sale of electricity by one of those persons to the other.

Bilateral Submission: A submission by a Market Participant to AEMO made in accordance with clause 6.2.

Bilateral Submission Cutoff: Means 8:50 AM on the Scheduling Day for the Trading Day, or such other time as may be notified by AEMO under clause 6.4.6B.

Bilateral Submission Results Window: For a point in time in the 24-hour period starting at 8:00 AM on a Scheduling Day, the period of eight consecutive Trading Days starting with the Trading Day for the Scheduling Day.

BRCP Cap Factor: Means the ratio of the Reserve Capacity Price to the Benchmark Reserve Capacity Price for a Reserve Capacity Cycle if there was to be no excess Reserve Capacity in that Reserve Capacity Cycle.

Business Day: A day that is not a Saturday, Sunday, or a public holiday throughout Western Australia. For the purpose of clauses 9.3.4 and 9.15.7, a Business Day is a day that is not a Saturday, Sunday, or a public holiday (including a bank holiday) throughout Western Australia and/or Sydney (New South Wales).

Calendar Hour: A period of one hour, commencing on the hour.

Candidate Fixed Price Component: A Facility Technology Type within a Facility that has been nominated to be classified as a Fixed Price Component in accordance with clause 4.14.1B.

Candidate Fixed Price Facility: Means a Facility that has been nominated to be classified as a Fixed Price Facility in accordance with clause 4.14.1B.

Capability Class: Means the classes of capability that must be assigned to Peak Certified Reserve Capacity by AEMO under clause 4.11.4.

Capability Class 1: The Capability Class that may be assigned by AEMO to Peak Certified Reserve Capacity for a Facility or component of a Facility under clause 4.11.4(a).

Capability Class 1 Availability Assessment Duration: 28 Trading Intervals.

Capability Class 1 Availability Assessment Interval: A Trading Interval occurring between 8:00 AM and 10:00 PM on a Business Day.

Capability Class 2: The Capability Class that may be assigned by AEMO to Peak Certified Reserve Capacity for a Facility, or component of a Facility, under clause 4.11.4(b).

Capability Class 3: The Capability Class that may be assigned by AEMO to Peak Certified Reserve Capacity for a Facility, or component of a Facility, under clause 4.11.4(c).

~~**Capacity Adjusted Forced Outage Quantity:** Means, the quantity, in MW, of the derating of a Facility or Separately Certified Component in a Dispatch Interval or Trading Interval from the Reserve Capacity Obligation Quantity for the Facility or Separately Certified Component as determined by AEMO in accordance with:~~

~~(a) for a Separately Certified Component in a Dispatch Interval, the formula in clause 3.21.7;~~

~~(b) for a Separately Certified Component in a Trading Interval, the formula in clause 3.21.7A;~~

~~(c) for a Facility in a Trading Interval, the formula in clause 3.21.7B; and~~

~~(d) for a Facility in a Dispatch Interval, the formula in clause 3.21.7C.~~

~~**Capacity Adjusted Planned Outage Quantity:** Means, the quantity, in MW, of the derating of a Facility or Separately Certified Component in a Dispatch Interval or Trading Interval from the Reserve Capacity Obligation Quantity for the Facility or Separately Certified Component as determined by AEMO in accordance with:~~

~~(a) for a Separately Certified Component in a Dispatch Interval, the formula in clause 3.21.8;~~

~~(b) for a Separately Certified Component in a Trading Interval, the formula in clause 3.21.8A;~~

~~(c) for a Facility in a Trading Interval, the formula in clause 3.21.8B; and~~

~~(d) for a Facility in a Dispatch Interval, the formula in clause 3.21.8C.~~

~~**Capacity Cost Refund**: Has the meaning given in clause 4.26.2E.~~

Capacity Credit: A Peak Capacity Credit or a Flexible Capacity Credit or both (as the context requires).

Capacity Credit Allocation: The allocation of a number of Capacity Credits held by a Market Participant for a Facility or a Separately Certified Component to a Market Participant for a Trading Day for settlement purposes through the allocation process in section 4.30.

Capacity Credit Allocation Submission: A submission from a Market Participant to AEMO made in accordance with clauses 4.30.1 and 4.30.2 to allocate Capacity Credits to a single Market Participant.

Capacity Shortfall: Has the meaning given in clause 4.26.2D.

Capacity Year: A period of 12 months commencing at the start of the Trading Day which commences on 1 October and ending on the end of the Trading Day ending on 1 October of the following calendar year.

Category A: The class of ESM Rules classified as Category A civil penalty provisions in the ESM Regulations for the purposes of the imposition of civil penalties under the Regulations.

Category B: The class of ESM Rules classified as Category B civil penalty provisions in the ESM Regulations for the purposes of the imposition of civil penalties under the Regulations.

Category C: The class of ESM Rules classified as Category C civil penalty provisions in the ESM Regulations for the purposes of the imposition of civil penalties under the Regulations.

CC Uplift Quantity: Has the meaning given in clause 4.1A.4.

Central Dispatch Process: The process managed by AEMO for the dispatch of Registered Facilities for energy and Essential System Services described in clause 7.2.1.

Certified Reserve Capacity: Peak Certified Reserve Capacity or Flexible Certified Reserve Capacity or both (as the context requires).

Charge Level: An Equipment Limit indicating the current level of stored energy in MWh in an Electric Storage Resource, as provided to AEMO in a real-time data feed in accordance with section 2.36A.

Chief Executive Officer: In respect of a Rule Participant, the chief executive officer of the relevant Rule Participant, or if that Rule Participant has no chief executive officer, then the individual nominated by the Rule Participant and holding a similar position to that of chief executive officer of the Rule Participant.

Civil Penalty Amount: The amount of a civil penalty imposed or demanded in respect of a breach of a provision of the ESM Rules that has been specified in Schedule 1 of the ESM Regulations as a civil penalty provision.

CL Facility: A Facility that is a:

(a) Scheduled Facility;

(b) Semi-Scheduled Facility;

(c) Non-Scheduled Facility monitored by AEMO's SCADA system; or

(d) Major Load.

CL Threshold: 120 MW.

Co-ordinated Universal Time: Co-ordinated Universal Time is determined by the International Bureau of Weights and Measures and maintained under section 8AA of the National Measurement Act 1960 of the Commonwealth.

Cold Season: The period commencing at the start of the Trading Day beginning on 1 April and ending at the end of the Trading Day finishing on the following 1 October.

Commercial Operation: The status determined by AEMO that:

(a) under clause 4.13.10B a Facility (other than a Demand Side Programme); or

(b) under clause 4.13A.25 a Demand Side Programme,

is operating in the Wholesale Electricity Market.

Commissioning Test Period: The proposed period during which a Commissioning Test Plan will be conducted, as provided to AEMO under clause 3.21A.7(d).

Commissioning Test Plan: The information submitted to AEMO in accordance with clause 3.21A.7.

Commissioning Tests: Has the meaning given in clause 3.21A.5.

Common Requirements: In respect of each Technical Requirement, means each requirement as specified in Appendix 12 that is common to both the Ideal Generator Performance Standard and Minimum Generator Performance Standard.

Compensation Guideline: The guideline published by the Economic Regulation Authority, if any, under clause 7.12.9.

Conditional Certified Reserve Capacity: Has the meaning given in clause 4.9.5.

Confidential Information: Market Information classified as confidential by an Information Manager under clause 10.2.3 or the Coordinator under section 10.5.

Congestion Information Resource: An information resource comprising the information described in clause 2.27B.3.

Congestion Information Resource Objective: Has the meaning given in clause 2.27B.1.

Congestion Rental: Means, in respect of a Registered Facility, for a Dispatch Interval and for a set of Network Constraints, the value calculated by AEMO in accordance with clause 7.14.1.

Connection Point: A point on a Network identified in, or to be identified in, a contract for network services as an entry point, exit point, or bidirectional point.

Constrained Access Load: A Non-Dispatchable Load that is subject to an agreement with a Network Operator, under which the Withdrawal of the Non-Dispatchable Load is constrained in specified conditions.

Constrained Portfolio: For a Constraint Equation, a set comprising all the Registered Facilities within a single Portfolio that are located behind the relevant Network Constraint.

Constrained Uplift Payment Ratio: Has the meaning given in clause 2.16C.2.

Constraint: Means:

(a) a Network Constraint; and

(b) a limitation or requirement affecting the capability of a Load or Energy Producing System such that it would represent a risk to Power System Security or Power System Reliability if the limitation or requirement was removed.

Constraint Equation: A mathematical representation of a Constraint on the SWIS.

Constraint Set: A group of Constraint Equations that respond to a particular condition or set of conditions.

Constraints Library: The collection of:

(a) Constraint Equations and Constraint Sets that AEMO is required to develop and maintain in accordance with section 2.27A or clause 5.7.3;

(b) supporting information, including:

i. Limit Advice, including Limit Equations and Limit Advice Inputs;

ii. the Operating Margin forming part of each Constraint Equation; and

iii. any other information specified in the WEM Procedure referred to in clause 2.27A.10; and

(c) for each Reserve Capacity Cycle:

i. the information provided by each Network Operator under clause 4.4B.5; and

ii. the final RCM Constraint Equations used by AEMO in the Network Access Quantity Model for determining Network Access Quantities under Appendix 3.

Consumption Contributing Quantity: For a Market Participant for a Trading Interval, has the meaning given in clause 9.5.7.

~~**Consumption Deviation Application:** An application submitted by a Market Participant to AEMO under clause 4.28.9A, notifying AEMO and providing evidence that the consumption of a Load was affected.~~

Consumption Share: Has the meaning given in clause 9.5.6.

Contestable Customer: A person that may purchase electrical energy from any retailer, including Synergy.

Contingency Event: Has the meaning given in clause 3.8A.1.

Contingency Lower Offset: For each Dispatch Interval or Pre-Dispatch Interval, the offset determined by AEMO in accordance with the WEM Procedure referred to in clause 7.2.5, when determining the quantity of Contingency Reserve Lower required to maintain the SWIS frequency in accordance with the Frequency Operating Standards taking into account the size of the Largest Credible Load Contingency, and where:

(a) a negative offset quantity indicates additional Contingency Reserve Lower is required; and

(b) a positive offset quantity indicates less Contingency Reserve Lower is required.

Contingency Raise Offset: For each Dispatch Interval or Pre-Dispatch Interval, the offset determined by AEMO in accordance with the WEM Procedure referred to in clause 7.2.5 when determining the quantity of Contingency Reserve Raise required to maintain the SWIS

frequency in accordance with the Frequency Operating Standards considering the Largest Credible Supply Contingency, and where:

(a) a negative offset quantity indicates additional Contingency Reserve Raise is required; and

(b) a positive offset quantity indicates less Contingency Reserve Raise is required.

Contingency Reclassification Conditions: Means the conditions that AEMO determines give rise to the need to reclassify a Non-Credible Contingency Event as a Credible Contingency Event.

Contingency Reserve: Has the meaning given in clause 3.9.4.

Contingency Reserve Lower: Has the meaning given in clause 3.9.6.

Contingency Reserve Lower Market Clearing Price: The Market Clearing Price for Contingency Reserve Lower.

Contingency Reserve Lower Offer Price Ceiling: The price, in dollars per MW per hour, determined in accordance with clause 2.26.2B, and as may be indexed in accordance with clause 2.26.2U, that is the maximum price that may be associated with a Real-Time Market Submission or Standing Real-Time Market Submission for the provision of Contingency Reserve Lower.

Contingency Reserve Raise: Has the meaning given in clause 3.9.5.

Contingency Reserve Raise Market Clearing Price: The Market Clearing Price for Contingency Reserve Raise.

Contingency Reserve Raise Offer Price Ceiling: The price, in dollars per MW per hour, determined in accordance with clause 2.26.2B, and as may be indexed in accordance with clause 2.26.2U, that is the maximum price that may be associated with a Real-Time Market Submission or Standing Real-Time Market Submission for the provision of Contingency Reserve Raise.

Contract Maximum Demand: Has the meaning given in Appendix 3 of the Electricity Networks Access Code 2004.

Controlled Circumstances: Circumstances where AEMO expects or requires SWIS Frequency to vary as a result of a test or the process of dispatch.

Coordinator: The Coordinator referred to in section 4 of the Energy Coordination Act 1994.

Coordinator's Website: A website or portion of a website maintained by, or on behalf of, the Coordinator.

Coordinator Transfer Date: Means 8:00AM on the date the amending rules made under the *Electricity Industry (Wholesale Electricity Market) Regulations 2004* (WA), regulation 7(4) giving effect to the transfer of functions from the Rule Change Panel to the Coordinator commence operation.

Corporations Act: The Corporations Act 2001 (Cwlth).

CR Facility: A Facility that is a:

(a) Scheduled Facility;

(b) Semi-Scheduled Facility;

(c) Non-Scheduled Facility; or

(d) Non-Dispatchable Load containing an Intermittent Load, if the Energy Producing System supplying the Intermittent Load is not also part of a Scheduled Facility, Semi-Scheduled Facility or Non-Scheduled Facility.

Credible Contingency Event: Has the meaning given in clause 3.8A.2.

Credible Contingency Event Frequency Band: Has the meaning given in clause 3B.2.3.

Credit Limit: In respect of a relevant Rule Participant, the amount determined by AEMO in accordance with clause 2.37.4.

Credit Support: Has the meaning given in clause 2.38.4.

Cure Notice: Has the meaning given in clause 9.19.4(a).

Customer: Means a person to whom electricity is sold for the purpose of consumption.

De-registration Notice: means the notice issued by AEMO under clause 2.32.7E(b).

Declared Sent Out Capacity: Has the meaning given in Appendix 3 of the Electricity Networks Access Code 2004.

Default Levy: The amount, in respect of a given Rule Participant and in the circumstance of a particular Payment Default, determined by AEMO in accordance with clause 9.20.6.

Default Peak Electric Storage Resource Obligation Intervals: For a Trading Day in a Capacity Year, the set of contiguous Trading Intervals, which has the Mid Peak Electric Storage Resource Obligation Interval in the middle, for that Trading Day, and including the exact number of Trading Intervals in the ESR Duration Requirement for that Reserve Capacity Cycle. If the ESR Duration Requirement is an even number, then the last Trading Interval in the first half of the Default Peak Electric Storage Resource Obligation Intervals must be the Mid Peak Electric Storage Resource Obligation Interval.

Degenerate Solution: Occurs where, according to the Dispatch Algorithm, more than one combination of Dispatch Targets and ESS Enablement Quantities will maximise the value of Real-Time Market trading while taking into account the various constraints in section 7.2.

Delegate: Means a person appointed by AEMO under clause 2.1A.3 to perform a function on its behalf that is, in AEMO's opinion, competent to exercise the relevant function.

Demand Side Programme: Means a Facility registered in accordance with clause 2.29.5A.

~~**Demand Side Programme Capacity Cost Refund:** Has the meaning given in clause 4.26.3A.~~

Demand Side Programme Load: Has the meaning given in clause 9.5.4.

DER Generation Information: Standing data in relation to:

(a) a Small Generating Unit; or

(b) Storage Works with an export capacity of less than 5 MW.

DER Register: The register established and maintained by AEMO in accordance with clause 3.24.

DER Register Information: Information contained in the DER Register.

DER Register Report: The report of aggregated DER Register Information required to be developed and published by AEMO under clause 3.24.12.

DER Roadmap: The distributed energy resources roadmap delivered by the Energy Transformation Taskforce pursuant to the Western Australian Government's Energy Transformation Strategy and published by the Minister on 4 April 2020.

DER Roadmap Actions: Any activities undertaken by AEMO to implement the DER Roadmap that have been endorsed by the Minister as Wholesale Electricity Market and Constrained Network Access Reform and includes any and all such activities undertaken after 31 December 2019 irrespective of the date they were endorsed.

DER Roadmap Implementation Costs: Any costs incurred by AEMO after 31 December 2019 in respect of DER Roadmap Actions.

Disconnected Microgrid: Means a part of the SWIS that is not an Embedded System, that is designed to be disconnected from the remainder of the SWIS, and that has disconnected from the remainder of the SWIS, and is being operated independently from the SWIS by a Network Operator.

Dispatch Algorithm: Means, the algorithm used in the Central Dispatch Process developed by AEMO in accordance with section 7.2.

Dispatch Cap: The total MW level of Injection or Withdrawal that must not be exceeded by a Semi-Scheduled Facility at the end of the Dispatch Interval.

Dispatch Criteria: Means the criteria under clause 7.6.1.

Dispatch Forecast: The total MW level of Injection or Withdrawal expected to be reached by a Semi-Scheduled Facility or Non-Scheduled Facility at the end of the Dispatch Interval which is:

(a) for a Non-Scheduled Facility, the Market Participant's Unconstrained Injection Forecast or Unconstrained Withdrawal Forecast, as applicable, for the Non-Scheduled Facility for the Dispatch Interval, as may be replaced by AEMO under clause 7.2.4A; and

(b) for a Semi-Scheduled Facility:

i. if AEMO has specified a Dispatch Target for the Semi-Scheduled Facility for the Dispatch Interval, that Dispatch Target;

ii. otherwise, if the Semi-Scheduled Facility is expected to be Injecting at the end of the Dispatch Interval, the lesser of:

1. the Dispatch Cap for the Semi-Scheduled Facility for the Dispatch Interval; and

2. the Market Participant's Unconstrained Injection Forecast for the Semi-Scheduled Facility for the Dispatch Interval, as may be replaced by AEMO under clause 7.2.4A; and

iii. otherwise, the greater of:

1. the Dispatch Cap for the Semi-Scheduled Facility for the Dispatch Interval; and

2. the Market Participant's Unconstrained Withdrawal Forecast for the Semi-Scheduled Facility for the Dispatch Interval, as may be replaced by AEMO under clause 7.2.4A.

Dispatch Inflexibility Profile: Means, the parameters that indicate a Registered Facility's MW capacity and time related dispatch inflexibilities in accordance with clause 7.4.44 for a Fast Start Facility.

Dispatch Input: Any value, excluding the values made, or required to be made, by Market Participants in a Real-Time Market Submission, that is used by the Dispatch Algorithm, including:

(a) measurements of power system status;

(b) the Forecast Unscheduled Operational Demand;

(c) Constraint Equations; and

(d) software setup for the Dispatch Algorithm.

Dispatch Instruction: Has the meaning given in clause 7.6.5.

Dispatch Interval: Means each 5 minute period commencing at 0, 5, 10, 15, 20, 25, 30, 35, 40, 45, 50 and 55 minutes past the hour.

Dispatch Quantity: The value specified for the Capacity Year in the Statement of Opportunities Report most recently published before the start of the Capacity Year.

Dispatch Schedule: A forecast of the Market Clearing Prices, Dispatch Targets, Dispatch Caps, Dispatch Forecasts and Essential System Services Enablement Quantities for each Dispatch Interval in the Dispatch Schedule Horizon.

Dispatch Schedule Horizon: The next 24 Dispatch Intervals after a Dispatch Interval.

Dispatch Target: For a Scheduled Facility or Semi-Scheduled Facility, the level of Injection or Withdrawal to be reached at the end of a Dispatch Interval.

Dispute Participants: The parties to a relevant dispute described in clause 2.18.2.

Distribution Loss Factor: A factor representing the average electrical losses incurred when electricity is transmitted through a distribution network.

Distribution Loss Factor Class: A group of one or more connection points with common characteristics assigned a common Distribution Loss Factor.

Distribution Network: A Network that is a distribution system.

Distribution System Operator: Has the meaning given in the Electricity Industry Act.

DPV Shake-Off: The disconnection of distribution-connected photovoltaic energy producing units within Non-Dispatchable Loads caused by voltage and frequency disturbances during Credible Contingency Events in the SWIS.

Draft Rule Change Report: The draft report described in clause 2.7.7 and published by the Coordinator under clause 2.7.6(a) in relation to a Rule Change Proposal.

Draw Upon: In relation to Credit Support or Reserve Capacity Security held by AEMO in relation to a Rule Participant, means that AEMO:

(a) in relation to a Security Deposit, applies the Security Deposit to satisfy amounts owing by the relevant Rule Participant; or

(b) in relation to other Credit Support, exercises its rights under the Credit Support, including by drawing or claiming an amount under it.

Droop Response: A fast, automatic and localised control scheme for generation facilities, wherein power output is proportionally adjusted to counteract frequency deviations.

DSP Constrained Quantity: A Market Participant's estimate of the average DSP Energy Level of its Demand Side Programme in a Dispatch Interval, taking into account any information about the potential or actual dispatch of the Demand Side Programme that is provided by AEMO in Market Advisories under clause 7.11.6(cA), Dispatch Instructions under clause 7.6.15 or notifications under clause 4.25.9(h).

DSP Dispatch Event: For a Demand Side Programme, the set of contiguous Trading Intervals during which the Demand Side Programme was subject to a Reserve Capacity Test or a Dispatch Instruction with a non-zero MW quantity.

DSP Energy Level: The Withdrawal or Injection in MW of a Demand Side Programme in a Dispatch Interval or a Trading Interval, and where the Demand Side Programme is expected in a future Dispatch Interval or Trading Interval to:

(a) Inject during the Dispatch Interval or Trading Interval, it is denoted as the estimated level of Injection of the Demand Side Programme, multiplied by negative one; and

(b) Withdraw during the Dispatch Interval or Trading Interval, it is denoted as an estimate of the absolute value of the level of Withdrawal of the Demand Side Programme.

DSP Forecast Capacity: An estimate of the potential reduction in the DSP Energy Level of a Demand Side Programme in a Dispatch Interval if the Demand Side Programme was fully dispatched by AEMO in accordance with the Reserve Capacity Obligations for the Demand Side Programme, determined by AEMO in accordance with clause 7.8A.3.

DSP Forecast Reduction: An estimate of the expected reduction in the DSP Energy Level of a Demand Side Programme in a Dispatch Interval based on DSP Profile Submissions provided by the Market Participant, determined by AEMO in accordance with clause 7.8A.4.

DSP Pre-Dispatch Schedule: Has the meaning given in clause 7.8A.1.

DSP Profile Submission: A submission made by a Market Participant to AEMO which provides a DSP Unconstrained Quantity and DSP Constrained Quantity for a Demand Side Programme for a Dispatch Interval.

DSP Reserve Capacity Security: The reserve capacity security to be provided for a Demand Side Programme that:

(a) has the meaning given in clause 4.13A.6; and

(b) is as calculated and re-calculated under section 4.13A.

DSP Schedule: A DSP Week-Ahead Schedule or a DSP Pre-Dispatch Schedule.

DSP Unconstrained Quantity: A Market Participant's estimate of the average DSP Energy Level of its Demand Side Programme in a Dispatch Interval, assuming that the Demand Side

Programme does not receive a notification under clause 4.25.9(h) or Dispatch Instruction under clause 7.6.15 that affects its DSP Energy Level in the Dispatch Interval.

DSP Week-Ahead Schedule: Has the meaning given in clause 7.8A.1.

Early Certified Reserve Capacity: Peak Early Certified Reserve Capacity or both Peak Early Certified Reserve Capacity and Flexible Early Certified Reserve Capacity (as the context requires).

Economic Price Offer: Has the meaning given in clause 2.16C.6A.

Economic Regulation Authority: The body established under section 4(1) of the Economic Regulation Authority Act (WA).

Electric Storage Resource: A system or resource capable of receiving and storing energy for later production of electric energy.

Electric Storage Resource Obligation Duration: See Peak Electric Storage Resource Obligation Duration.

Electric Storage Resource Obligation Interval: See Peak Electric Storage Resource Obligation Interval.

Electrical Location: The zone substation at which the Transmission Loss Factor for a Registered Facility is defined.

Electricity Corporations Act: Means the Electricity Corporations Act 2005 (WA).

Electricity Industry Act: Means the Electricity Industry Act 2004 (WA).

Electricity Review Board: The Board within the meaning of the Electricity Industry Act.

Electricity System and Market Rules: These rules made under the ESM Regulations and contemplated by section 123 of the *Electricity Industry Act 2004*.

Eligible Renewable Energy Source: Means an eligible renewable energy source as defined in the Renewable Energy (Electricity) Act 2000 (Cwlth).

Eligible Services: Peak Eligible Services or Flexible Eligible Services or both (as the context requires).

Embedded System: Means a Network connected at a connection point on the SWIS which is owned, controlled or operated by a person who is not a Network Operator or AEMO.

Emergency Operating State: The state of the SWIS defined in clause 3.5.1.

Enablement Limit: Enablement Maximum or Enablement Minimum.

Enablement Maximum: In relation to a Real-Time Market Offer for a Frequency Co-optimised Essential System Service, the level of Injection or Withdrawal above which no response is capable of being provided.

Enablement Minimum: In relation to a Real-Time Market Offer for a Frequency Co-optimised Essential System Service, the level of Injection or Withdrawal below which no response is capable of being provided.

Energy Market Clearing Price: The Market Clearing Price for energy.

Energy Market Commencement: The date and time at which the first Trading Day commences, as published by the Minister in the Government Gazette.

Energy Offer Caps: The Energy Offer Price Floor and the Energy Offer Price Ceiling.

Energy Offer Price Ceiling: The price in $/MWh determined in accordance with clause 2.26.2, and as may be indexed in accordance with clause 2.26.2U, that is the maximum price that may be associated with a Portfolio Supply Curve or Portfolio Demand Curve forming part of a STEM Submission or Standing STEM Submission, and with a Real-Time Market Submission or Standing Real-Time Market Submission for energy by a Registered Facility.

Energy Offer Price Floor: The price in $/MWh determined in accordance with clauses 2.26.2D to 2.26.2K, and as may be indexed in accordance with clause 2.26.2U, that is the minimum price that may be associated with a Portfolio Supply Curve or Portfolio Demand Curve forming part of a STEM Submission or Standing STEM Submission, and with a Real-Time Market Submission or Standing Real-Time Market Submission for energy by a Registered Facility.

Energy Producing System: One or more electricity producing units, such as generation systems or Electric Storage Resources, located behind a single Measurement Point or electrically connected behind two or more shared Measurement Points.

Energy Storage Constraints: limitations on the Injection or Withdrawal capability of a Registered Facility based on the Charge Level of associated Electric Storage Resources.

Energy Uplift Override Flag: A flag set by AEMO under clause 7.5.22 and used to amend erroneous Energy Uplift Payments caused by missing or manifestly incorrect Constraint Equations.

Energy Uplift Payment: Is the Energy Uplift Payment in respect of a Facility and, in relation to a:

(a) Trading Interval, has the meaning given in clause 9.9.7; and

(b) Dispatch Interval, has the meaning given in clause 9.9.8.

Energy Uplift Price: Is the Energy Uplift Price in respect of a Facility and Dispatch Interval, has the meaning given in clause 9.9.10.

Energy Uplift Quantity: Is the Energy Uplift Quantity in respect of a Facility and Dispatch Interval, has the meaning given in clause 9.9.11.

Entity Daily Flexible Reserve Capacity Price: In respect of a Reserve Capacity Cycle, the price per Flexible Capacity Credit for a Trading Day calculated in accordance with clause 4.29.1E in respect of:

(a) a Demand Side Programme;

(b) a Separately Certified Component of a Scheduled Facility; or

(c) a Separately Certified Component of a Semi-Scheduled Facility.

Entity Daily Peak Reserve Capacity Price: In respect of a Reserve Capacity Cycle, the price per Peak Capacity Credit for a Trading Day calculated in accordance with clause 4.29.1A(c) in respect of:

(a) a Non-Scheduled Facility;

(b) a Demand Side Programme;

(c) a Separately Certified Component of a Scheduled Facility; or

(d) a Separately Certified Component of a Semi-Scheduled Facility.

Environmental Approval: In respect of a Facility is a licence, consent, certificate, notification, declaration or other authorisation required under any law relating to the protection or conservation of the environment for the lawful construction of the Facility or the development of the site on which the Facility is to be constructed.

EOI Facility Variant: An Expression of Interest that is associated with one or more other Expressions of Interest and that, on the basis of the information provided in clause 4.4.1, relates to the same Facility.

EOI Quantity: Means the quantity, in MW, at which a Registered Facility was Injecting or Withdrawing as at the end of a Dispatch Interval.

Equipment Limit: Has the meaning given in clause 3.2.1.

Equipment List: Means the list maintained by AEMO under clause 3.18A.1.

Equipment List Facility: Means a Facility or item of equipment that is included on the Equipment List.

Equivalent Planned Outage Hours: Means, in respect of a Facility, the sum of the “Planned Outage Hours” and the “Equivalent Planned Derated Hours” for the Facility as calculated in accordance with the WEM Procedure specified in clause 4.9.10.

ERA Transfer Date: Means 8:00 AM on 1 July 2016.

ESM Regulations: The *Electricity Industry (Electricity System and Market) Regulations 2004*.

ESM Rules: The Electricity System and Market Rules.

~~**ESR Charge Shortfall**: The MW quantity of capacity of a Scheduled Facility or Semi-Scheduled Facility that is subject to a capacity refund in a Trading Interval due to the inadequate Charge Level of an Electric Storage Resource, calculated in accordance with clause 4.26.1E.~~

ESR Duration Requirement: For a Reserve Capacity Cycle, the number of Trading Intervals in each Trading Day in the applicable Capacity Year to be designated as Peak Electric Storage Resource Obligation Intervals for Electric Storage Resources first allocated Peak Capacity Credits in that Reserve Capacity Cycle, which is:

(a) for Reserve Capacity Cycles up to and including the 2024 Reserve Capacity Cycle, eight Trading Intervals; and

(b) for Reserve Capacity Cycles after 2024, the value determined by AEMO under clause 4.5.12(d) for the third Capacity Year of the Long Term PASA Study Horizon in the relevant Reserve Capacity Cycle.

ESR Duration Requirement Uplift: Is calculated in accordance with Part C of Appendix 11.

Essential System Service: A service, including each service described in section 3.9, that is required to maintain Power System Security and Power System Reliability, facilitate orderly trading in electricity and ensure that electricity supplies are of an acceptable quality.

Essential System Service Enablement Quantity: the quantity of a Frequency Co-optimised Essential System Service to be provided by a Registered Facility in a Dispatch Interval.

Essential System Service Standards: The standards referred to in these ESM Rules for Essential System Services, including those set out in sections 3.7 and 3.10.

Estimated FCESS Uplift Payment: An estimate of the FCESS Uplift Payment for a Scheduled Facility or Semi-Scheduled Facility in a Dispatch Interval or Pre-Dispatch Interval, calculated by AEMO for a Market Schedule and Scenario in accordance with clause 7.17.1 and made available to the Market Participant in accordance with clause 7.13.1D(c).

~~**Excess Allocation Price**: For a Market Participant is as calculated in accordance with clause 9.8.3B(c).~~

Exempt Transmission Connected Generating System: Has the meaning given in clause 3A.3.1.

Existing Transmission Connected Generating System: Means a Transmission Connected Generating System for which an Arrangement for Access has been executed prior to the Tranche 1 Commencement Date other than an Exempt Transmission Connected Generating System.

Expression of Interest: In respect of a Reserve Capacity Cycle, a response to the Request for Expressions of Interest provided to AEMO in accordance with section 4.2.

External Administrator: Means an administrator, controller, managing controller or restructuring practitioner (each as defined in the Corporations Act), trustee, provisional liquidator, liquidator or any other person (however described) holding or appointed to an analogous office or acting or purporting to act in an analogous capacity.

Extreme Frequency Tolerance Band: Has the meaning given in clause 3B.2.5.

EZ: Means the ratio of excess Reserve Capacity to the Reserve Capacity Requirement for a Reserve Capacity Cycle at which no additional resources should enter the market under a very wide range of market conditions.

EZ BRCP Factor: Means the ratio of the Reserve Capacity Price to the Benchmark Reserve Capacity Price for a Reserve Capacity Cycle if the ratio of excess Reserve Capacity to the Reserve Capacity Requirement for a Reserve Capacity Cycle was equal to EZ in that Reserve Capacity Cycle.

Facility: Has the meaning given in clause 2.29.1B, which can be an unregistered Facility or Registered Facility.

Facility Classes: Any one of the classes of Facility specified in clause 2.29.1A.

Facility Contingency: Means a Credible Contingency Event associated with the unexpected automatic or manual disconnection of, or the unplanned change in output of, one or more operating energy producing units or Facilities.

Facility Lower Contingency: A Credible Contingency Event resulting in an increase in SWIS Frequency associated with the unexpected automatic or manual disconnection of, or the unplanned reduction in the Withdrawal of, a CL Facility.

Facility Lower Risk: The maximum estimated net MW change resulting in an increase in SWIS Frequency in a Dispatch Interval or Pre-Dispatch Interval due to a Facility Lower Contingency for a CL Facility, taking into account the output of the Dispatch Algorithm (and expressed as a non-negative number).

Facility Maximum Peak Refund Factor: For a Facility:

(a) if the Facility is a Demand Side Programme, 1.25;

(b) otherwise, 1.

~~**Facility Monthly Peak Reserve Capacity Price:** Means the dollar price per Capacity Credit per Trading Month calculated in respect of a Facility in accordance clause 4.29.1A.~~

Facility Performance Factor: For a Registered Facility and a Frequency Co-optimised Essential System Service in a Dispatch Interval or Pre-Dispatch Interval, the ratio between the Essential System Service Enablement Quantity and the Registered Facility's Contribution to meeting the requirement for that Frequency Co-optimised Essential System Service, where:

(a) a ratio of one denotes that one MW of the relevant Frequency Co-optimised Essential System Service enabled at the Registered Facility contributes one MW to meeting the requirement for that Frequency Co-optimised Essential System Service; and

(b) a ratio of less than one denotes that one MW of the relevant Frequency Co-optimised Essential System Service enabled at the Registered Facility contributes less than one MW to meeting the requirement for that Frequency Co-optimised Essential System Service.

Facility Raise Contingency: A Credible Contingency Event resulting in a decrease in SWIS Frequency associated with the unexpected disconnection of, or the unplanned change in the output of, one or more operating energy producing units within a CR Facility.

Facility Raise Contingency Risk: The maximum estimated net MW change resulting in a decrease in SWIS Frequency in a Dispatch Interval or Pre-Dispatch Interval due to a Facility Raise Contingency for a CR Facility, taking into account the output of the Dispatch Algorithm for the Dispatch Interval or Pre-Dispatch Interval (as applicable) (and expressed as a non-negative number).

Facility Reserve Capacity Deficit Refund: Has the meaning given in clause 4.26.1A.

Facility SESSM Refund: Means, for a Dispatch Interval, Registered Facility and an Essential System Service, the amount refunded by a Market Participant to whom the Facility is registered, for failing to meet their obligations under each relevant SESSM Award.

Facility Speed Factor: A parameter τ that defines the approximation of the response curve of a Facility to a Contingency Event, in the form:

$$response(t) = reserve * \left(1 - e^{\frac{-t}{\tau}}\right)$$

Facility Sub-Metering: Metering arrangements sufficient to calculate the contribution of each Separately Certified Component and associated Parasitic Loads to the Injection or Withdrawal of energy for a Facility, which may include use of Meter Data Submissions where each Separately Certified Component is not individually metered.

Facility Technology Types: Means any one of the types of technologies specified in clause 2.29.1.

Facility Tiebreak Number: A unique random number determined by AEMO for a Registered Facility for a Trading Day under clause 7.5.17.

Facility Tolerance Range: Means the amount, in MW, determined by AEMO under clause 2.13.17(b)(iii) in relation to a specific Facility, as varied under clause 2.13.20, as applicable.

Facility Upgrade: for a Facility, an increase in the nameplate capacity of the Facility, being the difference between:

(a) the nameplate capacity specified under clause 4.10.1(dA), for the Facility, as provided in the Reserve Capacity Cycle immediately preceding the current Reserve Capacity Cycle; and

(b) the nameplate capacity specified under clause 4.10.1(dA), for the Facility as provided in the current Reserve Capacity Cycle.

Fast Start Facility: A Scheduled Facility or Semi-Scheduled Facility that is capable of:

(a) synchronizing and changing its rate of Injection or Withdrawal within 30 minutes of receiving a Dispatch Instruction from AEMO; and

(b) shutting down within 60 minutes from the time the Dispatch Instruction to synchronise was issued.

Fast Track Rule Change Process: The process for dealing with Rule Change Proposals set out in clause 2.6.

FCESS Accreditation Shortfall: Means, for a Frequency Co-optimised Essential System Service in a Dispatch Interval, a difference between the actual or forecast required quantity and the total accredited capability accounting for where Facility response capability is accredited to provide more than one Frequency Co-optimised Essential System Service, as identified under clause 3.11.1.

FCESS Clearing Price Ceiling: The maximum Market Clearing Price in dollars per MW per hour or dollars per MWs per hour as applicable for a Frequency Co-optimised Essential System Service in a Dispatch Interval, is equal to:

(a) for RoCoF Control Service, zero; and

(b) for all other Frequency Co-optimised Essential System Services:

EOPC - EOPF + FCESSOPC

where:

i. EOPC is the Energy Offer Price Ceiling in the Dispatch Interval;

ii. EOPF is the Energy Offer Price Floor in the Dispatch Interval; and

iii. FCESSOPC is the relevant FCESS Offer Price Ceiling in the Dispatch Interval.

FCESS Minimum Dispatch Target: The minimum theoretical Dispatch Target from which the Essential System Service Enablement Quantities for Contingency Reserve Raise, Contingency Reserve Lower, Regulation Raise and Regulation Lower for a Registered Facility could be provided in a Dispatch Interval, as calculated by AEMO in accordance with clause 9.10.3G.

FCESS Offer Price Ceilings: The set of price limits comprising the Contingency Reserve Raise Offer Price Ceiling, the Contingency Reserve Lower Offer Price Ceiling, the RoCoF Control Service Offer Price Ceiling, the Regulation Raise Offer Price Ceiling and the Regulation Lower Offer Price Ceiling.

FCESS Participation Shortfall: Means, for a Frequency Co-optimised Essential System Service in a Dispatch Interval, a difference between the actual or forecast required quantity and the total capability offered as In-Service, as identified under clause 3.11.2(b).

FCESS Uplift Payment: A payment made to a Market Participant as compensation for enablement losses incurred by a Registered Facility providing one or more Frequency Co-optimised Essential System Services, determined in accordance with:

(a) clause 9.10.3B, for a Trading Interval; and

(b) clause 9.10.3C, for a Dispatch Interval.

Final Annual Consolidated Outage Intention Plan: Means the final consolidated outline of Outages Market Participants and Network Operators expect to occur in a calendar year as accepted by AEMO and developed and published by AEMO in accordance with clause 3.19.9.

Final Contingency Reserve Lower Market Clearing Price: The Contingency Reserve Lower Market Clearing Price as published or revised under section 7.13.

Final Contingency Reserve Raise Market Clearing Price: The Contingency Reserve Raise Market Clearing Price as published or revised under section 7.13.

Final Energy Market Clearing Price: The Energy Market Clearing Price as published or revised and republished under section 7.13.

Final Network Access Quantity: Means, in respect of a Facility for a Reserve Capacity Cycle, the value recorded by AEMO for the Facility in accordance with Appendix 3 for the Reserve Capacity Cycle.

Final Reference Trading Price: The Reference Trading Price as published or revised under section 7.13.

Final Regulation Lower Market Clearing Price: The Regulation Lower Market Clearing Price as published or revised under section 7.13.

Final Regulation Raise Market Clearing Price: The Regulation Raise Market Clearing Price as published or revised under section 7.13.

Final RoCoF Control Service Market Clearing Price: The RoCoF Control Service Market Clearing Price as published or revised under section 7.13.

Final Rule Change Report: In respect of a Rule Change Proposal to which the Fast Track Rule Change Process applies, the report described in clause 2.6.4 and published by the Coordinator in accordance with clause 2.6.3A(b). In respect of a Rule Change Proposal to which the Standard Rule Change Process applies, the report described in clause 2.7.8 and published by the Coordinator in accordance with clause 2.7.7A(b).

Financial Year: A period of 12 months commencing on 1 July.

Fixed Assessment Period: A period of at least seven consecutive Trading Days in which the Constraint Equation relevant to the identification of a Constrained Portfolio under clause 2.16B.2(b) has continuously bound within or across a Rolling Test Window. A Rolling Test Window may contain multiple Fixed Assessment Periods.

Fixed Daily Flexible Reserve Capacity Price: For a Fixed Price Facility or Fixed Price Component in a Flexible Fixed Price Reserve Capacity Cycle, the price per Flexible Capacity Credit per Trading Day calculated in accordance with clause 4.29.1H.

Fixed Daily Peak Reserve Capacity Price: For a Fixed Price Facility or Fixed Price Component in a Peak Fixed Price Reserve Capacity Cycle, the price per Peak Capacity Credit per Trading Day calculated in accordance with clause 4.29.1D.

Fixed Price Component: Means a Candidate Fixed Price Component that was assigned Peak Capacity Credits for the Reserve Capacity Cycle in which it nominated in accordance with clause 4.14.1B to be classified as a Fixed Price Component.

Fixed Price Facility: Means a Non-Scheduled Facility assigned Peak Capacity Credits for the Reserve Capacity Cycle in which it nominated in accordance with clause 4.14.1B to be classified as a Fixed Price Facility.

Flexible Benchmark Reserve Capacity Price: In respect of a Reserve Capacity Cycle, the price described in clause 4.16.2A and published on the Coordinator's Website under clause 4.16.1.

Flexible Capacity: Reserve Capacity that meets the requirements determined under clause 4.10.1A for the relevant Reserve Capacity Cycle, such that it is able to respond at very short notice to manage changes in load during high ramp periods.

Flexible Capacity Adjusted Forced Outage Quantity: Means, the quantity, in MW, of the derating of a Facility or Separately Certified Component in a Dispatch Interval or Trading Interval from the Flexible Reserve Capacity Obligation Quantity for the Facility or Separately Certified Component as determined by AEMO in accordance with:

(a) for a Separately Certified Component in a Dispatch Interval, the formula in clause 3.21.12;

(b) for a Separately Certified Component in a Trading Interval, the formula in clause 3.21.13;

(c) for a Facility in a Trading Interval, the formula in clause 3.21.14; and

(d) for a Facility in a Dispatch Interval, the formula in clause 3.21.15.

Flexible Capacity Adjusted Planned Outage Quantity: Means, the quantity, in MW, of the derating of a Facility or Separately Certified Component in a Dispatch Interval or Trading Interval from the Flexible Reserve Capacity Obligation Quantity for the Facility or Separately Certified Component as determined by AEMO in accordance with:

(a) for a Separately Certified Component in a Dispatch Interval, the formula in clause 3.21.16;

(b) for a Separately Certified Component in a Trading Interval, the formula in clause 3.21.17;

(c) for a Facility in a Trading Interval, the formula in clause 3.21.18; and

(d) for a Facility in a Dispatch Interval, the formula in clause 3.21.19.

Flexible Capacity Cost Refund: Has the meaning given in clause 4.26.15.

Flexible Capacity Credit: A notional unit of Flexible Capacity provided by a Facility or Separately Certified Component during a Capacity Year. Each Flexible Capacity Credit is equivalent to 1 MW of Flexible Capacity. Flexible Capacity Credits are held by the Market Participant registered in respect of the relevant Facility or Separately Certified Component.

Flexible Capacity Obligation Duration: 8 Trading Intervals.

Flexible Capacity Outage Quantity: The quantity, in MW, of the derating of a Separately Certified Component in a Dispatch Interval as a result of a Planned Outage or Forced Outage for Flexible Capacity, determined in accordance with clause 3.21.11.

Flexible Certified Reserve Capacity: In respect of a Reserve Capacity Cycle, for a Facility or component of a Facility, the quantity of Flexible Capacity that AEMO has assigned to the Facility for the Reserve Capacity Cycle in accordance with section 4.11, as adjusted under these ESM Rules including clause 4.14.8.

Flexible Demand Side Programme Capacity Cost Refund: Has the meaning given in clause 4.26.18.

Flexible Demand Side Programme Dispatch Requirement: For a Reserve Capacity Cycle, the value determined by AEMO under clause 4.5.12(h).

Flexible DSP Delivery Shortfall: For a Demand Side Programme with Flexible Capacity Credits and for a Trading Day, denotes the quantity calculated in accordance with clause 4.26.4A.

Flexible DSP Test Shortfall: For a Demand Side Programme in a Trading Interval, the quantity in MW by which it failed a Reserve Capacity Test for Flexible Capacity, calculated under clause 4.25.3E, clause 4.25.3G(b) or clause 4.25.6(b)(ii);

Flexible Early Certified Reserve Capacity: Flexible Capacity assigned to a new Facility by AEMO for a future Reserve Capacity Cycle under clause 4.28C.

Flexible Electric Storage Resource Obligation Interval: A Trading Interval determined in accordance with clause 4.11.3A(aA), in which a non-zero Flexible Reserve Capacity Obligation Quantity is applied to an Electric Storage Resource which holds Flexible Capacity Credits.

Flexible Eligible Services: Has the meaning given in clause 4.24.3A.

Flexible ESR Charge Shortfall: The MW quantity of Flexible Capacity of a Scheduled Facility or Semi-Scheduled Facility that is subject to a capacity refund in a Trading Interval due to the inadequate Charge Level of an Electric Storage Resource, calculated in accordance with clause 4.26.9.

Flexible Excess Allocation Price: Means the price for a Market Participant as calculated in accordance with clause 9.8.8(c).

Flexible Facility Reserve Capacity Deficit Refund: Has the meaning given in clause 4.26.4.

Flexible Fixed Price Reserve Capacity Cycle: For a Fixed Price Component that was first assigned Peak Capacity Credits and Flexible Capacity Credits in the same Reserve Capacity Cycle:

(a) if the Fixed Price Component was nominated in accordance with clause 4.14.1B(a):

  i. the Reserve Capacity Cycle in which the Fixed Price Component was first assigned Flexible Capacity Credits; or

  ii. any of the subsequent four Reserve Capacity Cycles; and

(b) if the Fixed Price Component was nominated in accordance with clause 4.14.1B(b):

  i. the Reserve Capacity Cycle in which the Fixed Price Component was first assigned Flexible Capacity Credits; or

  ii. any of the subsequent nine Reserve Capacity Cycles.

Flexible Generation Capacity Cost Refund: Has the meaning given in clause 4.26.17.

Flexible Generation Reserve Capacity Deficit Refund: Has the meaning given in clause 4.26.13.

Flexible Individual Reserve Capacity Requirement: The MW quantity determined by AEMO in respect of a Market Participant for a Trading Month, in accordance with clause 4.28.7A and, if applicable, as revised in accordance with clause 4.28.11B.

Flexible IRCR Intervals: For a Capacity Year, the Trading Intervals determined by AEMO under clause 4.28.5C.

Flexible Not In-Service Capacity Refund Quantity: The MW quantity of Not In-Service Capacity of a Scheduled Facility or Semi-Scheduled Facility that is subject to a Flexible Capacity refund in a Trading Interval, calculated in accordance with clause 4.26.8.

Flexible Real-Time Market Offer Shortfall: Has the meaning given in clause 4.26.11.

Flexible Real-Time Market Reserve Capacity Deficit: Has the meaning given in clause 4.26.5.

Flexible Refund Exempt Planned Outage Count: In respect of a Separately Certified Component of a Scheduled Facility or Semi-Scheduled Facility and a period of time during which Flexible Capacity Credits were associated with the Separately Certified Component, the sum over all Trading Intervals in that period of:

(a) the total Flexible Refund Exempt Planned Outage Quantity determined by AEMO for the Separately Certified Component in the Trading Interval under clauses 4.26.6 or 4.26.7; divided by

(b) the number of Flexible Capacity Credits associated with the Separately Certified Component in the Trading Interval.

Flexible Refund Exempt Planned Outage Quantity: A Flexible Capacity Adjusted Planned Outage Quantity for a Separately Certified Component of a Scheduled Facility or Semi-Scheduled Facility in a Trading Interval for which a Flexible Facility Reserve Capacity Deficit Refund is not payable, as determined by AEMO under clauses 4.26.6 or 4.26.7.

Flexible Refund Payable Planned Outage Quantity: A Flexible Capacity Adjusted Planned Outage Quantity for a Separately Certified Component of a Scheduled Facility or Semi-Scheduled Facility in a Trading Interval for which a Flexible Facility Reserve Capacity Deficit Refund is payable, as determined by AEMO under clauses 4.26.6 or 4.26.7.

Flexible Reserve Capacity Deficit: Has the meaning given in clause 4.26.4(a)(ii).

Flexible Reserve Capacity Obligation Quantity: The specific amount of capacity required to be provided in a Dispatch Interval or Trading Interval as part of a Reserve Capacity Obligation set by AEMO in accordance with clauses 4.12.7 to 4.12.9.

~~**Flexible Reserve Capacity Obligation Quantity**: The specific amount of capacity required to be provided in a Dispatch Interval or Trading Interval as part of a Reserve Capacity Obligation set by AEMO.~~

Flexible Reserve Capacity Price: In respect of a Reserve Capacity Cycle, the price for Flexible Capacity determined in accordance with clause 4.29.1(b), where this price is expressed in units of dollars per Flexible Capacity Credit per year.

Flexible Reserve Capacity Requirement: Has the meaning given in clause 4.6.1A.

Flexible Reserve Capacity Target: In respect of a Capacity Year, AEMO's estimate of the total amount of Flexible Capacity required in the SWIS to satisfy clause 4.5.9(c) for that Capacity Year determined in accordance with clause 4.5.10(bA).

Flexible Shared Reserve Capacity Cost: For a Trading Day, the amount determined in accordance with clause 4.28.1A(b).

Flexible Targeted Reserve Capacity Cost: For a Trading Day, the cost defined under clause 4.28.1A(a).

Flexible Trading Interval Capacity Cost Refund: The refund a Market Participant holding Flexible Capacity Credits incurs in a Trading Interval, as calculated in accordance with clause 4.26.16.

Flexible Trading Interval Refund Rate: The Flexible Capacity refund rate applicable in a Trading Interval, and in **respect** of a Facility, as calculated in accordance with clause 4.26.1(h).

Floating Daily Flexible Reserve Capacity Price: In respect of a Reserve Capacity Cycle, the price per Flexible Capacity Credit for a Trading Day calculated in accordance with clause 4.29.1F.

Floating Daily Peak Reserve Capacity Price: In respect of a Reserve Capacity Cycle, the price per Peak Capacity Credit for a Trading Day calculated in accordance with clause 4.29.1AA.

Forced Outage: Has the meaning given in clause 3.21.1.

Forced Outage Threshold: The Forced Outage rate above which a Facility will have its historical Forced Outage rate reflected in its Certified Reserve Capacity, which is 10%.

Forecast Capital Expenditure: With respect to AEMO, the predicted sum of capital expenditure required for a Review Period as determined by the Economic Regulation Authority in accordance with section 2.22A.

Forecast Operational Demand: For a Dispatch Interval or Pre-Dispatch Interval, AEMO's estimate of the total Injection required, in MW, from Scheduled Facilities, Semi-Scheduled Facilities and Non-Scheduled Facilities at the end of the interval, as determined by the Dispatch Algorithm for a Reference Scenario of a Market Schedule.

Forecast Operational Withdrawal: For a Dispatch Interval or Pre-Dispatch Interval, AEMO's estimate of the total Withdrawal, in MW, from Scheduled Facilities, Semi-Scheduled Facilities and Non-Scheduled Facilities (excluding Registered Facilities that are not required to specify Price-Quantity Pairs for Withdrawals under clause 7.4.46A) at the end of the interval, as determined by the Dispatch Algorithm for a Reference Scenario of a Market Schedule.

Forecast Unscheduled Operational Demand: For a Dispatch Interval or Pre-Dispatch Interval, AEMO's estimate, determined in accordance with section 7.3, of the total Injection required, in MW, from Scheduled Facilities, Semi-Scheduled Facilities and Non-Scheduled Facilities at the end of the interval, to serve demand that does not relate to:

(a) Withdrawals by Non-Scheduled Facilities; or

(b) Withdrawals scheduled by the Dispatch Algorithm for Scheduled Facilities or Semi-Scheduled Facilities.

Four-Hour Demand Increase: For a Trading Interval, the quantity in MW determined by AEMO in accordance with the formula in clause 3.16.7A.

~~**Four-Hour Demand Increase**: For a Trading Interval, the quantity in MW calculated as follows:~~

~~$$FHDI(t) = (OPDEM(t) - |OPWITH(t)|) - (OPDEM(t-8) - |OPWITH(t-8)|)$$~~

~~where:~~

~~(a) FHDI(t) is the Four-Hour Demand Increase for Trading Interval t;~~

~~(b) OPDEM(t) is the Operational Demand for the last Dispatch Interval in Trading Interval t;~~

~~(c) OPWITH(t) is the Operational Withdrawal for the last Dispatch Interval in Trading Interval t.~~

Frequency Band: Means the Credible Contingency Event Frequency Band, Extreme Frequency Tolerance Band, Island Separation Frequency Band, Normal Operating Frequency Band or Normal Operating Frequency Excursion Band.

Frequency Co-optimised Essential System Service: Means an Essential System Service as defined in clause 3.9.1 to clause 3.9.7.

Frequency Co-optimised Essential System Service Accreditation Parameters: Means the information in respect of a Facility accredited to provide Frequency Co-optimised

Essential System Services that is required to be included in the Standing Data for the Facility as set out in clause 2.34A.6.

Frequency Operating Standards: Means the SWIS Frequency outcomes set out in Chapter 3B and Appendix 13.

Fuel Declaration: A declaration included with a STEM Submission or Standing STEM Submission and which includes the information described in clause 6.6.2A(a).

Fully Co-Optimised Network Constraint Equation: A Constraint Equation formulation to address a Network Constraint that allows AEMO, through direct physical representation, to control all the variables within the Constraint Equation that can be determined through the Dispatch Algorithm as part of the Central Dispatch Process excluding variables for which control would not materially enhance the security of the power system due to the small size of their coefficients.

Gate Closure: The latest point in time before the start of a Dispatch Interval that a Market Participant may submit a revised Real-Time Market Submission for that Dispatch Interval, other than for the purposes specified in clause 7.4.35, as determined by AEMO under clauses 7.4.30 or 7.4.32 and published on the WEM Website.

~~**Generation Capacity Cost Refund:** Has the meaning given in clause 4.26.3.~~

Generation Centre: A geographically concentrated area containing a generating system or generating systems with significant combined generating capability.

~~**Generation Reserve Capacity Deficit Refund:** Has the meaning given in clause 4.26.1I.~~

Generator Monitoring Plan: Means a monitoring plan for a Transmission Connected Generating System in respect of the Registered Generator Performance Standards that apply to the Transmission Connected Generating System.

Generator Monitoring Plan Requirements: The requirements relating to the content of a Generator Monitoring Plan set out in the WEM Procedure referred to in clause 3A.6.2 as may be amended from time to time.

Generator Register: Means a register required to be established and maintained by a Network Operator in accordance with clause 3A.7.1.

Generic Load: The share of load in respect of Facility Lower Risks and Network Lower Risks that is not allocated to Market Participants in respect of their CL Facilities in accordance with Appendix 2E for the purpose of allocating the costs of Contingency Reserve Lower to Market Participants.

GIA Facility: A Facility that was a Constrained Access Facility (as previously defined in the ESM Rules) for the purpose of certification of Reserve Capacity in one or more Reserve Capacity Cycles.

GST: means Goods and Services Tax and has the meaning given in the GST Act.

GST Act: means the A New Tax System (Goods and Services Tax) Act 1999 (Cth).

High Breakpoint: Means, for a Facility providing a Frequency Co-optimised Essential System Service, the MW energy dispatch level above which the Facility cannot provide the maximum quantity of that Frequency Co-optimised Essential System Service which it is capable of providing.

Highest Network Access Quantity: The Network Access Quantity determined for a Facility in accordance with clause 4.15.14.

Hot Season: The period commencing at the start of the Trading Day beginning on 1 December and ending at the end of the Trading Day finishing on the following 1 April.

Ideal Generator Performance Standard: Means the ideal generator performance standard in respect of a Technical Requirement as specified in Appendix 12.

IML Trading Interval Refund Rate: The Peak Capacity refund rate applicable in a Trading Interval, and in respect of an Intermittent Load, as calculated in accordance with clause 4.28A.1A.

IMO: The former Independent Market Operator that was abolished by the *Electricity Industry (Independent Market Operator) Repeal Regulations 2018* (which also repealed the *Electricity Industry (Independent Market Operator) Regulations 2004*).

Impacted Participant: Has the meaning given in clause 3.18C.1(b).

Impacting Participant: Has the meaning given in clause 3.18C.1(a).

In-Service Capacity: For a Registered Facility in a Dispatch Interval, Injection or Withdrawal capacity that the Market Participant expects to be ready for dispatch in the Dispatch Interval, allowing for expected operating conditions, commitment and control intentions and the effect of any Outages that have not been rejected for the Registered Facility. To avoid doubt, In-Service Capacity is not limited by the expected availability of intermittent fuels for an Intermittent Generating System such as wind.

Indicative Demand Side Programme Dispatch Threshold: For a Reserve Capacity Cycle, the value which indicates the MW demand above which Demand Side Programmes would likely be dispatched, as published by AEMO under clause 4.5.12(f) for Year 3 of the Long Term PASA Study Horizon for the Reserve Capacity Cycle.

Indicative Flexible Individual Reserve Capacity Requirement: Means the estimate of a Market Participant's Flexible Individual Reserve Capacity Requirement for a Trading Month determined and provided to that Market Participant by AEMO in accordance with clause 4.28.6A.

~~**Indicative Individual Reserve Capacity Requirement**: Means the estimate of a Market Participant's Individual Reserve Capacity Requirement determined and provided to that Market Participant by AEMO in accordance with clause 4.28.6.~~

Indicative Network Access Quantity: An estimate of a Network Access Quantity for a Facility for a future Reserve Capacity Cycle to which an application for Early Certified Reserve Capacity has been made under section 4.28C.2, as determined by AEMO in accordance with Appendix 3 and as may be adjusted in accordance with clause 4.28C.7AA.

Indicative Peak Individual Reserve Capacity Requirement: Means the estimate of a Market Participant's Peak Individual Reserve Capacity Requirement for a Trading Month determined and provided to that Market Participant by AEMO in accordance with clause 4.28.6.

~~**Individual Intermittent Load Reserve Capacity Requirement**: Means the Individual Reserve Capacity Requirement for an Intermittent Load to which clause 1.48.2 applies for a Trading Month determined in accordance with Appendix 4A.~~

~~**Individual Reserve Capacity Requirement**: The MW quantity determined by AEMO in respect of a Market Participant, in accordance with clause 4.28.7 and, if applicable, as revised in accordance with clause 4.28.11A.~~

Individual Reserve Capacity Requirement: A Peak Individual Reserve Capacity Requirement or a Flexible Individual Reserve Capacity Requirement or both (as the context requires).

~~**Individual Reserve Capacity Requirement Contribution**: Means the contribution of an Associated Load to a Market Participant's Indicative Individual Reserve Capacity Requirement determined in accordance with Step 11 of Appendix 5.~~

Inertia: The kinetic energy (at nominal frequency) that is extracted from the rotating mass of a machine coupled to the power system to compensate an imbalance in the system frequency.

Inertia Requirements: Means, the required levels of Inertia to assist in reasonably maintaining frequency in an Island in accordance with the Frequency Operating Standards, the process by which is set out in the WEM Procedure referred to in clause 3.2.7.

Inflexible: Means that a Registered Facility is only able to be dispatched in a Dispatch Interval:

(a) in accordance with its Dispatch Inflexibility Profile, or

(b) for the fixed level of Injection or Withdrawal specified in clause 7.6.31(a)(ii).

Information Manager: The party responsible for managing Market Information, in accordance with clauses 10.2.11 and 10.2.12.

Information Stakeholder: Has the meaning given in clause 10.2.7A.

Initial Network Access Quantity: The Network Access Quantity determined for a Facility in accordance with section 4.1A.1.

Initial Time: Is the earlier of the Energy Market Commencement and the start of the Trading Day commencing on 1 October 2007.

Injection: The quantity of power or energy sent into a Network, as measured:

(a) for a Scheduled Facility, Semi-Scheduled Facility or Non-Scheduled Facility with a single Measurement Point, at the Measurement Point;

(b) for a Scheduled Facility, Semi-Scheduled Facility or Non-Scheduled Facility with multiple Measurement Points with the same Electrical Location, at the Electrical Location;

(c) for a Non-Dispatchable Load, at the Measurement Point; and

(d) for a Demand Side Programme or Interruptible Load, as the maximum of:

i. zero; and

ii. the sum of the Injection and Withdrawal quantities of the Associated Loads of the Demand Side Programme,

which is measured in instantaneous MW unless specified as MWh over a time period, and represented as a positive number or zero.

Interim Annual Consolidated Outage Intention Plan: Means the interim consolidated outline of Outages Market Participants and Network Operators expect to occur in a calendar year as accepted by AEMO and developed and published by AEMO in accordance with clause 3.19.4.

Interim Approval to Generate Notification: Means the notification issued by the Network Operator to a Market Participant in accordance with section 3A.8, which may or may not be subject to and contain conditions, granting interim approval to a Transmission Connected Generating System to generate electricity.

Intermediary: Has the meaning given in clause 2.28.16A.

Intermediate Season: The interval commencing at the start of the Trading Day beginning on 1 October and ending at the end of the Trading Day finishing on the following 1 December of the same year.

Intermittent Generating System: Any generating system whose output is not reasonably controllable by AEMO, and whose output is dependent on a fuel resource that cannot be directly stored or stockpiled and whose availability is difficult to predict.

Intermittent Load: A type of Load or part of a Load defined under clause 2.30B.1.

Intermittent Load Refund: Has the meaning given in clause 4.28A.1.

Interruptible Load: A Facility relating to one or more Non-Dispatchable Loads, where consumption can be curtailed automatically in response to a change in system frequency, and registered as such in accordance with clause 2.29.5.

Interval Meter: Has the meaning given to it in the Metering Code.

Interval Meter Deadline: The date determined in accordance with clause 9.3.1(a).

Intervention Constraint: A Constraint Equation used to implement a direction in the Dispatch Algorithm pursuant to an AEMO Intervention Event.

Intervention Dispatch Interval: A Dispatch Interval declared by AEMO to be an Intervention Dispatch Interval in accordance with clauses 7.11A.1 or 7.11C.10.

Inverter Energy System: A system comprising one or more inverters together with one or more energy sources (which may include Electric Storage Resources) and controlled up to the single main switch for that system. It may also include additional equipment used for monitoring and control. Multiple Inverter Energy Systems can exist within a single Energy Producing System in a Facility.

Invoice: An invoice requesting payment for transactions under these ESM Rules issued under Chapter 9. An Invoice may relate to Settlement Statements or adjusted Settlement Statements as the case may be.

Invoicing Date: The Business Day, determined in accordance with clause 9.3.1(c), on which AEMO releases Invoices for original Settlement Statements for a Trading Week and each Business Day, determined in accordance with clause 9.3.1(h), on which AEMO releases Invoices for adjusted Settlement Statements for the Adjustment Process for that Trading Week, respectively.

Irregular Price Offer: A price described in clauses 2.16C.6(c) or 2.16C.6(d).

Island: Means a part of the SWIS that includes interconnected Energy Producing Systems (or other energy sources and loads), for which all of the connection points with the SWIS have been disconnected, provided that the part:

(a) is smaller than the remainder of the SWIS that it has disconnected from; and

(b) contains Energy Producing Systems (or other energy sources) capable of supplying the Load in accordance with the Frequency Operating Standards within the part of the SWIS that has been disconnected,

but does not include an Embedded System or Disconnected Microgrid.

Island Separation Frequency Band: Has the meaning given in clause 3B.2.4.

Key Project Dates: Means the dates most recently provided to AEMO under clause 4.10.1(c)(iii) or in reports provided under clause 4.27.10, clause 3.15A.40 or clause 3.15A.42.

Largest Credible Load Contingency: The highest magnitude possible MW change resulting in an increase in SWIS Frequency that could occur in a Dispatch Interval or Pre-Dispatch Interval due to a single Credible Contingency Event taking into account the output of the Dispatch Algorithm.

Largest Credible Supply Contingency: The maximum possible net MW change resulting in a decrease in SWIS Frequency that could occur in a Dispatch Interval or Pre-Dispatch Interval due to a single Credible Contingency Event taking into account the output of the Dispatch Algorithm and accounting for any associated change in overall demand as a result of the same Credible Contingency Event.

Liquid Fuel: Means distillate, fuel oil, liquid petroleum gas, or liquefied natural gas.

Limit Advice: Has the meaning given in clause 2.27A.2.

Limit Advice Inputs: Information used in the development of Limit Advice including:

(a) the rating for each transmission system element or equipment comprising the transmission system, including any part of the distribution system that is used for the transmission of electricity as part of the secure operation of the transmission system or the SWIS; and

(b) the Limit Margin forming part of each Limit Equation.

Limit Equation: Means a mathematical expression defining the power transfer capability across a particular Network element or group of Network elements.

Limit Margin: A margin applied by a Network Operator when formulating a Limit Equation, or a Network Limit where a Limit Equation is not appropriate, to account for uncertainty.

Linearly Derating Capacity: The maximum capacity, in MW, of an Electric Storage Resource that can be guaranteed to be available over the Peak Electric Storage Resource Obligation Duration, being the minimum of:

(a) the nameplate capacity; and

(b) the maximum Charge Level capability (in MWh) divided by half the number of Trading Intervals in the Peak Electric Storage Resource Obligation Duration, being the maximum sustainable MW capacity, which could be delivered continuously across the Peak Electric Storage Resource Obligation Duration accounting for any charging limitations.

Load: One or more electricity consuming resources or devices, other than Electric Storage Resources, located behind a single network connection point or electrically connected behind two or more shared network connection points.

Load Relief: The expected change in load in response to a change in power system frequency.

Load Shake-Off: The disconnection of Load within Non-Dispatchable Loads caused by voltage and frequency disturbances during Credible Contingency Events in the SWIS.

Local Black Start Procedures: The procedures developed by a Market Participant under clause 3.7.13 in accordance with the guidelines published by AEMO under clause 3.7.12.

Long Term PASA: A PASA study conducted in accordance with clause 4.5 in order to determine the Reserve Capacity Targets and Availability Duration Gap for each year in the Long Term PASA Study Horizon and prepare the Statement of Opportunities Report for a Reserve Capacity Cycle.

Long Term PASA Study Horizon: The ten year period commencing on 1 October of Year 1 of a Reserve Capacity Cycle.

Loss Factor: Means a factor representing network losses between any given node and the Reference Node where the Loss Factor at the Reference Node is 1, expressed as the product of a Transmission Loss Factor and a Distribution Loss Factor and determined in accordance with clause 2.27.5.

Loss Factor adjusted: In respect of a quantity of electricity, means that quantity multiplied by any applicable Loss Factor.

Loss Factor Adjusted Price: Means, in respect of any price, that price divided by any applicable Loss Factor for the relevant Facility.

Loss Factor Class: A Transmission Loss Factor Class or a Distribution Loss Factor Class.

Low Breakpoint: Means, for a Facility providing a Frequency Co-optimised Essential System Service, the MW energy dispatch level below which the Facility cannot provide the maximum quantity of that Frequency Co-optimised Essential System Service which it is capable of providing.

Low Injection Flag: A flag indicating whether the total level of Injection for the SWIS in a Trading Interval is sufficiently low to warrant the use of alternative calculations for the allocation of various costs normally allocated using Metered Schedules, determined in accordance with clause 9.5.5A.

Low Reserve Condition: Means each of the conditions of the power system described in clause 3.17.1(a) to 3.17.1(c) which may result in a Low Reserve Condition Declaration.

Low Reserve Condition Declaration: Has the meaning given to that term in clause 3.17.1.

Low Reserve Condition Report: Means a report published by AEMO pursuant to clause 3.17.2 in respect of Low Reserve Condition Declarations.

MAC Secretariat: The services, facilities and assistance made available by the Coordinator to the Market Advisory Committee.

Major Load: A Non-Dispatchable Load that is:

(a) individually monitored by AEMO's SCADA system;

(b) not included in the Notional Wholesale Meter; and

(c) in AEMO's reasonable opinion, capable of a level of Withdrawal greater than the CL Threshold.

Mandatory Routine Maintenance: Means Outage Facility Maintenance of a routine nature that must be undertaken by a specific point in time, or by the time that a specific measure of usage is reached, as required by applicable legislation or in accordance with the Outage Facility's asset management plan.

Margin Call: The amount determined in accordance with clause 2.42.3.

Margin Call Notice: A notification by AEMO to a Market Participant that the Market Participant's Trading Margin is less than zero, and requiring the payment of a Margin Call.

Market Advisory: Has the meaning given in clause 7.11.1.

Market Advisory Committee: An advisory body to the Coordinator, Economic Regulation Authority and AEMO comprising industry representatives established under clause 2.3.1.

Market Auditor: An auditor appointed by AEMO under clause 2.14.1.

Market Clearing Price: The price for a Market Service in a Dispatch Interval as determined in accordance with section 7.11B, or section 7.11E if AEMO has suspended the Real-Time Market under clause 7.11D.1.

Market Fees: The fee rates and other fees payable by Rule Participants to AEMO as determined by AEMO in accordance with section 2.24 and, for Market Participant Market Fees, Market Participant Coordinator Fees and Market Participant Regulator Fees, as calculated for each Market Participant in accordance with section 9.12.

Market Information: Any information or document that is required to be produced, provided or exchanged under these ESM Rules or a WEM Procedure.

Market Participant: A Rule Participant that is registered in accordance with section 2.28.

Market Participant Coordinator Fees: The fees, the rates of which are determined by AEMO in accordance with section 2.24, and calculated as payable by Market Participants in accordance with clause 9.12.4A to AEMO for the services provided by the Coordinator in undertaking her or his functions under these ESM Rules and the ESM Regulations.

Market Participant Deficit: Has the meaning given in clause 7.12.7.

Market Participant Deficit Amount: The amount determined by the Economic Regulation Authority for a Market Participant under clause 7.12.8(a).

Market Participant Excess: Has the meaning given in clause 7.12.2.

Market Participant Excess Amount: The amount determined by the Economic Regulation Authority for a Market Participant under clause 7.12.2(a).

Market Participant Market Fees: The fees payable by Market Participants to AEMO the rate of which is determined by AEMO in accordance with section 2.24, and as calculated for each Market Participant in accordance with clause 9.12.3.

Market Participant Regulator Fees: The fees, the rates of which are determined by AEMO in accordance with section 2.24, and calculated as payable by Market Participants in accordance with clause 9.12.4 to AEMO for the services provided by the Economic Regulation Authority in undertaking its Wholesale Electricity Market related functions and other functions under these ESM Rules.

Market Price Limits: The set of price limits comprising the Energy Offer Price Ceiling, the Energy Offer Price Floor, the Contingency Reserve Raise Offer Price Ceiling, the Contingency Reserve Lower Offer Price Ceiling, the RoCoF Control Service Offer Price Ceiling, the Regulation Raise Offer Price Ceiling and the Regulation Lower Offer Price Ceiling.

Market Schedule: A Dispatch Schedule, Pre-Dispatch Schedule or Week-Ahead Schedule.

Market Service: Energy or any of the Frequency Co-optimised Essential System Services.

Market Surveillance Data Catalogue: The catalogue developed by AEMO under clause 2.16.2.

Market Suspension Compensation: An amount that may be payable to, or by, a Market Participant in accordance with section 9.11A.

Material Constrained Portfolio: Has the meaning given in clause 2.16C.2(b).

Material Portfolio: Has the meaning given in clause 2.16C.1(b).

Maximum Capability: Means, the Facility's MW energy dispatch capability between the Low Breakpoint and the High Breakpoint.

Maximum Consumption Capability: For a Market Participant, the maximum cumulative MWh quantity that the Market Participant is permitted to include in a Portfolio Demand Curve for a Trading Interval, determined in accordance with clause 6.3A.3(f).

Maximum Contingency Reserve Block Size: The largest quantity of Contingency Reserve that may be offered by a relevant Registered Facility at one price, as set by AEMO in a WEM Procedure.

Maximum Downwards Ramp Rate: The Market Participant's best estimate, in MW per minute, on a linear basis, of a Facility's physical ability to decrease the magnitude of Injection or increase the magnitude of Withdrawal on the receipt of a Dispatch Instruction.

~~**Maximum Facility Refund:** The Facility Maximum Peak Refund Factor multiplied by the total amount of the Capacity Credit payments paid or to be paid under these ESM Rules to a Market Participant in relation to a Facility and in relation to a Capacity Year assuming that:~~

~~(a) AEMO acquires all of the Capacity Credits held by the Market Participant in relation to its Facility; and~~

~~(b) the cost of each Capacity Credit so acquired is determined in accordance with clause 4.28.2(d).~~

Maximum Facility Supply Capability: The MWh contribution of a Scheduled Facility, Semi-Scheduled Facility or Non-Scheduled Facility over a Dispatch Interval or Trading Interval to the Maximum Supply Capability of a Market Participant, determined in accordance with clauses 6.3A.3(c) (for a Dispatch Interval) and 6.3A.3(d) (for a Trading Interval).

Maximum Flexible Facility Refund: The total amount of the Flexible Capacity Credit payments paid or to be paid under these ESM Rules to a Market Participant in relation to a Facility and in relation to a Capacity Year assuming that:

(a) AEMO acquires all of the Flexible Capacity Credits held by the Market Participant in relation to its Facility; and

(b) the cost of each Flexible Capacity Credit so acquired is determined in accordance with clause 4.28.2(f).

Maximum Flexible Participant Generation Refund: The total amount of the Flexible Capacity Credit payments paid or to be paid under these ESM Rules to a Market Participant in relation to its Facilities (other than Facilities with a Facility Class or indicative Facility Class of Demand Side Programme) and in relation to a Capacity Year assuming that:

(a) AEMO acquires all of the Flexible Capacity Credits held by the Market Participant in relation to those Facilities; and

(b) the cost of each Flexible Capacity Credit so acquired is determined in accordance with clause 4.28.2(f).

Maximum Peak Facility Refund: The Facility Maximum Peak Refund Factor multiplied by the total amount of the Peak Capacity Credit payments paid or to be paid under these ESM Rules to a Market Participant in relation to a Facility and in relation to a Capacity Year assuming that:

(a) AEMO acquires all of the Peak Capacity Credits held by the Market Participant in relation to its Facility; and

(b) the cost of each Peak Capacity Credit so acquired is determined in accordance with clause 4.28.2(d).

Maximum Peak Participant Generation Refund: The total amount of the Peak Capacity Credit payments paid or to be paid under these ESM Rules to a Market Participant in relation to its Facilities (other than Facilities with a Facility Class or indicative Facility Class of Demand Side Programme) and in relation to a Capacity Year assuming that:

(a) AEMO acquires all of the Peak Capacity Credits held by the Market Participant in relation to those Facilities; and

(b) the cost of each Peak Capacity Credit so acquired is determined in accordance with clause 4.28.2(d).

~~**Maximum Participant Generation Refund:** The total amount of the Capacity Credit payments paid or to be paid under these ESM Rules to a Market Participant in relation to its Facilities (other than Facilities with a Facility Class or indicative Facility Class of Demand Side Programme) and in relation to a Capacity Year assuming that:~~

~~(a) AEMO acquires all of the Capacity Credits held by the Market Participant in relation to those Facilities; and~~

~~(b) the cost of each Capacity Credit so acquired is determined in accordance with clause 4.28.2(d).~~

Maximum Supply Capability: For a Market Participant is, the maximum cumulative MWh quantity that the Market Participant is permitted to include in a Portfolio Supply Curve for a Trading Interval, determined as calculated in accordance with clause 6.3A.3(e).

Maximum Upwards Ramp Rate: The Market Participant's best estimate, in MW per minute, on a linear basis, of a Facility's physical ability to increase the magnitude of Injection or decrease the magnitude of Withdrawal on the receipt of a Dispatch Instruction.

Measurement Point: For a Facility, the point at which the Network Operator measures Injection and Withdrawal using a revenue quality metering device that complies with the Metering Code.

Medium Term PASA: A PASA covering the period in clause 3.16.1(a).

Meter Data Submission: A submission of meter data by a Metering Data Agent to AEMO in accordance with clause 8.4.

Meter Dispute: Has the meaning given in clause 8.6.1(e).

Meter Registry: A registry maintained by a Metering Data Agent containing information about meters and the persons with which those meters are associated including the information listed in clause 8.3.1.

Metered Schedule: Has the meaning given in clause 9.5.2 and clause 9.5.3, as the case may be.

Metering Code: The Electricity Industry (Metering) Code 2012.

Metering Data Agent: The person identified under clause 8.1.2 or clause 8.1.4.

Metering Protocol: A combination of the Metering Data Rules as specified by the Economic Regulation Authority and a Network Operator's metering requirements as a condition of access. The metering requirement means in the context of a "covered network" (as that term is defined in the Access Code) the "Metering Rules" as defined in the Access Code while when used in the context of a network which is not a "covered network" (as that term is defined in the Access Code) means any commercial arrangement for metering energy.

The definition of the Metering Protocol is subject to finalisation of the Metering Rules arrangements.

Mid Peak Electric Storage Resource Obligation Interval: For a Trading Day, the Trading Interval that AEMO has determined, in accordance with the WEM Procedure referred to in clause 4.11.3A, to be the reference Peak Electric Storage Resource Obligation Interval for all Electric Storage Resources.

Minimum Capacity Credits Quantity: The minimum quantity of Peak Capacity Credits a Market Participant requires to be assigned to a Facility or upgrade to the Facility for a Reserve Capacity Cycle for the Facility or upgrade to the Facility to participate in the Reserve Capacity Cycle, as notified to AEMO under clause 4.14.1D.

Minimum Consumption: For an Associated Load (associated with a Demand Side Programme with a single Associated Load) means the amount specified under clause 2.29.5B(c) as the amount below which the Associated Load does not wish to be curtailed in the course of dispatching the Demand Side Programme.

Minimum Generator Performance Standard: Means the minimum generator performance standard in respect of a Technical Requirement as specified in Appendix 12.

Minimum RoCoF Control Requirement: Is:

(a) the smallest quantity of scheduled or dispatched RoCoF Control Service in a Dispatch Interval or a Pre-Dispatch Interval that is necessary to maintain the SWIS frequency in accordance with the Frequency Operating Standards; and

(b) zero, where the SWIS frequency can be maintained in accordance with the Frequency Operating Standards without explicit enablement of RoCoF Control Service.

Minimum Transaction Cost: Means the dollar amount published by AEMO in accordance with clause 9.18.4(b).

Minister: The Minister responsible for administering the Electricity Industry Act.

Multiple Contingency Event: Means, in relation to the SWIS Frequency Operating Standards, when an additional Contingency Event occurs before the SWIS Frequency has been able to Recover from the previous Contingency Event.

MW: Means megawatt.

MWh: Means megawatt-hour.

MWs: Means megawatt-second.

National Electricity Rules: The rules so named having effect under the National Electricity Law as that law applies in Western Australia.

National Metering Identifier: The unique identifier for a Measurement Point.

NCESS: See Non-Co-optimised Essential System Service.

NCESS Contract: A contract procured by AEMO or a Network Operator for the provision of an NCESS.

NCESS Service Specification: A service specification prepared by AEMO or a Network Operator in accordance with clause 3.11B.5.

NCESS Submission: A submission in accordance with clause 3.11B.8.

Near Binding Constraint Equation: For a Constraint Equation used in the Dispatch Algorithm as part of the Central Dispatch Process, where the absolute value of difference between the value of the left hand side and the value of the right hand side of the Constraint Equation is less than 20 times the absolute value of the largest coefficient on the left hand side of the Constraint Equation.

Negotiated Generator Performance Standard: Means a standard or technical level of performance in respect of a Technical Requirement that represents a variation from the Ideal Generator Performance Standard but is no less than the Minimum Generator Performance Standard that has been approved and registered in accordance with the process in Chapter 3A.

Negotiation Criteria: Means the criteria that must be met in respect of each Technical Requirement as specified in Appendix 12 if a Market Participant submits a Proposed Negotiated Generator Performance Standard.

Net Bilateral Position: Means in relation to a Market Participant, the amount calculated under clause 6.9.2.

Net Contract Position: In respect of a Market Participant for a Trading Interval is calculated in accordance with clause 6.9.13.

Net STEM Shortfall: Has the meaning given in clause 4.26.2AA.

Net Trading Quantity: In respect of a Trading Interval and for a Market Participant has the meaning given in clause 9.9.5.

Network: A transmission system or distribution system registered as a Network under clause 2.29.3.

Network Access Quantity: The quantity, in MW, that is determined for a Facility pursuant to clause 4.15.1.

Network Access Quantity Model: A model to be developed and maintained by AEMO pursuant to clause 4.15.6 and to be used by AEMO for determining Network Access Quantities for Facilities in accordance with the processes in Appendix 3.

Network Access Quantity Model Inputs: Means, in respect of the relevant Reserve Capacity Cycle:

(a) the preliminary Network Access Quantity determined by AEMO for a Facility and, where applicable, the adjusted Indicative Network Access Quantity determined for a Facility that is classified as an Indicative NAQ Facility under Appendix 3, for each applicable step in Appendix 3;

(b) each of the assumptions and parameters used by AEMO in the Network Access Quantity Model;

(c) each RCM Constraint Equation that is used in the Network Access Quantity Model; and

(d) RCM Limit Advice used in the Network Access Quantity Model.

Network Augmentation Funding Facility: For a Reserve Capacity Cycle, a Facility or upgrade to a Facility that a Market Participant has nominated to be classified as a Network Augmentation Funding Facility for the Reserve Capacity Cycle in an application for certification of Reserve Capacity under clause 4.10.1(m), and which AEMO has classified as a Network Augmentation Funding Facility for the Reserve Capacity Cycle.

Network Augmentation Works: Means any wires, apparatus, equipment, plant or buildings used, or to be used, for, or in connection with, or to control, the transfer of electricity that

directly results in an increase in the capacity of a part of the transmission system or distribution system.

Network Constraint: A limitation or requirement in a part of a Network that may impact one or more Registered Facilities in the Central Dispatch Process, such that it would be unacceptable to transfer electricity across that part of the Network at a level or in a manner outside the limit or requirement.

Network Contingency: A Credible Contingency Event associated with the unexpected disconnection of one or more major items of Network equipment, but excludes from that meaning a Credible Contingency Event resulting in the loss of Injection or Withdrawal from a Facility arising as a result of failure of equipment at the Facility or the loss of the network connection point associated with the Facility.

Network Facility Lower Risk: The estimated MW contribution of a CL Facility to a Network Lower Risk for a Dispatch Interval or Pre-Dispatch Interval (as applicable) in respect of a Network Lower Contingency, taking into account the output of the Dispatch Algorithm for the Dispatch Interval or Pre-Dispatch Interval (as applicable).

Network Facility Raise Risk: The estimated MW contribution of a CR Facility to a Network Raise Risk for a Dispatch Interval or Pre-Dispatch Interval (as applicable) in respect of a Network Raise Contingency, taking into account the output of the Dispatch Algorithm for the Dispatch Interval or Pre-Dispatch Interval (as applicable).

Network Limit: A limitation or requirement affecting the capability to transfer power in a part of a Network, such that it would be unacceptable to transfer electricity across that part of the Network at a level or in a manner outside the limit or requirement.

Network Lower Contingency: A Credible Contingency Event resulting in an increase in SWIS Frequency associated with the unexpected disconnection of one or more major items of Network equipment, but excludes from that meaning a Credible Contingency Event resulting in a reduction in Withdrawal from a Facility arising from a failure of equipment at the Facility or the loss of the network connection point associated with the Facility.

Network Lower Risk: The estimated net MW change resulting in an increase in SWIS Frequency due to a Network Lower Contingency for a Dispatch Interval or Pre-Dispatch Interval (as applicable), taking into account the output of the Dispatch Algorithm (and expressed as a non-negative number) for the Dispatch Interval or Pre-Dispatch Interval (as applicable).

Network Operator: A person who registers as a Network Operator, in accordance with clauses 2.28.2, 2.28.3 or 2.28.4.

Network Opportunity Map: Has the meaning given in Chapter 6A of the Access Code.

Network Quality and Reliability of Supply Code: The *Electricity Industry (Network Quality and Reliability of Supply) Code 2005*.

Network Raise Contingency: A Credible Contingency Event resulting in a decrease in SWIS Frequency associated with the unexpected disconnection of one or more major items of Network equipment, but excludes from that meaning a Credible Contingency Event resulting in the loss of output from a Facility arising from:

(a) a failure of equipment at the Facility; or

(b) except where a Separate Facility exists behind the Connection Point, the loss of the Connection Point associated with the Facility.

Network Raise Risk: The estimated net MW change resulting in a decrease in SWIS Frequency due to a Network Raise Contingency for a Dispatch Interval or Pre-Dispatch Interval (as applicable), taking into account the output of the Dispatch Algorithm (and expressed as a non-negative number) for the Dispatch Interval or Pre-Dispatch Interval (as applicable).

New Information: Has the meaning given in clause 2.29.5LA.

New RCM Transition Date: The date on which AEMO publishes the timetable referred to in section 1.36A.

New WEM Commencement Day: The date and time specified by the Minister as the New WEM Commencement Day, as published in the Government Gazette.

NMI: See National Metering Identifier.

Nominated Excess Capacity: In respect of a Facility containing an Intermittent Load, the maximum quantity of Injection (in MW) that the Market Participant intends the Facility to make in any Dispatch Interval, which must not be exceeded in more than 120 Dispatch Intervals within any continuous 12-month period.

Non-Business Day: A day that is a Saturday, Sunday, or a public holiday throughout Western Australia.

Non-Co-optimised Essential System Service: An Essential System Service procured under section 3.11B.

Non-Contestable Customer: Has the meaning given in the Metering Code.

Non-Credible Contingency Event: Has the meaning given in clause 3.8A.3.

Non-Dispatchable Load: A Facility of the type defined in clause 2.29.1B(c) which is not a Registered Facility and that may be associated with a Demand Side Programme or an Interruptible Load.

Non-Intermittent Generating System: A generation system which is not an Intermittent Generating System, including, without limitation, thermal generators fuelled by coal, natural gas, or distillate.

Non-Liquid Fuel: Means all fuels other than Liquid Fuel.

Non-Scheduled Facility: A Facility that can be self-scheduled by its operator (with the exception that AEMO can direct it to decrease its output subject to its physical capabilities), and which is registered as such in accordance with clause 2.29.4G.

~~**Non-Temperature Dependent Load**: A Non-Dispatchable Load accepted by AEMO as a Non-Temperature Dependent Load under clause 4.28.9.~~

Non-Thermal Network Limit: Means a Network Limit that is not Thermal Network Limit.

Normal Operating Frequency Band: Has the meaning given in clause 3B.2.1.

Normal Operating Frequency Excursion Band: Has the meaning given in clause 3B.2.2.

Not In-Service Capacity: Means, for a Scheduled Facility or a Semi-Scheduled Facility in a Dispatch Interval, the sent-out capacity, in MW, that was expected to be dispatched in the Available Capacity Scenario of the relevant Market Schedule at the Start Decision Cutoff, but was not offered as In-Service Capacity, as calculated in clause 7.13A.1.

~~**Not In-Service Capacity Refund Quantity**: The MW quantity of Not In-Service Capacity of a Scheduled Facility or Semi-Scheduled Facility that is subject to a capacity refund in a Trading Interval, calculated in accordance with clause 4.26.1D.~~

Notice of Disagreement: A notice issued by a Rule Participant under clause 9.16.1 to AEMO indicating a disagreement with a Settlement Statement.

Notice of Dispute: A notice issued under clause 2.19.1 and containing the information described in clause 2.19.3.

Notice of Intention to Cancel Capacity Credits: A notice issued by AEMO under clause 4.20.8 and containing the information required under clause 4.20.9.

Notional Wholesale Meter: A notional interval meter representing Non-Dispatchable Loads served by Synergy that are deemed to not have interval meters.

Offer Construction Guideline: The guideline published by the Economic Regulation Authority under clause 2.16D.1(a), which may be amended in accordance with clause 2.16D.2.

Operating Margin: A margin applied by AEMO when formulating a Constraint Equation to account for uncertainty.

Operating Protocol: A protocol developed between AEMO and a Network Operator in accordance with section 3.1A.

Operating Zone: A part or parts of the SWIS able to be practically monitored and incorporating elements that are likely to impact Power System Security or Power System Reliability.

Operational Demand: For a Dispatch Interval, the total Injection, in MW, from all Scheduled Facilities, Semi-Scheduled Facilities and Non-Scheduled Facilities that are Injecting at the end of the Dispatch Interval.

Operational Demand Estimate: For a point in time, AEMO's estimate of the total Injection, in MW, from all Scheduled Facilities, Semi-Scheduled Facilities and Non-Scheduled Facilities that are Injecting at that time.

Operational Withdrawal: For a Dispatch Interval, the total Withdrawal, in MW, from all Scheduled Facilities, Semi-Scheduled Facilities and Non-Scheduled Facilities (excluding Registered Facilities that are not required to specify Price-Quantity Pairs for Withdrawals under clause 7.4.46A) that are Withdrawing at the end of the Dispatch Interval.

Operational Withdrawal Estimate: For a point in time, AEMO's estimate of the total Withdrawal, in MW, from all Scheduled Facilities, Semi-Scheduled Facilities and Non-Scheduled Facilities (excluding Registered Facilities that are not required to specify Price-Quantity Pairs for Withdrawals under clause 7.4.46A) that are Withdrawing at that time.

Opportunistic Maintenance: Means, an Outage Plan with an Outage Period of less than 24 hours submitted in accordance with clause 3.18B.8(b)(ii).

Oscillation Control Constraint Equations: Constraint Equations that provide for stability in the Dispatch Algorithm outputs where a significant change to the Dispatch Target or ESS Enablement Quantities of a Registered Facility would result in only a small change in the value of Real-Time Market trading described in clause 7.2.2.

Outage: Has the meaning given in clause 3.18.3.

Outage Capability: The capability of the Facility for which an Outage occurs, which includes, but is not limited to, energy production, consumption, or transfer of energy, or the provision of any Essential System Service.

Outage Commencement Interval: The Dispatch Interval specified in an Outage Plan or revision in which the Outage is proposed to commence.

Outage Compensation: Means the amount determined by AEMO as payable to a Market Participant in accordance with clause 3.18H.5.

Outage Completion Interval: The Dispatch Interval specified in an Outage Plan or revision in which the Outage is proposed to be completed.

Outage Contingency Plan: Part of an Outage Plan specifying contingency plans for returning the relevant item of equipment to service before the end of the Outage Period.

Outage Evaluation: The evaluation of an Outage Plan by AEMO in accordance with clause 3.18E.5.

Outage Evaluation Criteria: The criteria AEMO is required to consider in undertaking an Outage Evaluation as set out in clause 3.18E.8.

Outage Facility: An Equipment List Facility or a Self-Scheduling Outage Facility.

Outage Facility Maintenance: Means an Outage for the purpose of:

(a) an upgrade of Outage Facility equipment;

(b) all maintenance in respect of an Outage Facility, including but not limited to preventative maintenance, corrective maintenance, plant inspections and tests, that would reasonably be required in accordance with good electricity industry practice;

(c) allowing for the safe conduct of work in proximity to an Outage Facility; or

(d) allowing for the Planned Outage of another Outage Facility to proceed.

Outage Intention Plan: Means the outline of Outages a Market Participant or Network Operator expects to occur in a calendar year submitted to AEMO annually in accordance with section 3.19.

Outage Period: In respect of an Outage Plan, the period of time between the start of the Outage Commencement Interval and the end of the Outage Completion Interval.

Outage Plan: Has the meaning given in clause 3.18B.1 as may be revised in accordance with clause 3.18D.1.

Outage Plan First Submission Date: The date on which an Outage Plan is first submitted to AEMO.

~~**Outage Quantity**: The quantity, in MW, of the derating of a Separately Certified Component in a Dispatch Interval as a result of a Planned Outage or Forced Outage for energy, determined in accordance with clause 3.21.6.~~

Outage Recall Direction: Means a direction given by AEMO to a Market Participant or Network Operator to return an Outage Facility to service from a Planned Outage in accordance with the Outage Contingency Plan, or take other measures contained in the relevant Outage Contingency Plan in accordance with clause 3.20.1.

Outage Return To Service Commencement Interval: The first Dispatch Interval in an Outage Return To Service Period.

Outage Return To Service Completion Interval: The last Dispatch Interval in an Outage Return To Service Period.

Outage Return To Service Period: A period of time within the Outage Period of an Outage Plan, during which the relevant Outage Capability is intended to be returned to service, which starts at the start of its Outage Return To Service Commencement Interval and ends at the end of its Outage Return To Service Completion Interval.

Outstanding Amount: The amount calculated in accordance with clause 2.40.1.

Panel Regulations: The former *Energy Industry (Rule Change Panel) Regulations 2016*.

Parasitic Load: A Load where consumption is auxiliary to the production of energy from an Energy Producing System.

PASA: See Projected Assessment of System Adequacy.

Payment Default: Any failure to make a payment in respect of an Invoice in accordance with section 9.18 or clause 9.20.8 or pay any other amount owing under these ESM Rules by the time it is due.

Peak Benchmark Reserve Capacity Price: In respect of a Reserve Capacity Cycle, the price described in clause 4.16.2 and published on the Coordinator's Website under clause 4.16.1.

Peak Capacity: Reserve Capacity that contributes to meeting peak demand.

Peak Capacity Adjusted Forced Outage Quantity: Means, the quantity, in MW, of the derating of a Facility or Separately Certified Component in a Dispatch Interval or Trading Interval from the Peak Reserve Capacity Obligation Quantity for the Facility or Separately Certified Component as determined by AEMO in accordance with:

(a) for a Separately Certified Component in a Dispatch Interval, the formula in clause 3.21.7;

(b) for a Separately Certified Component in a Trading Interval, the formula in clause 3.21.7A;

(c) for a Facility in a Trading Interval, the formula in clause 3.21.7B; and

(d) for a Facility in a Dispatch Interval, the formula in clause 3.21.7C.

Peak Capacity Adjusted Planned Outage Quantity: Means, the quantity, in MW, of the derating of a Facility or Separately Certified Component in a Dispatch Interval or Trading Interval from the Peak Reserve Capacity Obligation Quantity for the Facility or Separately Certified Component as determined by AEMO in accordance with:

(a) for a Separately Certified Component in a Dispatch Interval, the formula in clause 3.21.8;

(b) for a Separately Certified Component in a Trading Interval, the formula in clause 3.21.8A;

(c) for a Facility in a Trading Interval, the formula in clause 3.21.8B; and

(d) for a Facility in a Dispatch Interval, the formula in clause 3.21.8C.

Peak Capacity Cost Refund: Has the meaning given in clause 4.26.2E.

Peak Capacity Credit: A notional unit of Peak Capacity provided by a Facility or Separately Certified Component during a Capacity Year. Each Peak Capacity Credit is equivalent to 1 MW of Peak Capacity. Peak Capacity Credits are held by the Market Participant registered in respect of the Facility or Separately Certified Component.

Peak Capacity Outage Quantity: The quantity, in MW, of the derating of a Separately Certified Component in a Dispatch Interval as a result of a Planned Outage or Forced Outage for energy, determined in accordance with clause 3.21.6.

Peak Capacity Payment Reduction Ratio: For a Demand Side Programme on a Trading Day, the value calculated by AEMO in accordance with clause 4.25.4CC.

Peak Certified Reserve Capacity: In respect of a Reserve Capacity Cycle, for a Facility or a Separately Certified Component, the quantity of Peak Capacity that AEMO has assigned to the Facility for the Reserve Capacity Cycle in accordance with section 4.11, as adjusted under these ESM Rules including clause 4.14.8.

Peak Demand Side Programme Capacity Cost Refund: Has the meaning given in clause 4.26.3A.

Peak Demand Side Programme Dispatch Requirement: For a Reserve Capacity Cycle, the minimum number of Trading Intervals in the applicable Capacity Year during which a Demand Side Programme can be dispatched, which is:

(a) for Reserve Capacity Cycles up to and including the 2023 Reserve Capacity Cycle, 400 Trading Intervals;

(b) for the 2024 Reserve Capacity Cycle, 100 Trading Intervals; and

(c) for Reserve Capacity Cycles after 2024, the value determined by AEMO under clause 4.5.12(g) for the third Capacity Year of the Long Term PASA Study Horizon.

Peak DSP Association Shortfall: The quantity, in MW, determined under clauses 4.26.1AB and 4.26.1AC.

Peak DSP Delivery Shortfall: For a Demand Side Programme with Peak Capacity Credits and for a Trading Day, denotes the quantity calculated in accordance with clause 4.26.1AA.

Peak DSP Event Shortfall: The quantity, in MW, determined under clause 4.26.1AD.

Peak Early Certified Reserve Capacity: Peak Capacity which is certified and assigned to a new Facility by AEMO for a future Reserve Capacity Cycle under section 4.28C.

Peak Electric Storage Resource Obligation Interval: For an Electric Storage Resource for which a Market Participant holds Peak Capacity Credits, a Trading Interval in the Peak Electric Storage Resource Obligation Duration, in which a non-zero Peak Reserve Capacity Obligation Quantity is applied to the Electric Storage Resource.

Peak Electric Storage Resource Obligation Duration: For an Electric Storage Resource and a Trading Day, the contiguous Trading Intervals published by AEMO in accordance with clause 6.3A.2, where:

(a) the number of Trading Intervals is equal to:

i. if the Electric Storage Resource first received Capacity Credits within any of the nine previous Capacity Years, and does not include a Facility Upgrade that first received Capacity Credits in a later Capacity Year, the ESR Duration Requirement for the Capacity Year in which the Electric Storage Resource first received Capacity Credits; and

ii. otherwise the ESR Duration Requirement for the current Capacity Year; and

(b) if the number of Trading Intervals is an even number, then the last Trading Interval in the first half of the Peak Electric Storage Resource Obligation Duration must be the Mid Peak Electric Storage Resource Obligation Interval.

Peak Eligible Services: Has the meaning given in clause 4.24.3.

Peak ESR Charge Shortfall: The MW quantity of capacity of a Scheduled Facility or Semi-Scheduled Facility that is subject to a capacity refund in a Trading Interval due to the inadequate Charge Level of an Electric Storage Resource, calculated in accordance with clause 4.26.1E.

Peak Excess Allocation Price: For a Market Participant is as calculated in accordance with clause 9.8.3B(c).

Peak Facility Reserve Capacity Deficit Refund: Has the meaning given in clause 4.26.1A.

Peak Fixed Price Reserve Capacity Cycle: Means:

(a) for a Fixed Price Component that was nominated in accordance with clause 4.14.1B(a):

i. the Reserve Capacity Cycle in which the Fixed Price Component was first assigned Peak Capacity Credits; or

ii. any of the subsequent nine Reserve Capacity Cycles; and

(b) for all other Fixed Price Facilities and Fixed Price Components:

i. the Reserve Capacity Cycle in which the Fixed Price Facility or Fixed Price Component was first assigned Peak Capacity Credits; or

ii. any of the subsequent four Reserve Capacity Cycles.

Peak Generation Capacity Cost Refund: Has the meaning given in clause 4.26.3.

Peak Generation Reserve Capacity Deficit Refund: Has the meaning given in clause 4.26.1I.

Peak Individual Reserve Capacity Requirement: The MW quantity determined by AEMO in respect of a Market Participant for a Trading Month, in accordance with clause 4.28.7 and, if applicable, as revised in accordance with clause 4.28.11A.

Peak Individual Reserve Capacity Requirement Contribution: Means the contribution of an Associated Load to a Market Participant's Indicative Peak Individual Reserve Capacity Requirement determined in accordance with step 1 of Appendix 5.

Peak IRCR Intervals: For a Capacity Year, the Trading Intervals determined by AEMO under clause 4.1.23A~~, which are used solely in the Relevant Level Method in Appendix 9~~.

Peak Not In-Service Capacity Refund Quantity: The MW quantity of Not In-Service Capacity of a Scheduled Facility or Semi-Scheduled Facility that is subject to a Peak Capacity refund in a Trading Interval, calculated in accordance with clause 4.26.1D.

Peak Real-Time Market Offer Shortfall: Has the meaning given in clause 4.26.1G.

Peak Real-Time Market Reserve Capacity Deficit: Has the meaning given in clause 4.26.1B.

Peak Refund Exempt Planned Outage Count: In respect of a Separately Certified Component of a Scheduled Facility or Semi-Scheduled Facility and a period of time, the sum over all Trading Intervals in that period of:

(a) if the Trading Interval occurs on or after 8:00 AM on 1 June 2016 and before New WEM Commencement Day, the total MW quantity of Refund Exempt Planned Outage determined for the relevant Scheduled Generator (or Scheduled Generators) in the Trading Interval under the ESM Rules that were in force immediately before New WEM Commencement Day, divided by the number of Capacity Credits associated with the Scheduled Generator (or Scheduled Generators) in the Trading Interval;

(b) if the Trading Interval occurs on or after New WEM Commencement Day and before RCM Reform Commencement, the total Refund Exempt Planned Outage Quantity determined by AEMO for the Separately Certified Component in the Trading Interval under the ESM Rules that were in force

immediately before RCM Reform Commencement, divided by the number of Peak Capacity Credits associated with the Separately Certified Component in the Trading Interval; or

(c) if the Trading Interval occurs on or after RCM Reform Commencement, the total Peak Refund Exempt Planned Outage Quantity determined by AEMO for the Separately Certified Component in the Trading Interval under clauses 4.26.1C or 4.26.1CA, divided by the number of Peak Capacity Credits associated with the Separately Certified Component in the Trading Interval.

Peak Refund Exempt Planned Outage Quantity: A Peak Capacity Adjusted Planned Outage Quantity for a Separately Certified Component of a Scheduled Facility or Semi-Scheduled Facility in a Trading Interval for which a Peak Facility Reserve Capacity Deficit Refund is not payable, as determined by AEMO under clauses 4.26.1C or 4.26.1CA.

Peak Refund Payable Planned Outage Quantity: A Peak Capacity Adjusted Planned Outage Quantity for a Separately Certified Component of a Scheduled Facility or Semi-Scheduled Facility in a Trading Interval for which a Peak Facility Reserve Capacity Deficit Refund is payable, as determined by AEMO under clauses 4.26.1C or 4.26.1CA.

Peak Reserve Capacity Deficit: Has the meaning given in clause 4.26.1A(a)(ii).

Peak Reserve Capacity Obligation Quantity: The specific amount of capacity required to be provided in a Dispatch Interval or Trading Interval as part of a Reserve Capacity Obligation set by AEMO in accordance with clauses 4.12.4 to 4.12.6.

Peak Reserve Capacity Price: In respect of a Reserve Capacity Cycle, the price for Peak Capacity determined in accordance with clause 4.29.1, where this price is expressed in units of dollars per Peak Capacity Credit per year.

Peak Reserve Capacity Requirement: Has the meaning given in clause 4.6.1.

Peak Reserve Capacity Target: In respect of a Capacity Year, AEMO's estimate of the total amount of Energy Producing Systems' capacity or Demand Side Programme capacity required in the SWIS to satisfy clauses 4.5.9(a) and 4.5.9(b) for that Capacity Year determined in accordance with clause 4.5.10(b).

Peak Shared Reserve Capacity Cost: For a Trading Day, the amount determined in accordance with clause 4.28.4.

Peak Targeted Reserve Capacity Cost: For a Trading Day, the cost defined under clause 4.28.1(a).

Peak Trading Interval Capacity Cost Refund: The refund a Market Participant holding Peak Capacity Credits incurs in a Trading Interval, as calculated in accordance with clause 4.26.2F.

Peak Trading Interval Refund Rate: The Peak Capacity refund rate applicable in a Trading Interval, and in respect of a Facility, as calculated in accordance with clause 4.26.1(a).

Per-Dispatch Interval Availability Payment: For a SESSM Award, the SESSM Availability Payment divided by the number of Dispatch Intervals in the SESSM Award Duration for which the SESSM Availability Quantity is greater than zero.

Planned Outage: An Outage Plan that has been approved by AEMO.

Planning Criterion: Has the meaning given in clause 4.5.9.

Portfolio: A set comprising one or more Scheduled Facilities, Semi-Scheduled Facilities and Non-Scheduled Facilities identified by the Economic Regulation Authority in accordance with clause 2.16B.1(a).

Portfolio Demand Curve: A curve describing the STEM Price at which a Market Participant will purchase different levels of energy from the market having the form given in clause 6.6.2A(e).

Portfolio Supply Curve: A curve describing the STEM Price at which a Market Participant will provide the market with different levels of energy supply having the form given in clause 6.6.2A(d).

Post Capacity Year New Notional Wholesale Meter: A notional interval meter representing Non-Dispatchable Loads that are not read as interval meters that are served by Synergy and which came into existence after the end of the previous Capacity Year.

Potential Relevant Generator Modification: Has the meaning given in clause 3A.13.1.

Power System Adequacy: Means the ability of the SWIS to supply all demand at the time, allowing for Outages, taking into account the assessment methodologies and criteria in the WEM Procedure referred to in clause 3.3.2.

Power System Reliability: Means the safe scheduling, operation and control of the SWIS in accordance with the Power System Reliability Principles.

Power System Reliability Principles: Has the meaning given to that term in clause 3.3.3.

Power System Security: Means the safe scheduling, operation and control of the SWIS in accordance with the Power System Security Principles.

Power System Security Principles: Has the meaning given to that term in clause 3.4.3.

Power System Stability: Means when the SWIS will return to an acceptable steady-state operating condition following a disturbance.

Power System Stability Requirements: Means, the requirements identified to maintain Power System Stability, as determined by the processes specified in the WEM Procedure referred to in clause 3.2.7.

Power Transfer Capability: Means the maximum permitted power transfer through a transmission system or distribution system or part thereof.

Pre-Dispatch Interval: A period of 30 minutes commencing on the hour or half hour during a Trading Day, and where identified by a time, the 30 minute period starting at that time.

Pre-Dispatch Schedule: Means a forecast of Market Clearing Prices, Dispatch Targets, Dispatch Caps, Dispatch Forecasts and Essential System Services Enablement Quantities for each Pre-Dispatch Interval in the Pre-Dispatch Schedule Horizon.

Pre-Dispatch Schedule Horizon: The next 96 Pre-Dispatch Intervals after a Pre-Dispatch Interval.

Price-Quantity Pair: In the context of:

(a) Portfolio Demand Curves and STEM Offers, a quantity that will be provided to AEMO by a Market Participant for a price equalling or exceeding the specified price. In the context of Portfolio Demand Curves and STEM Bids, a quantity that will be purchased from AEMO by a Market Participant for a price equalling or less than the specified price;

(b) Real-Time Market Submissions the specified non-Loss Factor adjusted MW quantity at which a Market Participant is prepared to provide a Market Service from a Registered Facility as at the end of a Dispatch Interval and the non-Loss Factor Adjusted Price at which the Market Participant is prepared to provide that quantity by the end of the Dispatch Interval (as adjusted by AEMO under clauses 7.4.51 or 7.4.51A, if applicable), where the price is:

i. in $ per MWh for energy;

ii. in $ per MW per hour for Contingency Reserve Raise, Contingency Reserve Lower, Regulation Raise and Regulation Lower; and

iii. in $ per MWs per hour for RoCoF Control Service.

Priority Project: Has the meaning given in the Electricity Networks Access Code.

Procedural Decision: Has the meaning given in regulation 41(1) of the ESM Regulations.

Procedural Review: Means a review by the Electricity Review Board of a Procedural Decision in accordance with the ESM Regulations.

Procedure Amendment: The specific wording of a proposed or accepted change to a WEM Procedure.

Procedure Change Process: The process for amending a WEM Procedure as set out in sections 2.10 and 2.11.

Procedure Change Proposal: A proposal developed by the Coordinator, AEMO, the Economic Regulation Authority or a Network Operator to initiate a Procedure Change Process.

Procedure Change Report: A final report prepared by the Coordinator, AEMO, the Economic Regulation Authority or a Network Operator in relation to a Procedure Change Proposal, containing the information described in clause 2.10.13.

Procedure Change Submission: A submission made in relation to a Procedure Change Proposal submitted in accordance with clause 2.10.7.

Projected Assessment of System Adequacy (PASA): An assessment undertaken by AEMO to assess future risks to Power System Security and Power System Reliability.

Proposed Generator Performance Standard: Means a standard or technical level of performance in respect of a Technical Requirement proposed to apply to a Transmission Connected Generating System that has not been approved and registered in accordance with the process in Chapter 3A.

Proposed Negotiated Generator Performance Standard: Means a Proposed Generator Performance Standard that is not an Ideal Generator Performance Standard but is no less than the Minimum Generator Performance Standard.

Protected Provision: A chapter or clause of the ESM Rules, identified in clause 2.8.13.

Prudential Obligations: In respect of a Rule Participant, the obligations set out in clauses 2.37 to 2.43.

Public Information: Market Information that is not confidential and may be made available to any person.

Ramp Rate Limit: Means the Market Participant's best estimate, in MW per minute, on a linear basis, of a Facility's physical ability to increase or decrease its output from the commencement of a Dispatch Interval.

RCM Constraint Equation: Means a Constraint Equation developed by AEMO in accordance with section 4.4B.

RCM Limit Advice: Means Limit Advice for a Thermal Network Limit at an ambient temperature of 41°C.

RCM Reform Commencement: The date and time specified by the Minister as RCM Reform Commencement, as published in the Government Gazette.

RCS Provision Constraint Equation: A Constraint Equation included in the Dispatch Algorithm under clause 7.7.8 to facilitate a direction to synchronise a Facility to provide a RoCoF Control Service.

RCS Uplift Override Flag: A flag set by AEMO under clause 7.5.23 and used to amend erroneous RCS Uplift Payments caused by missing or manifestly incorrect Constraint Equations.

RCS Uplift Payment: A payment made to a Market Participant to account for enablement losses incurred by a Registered Facility that is directed to synchronise by AEMO to provide a RoCoF Control Service, determined in accordance with:

(a) clause 9.10.3R, for a Trading Interval; and

(b) clause 9.10.3S, for a Dispatch Interval.

Real-Time Market: Means the mandatory gross pool market operated under Chapter 7 that determines the dispatch and Essential System Service Enablement Quantity of Registered Facilities in each Dispatch Interval based on submitted prices and quantities.

Real-Time Market Bid: A bid in a Real-Time Market Submission or Standing Real-Time Market Submission submitted by a Market Participant to AEMO for a Registered Facility to Withdraw energy via the Central Dispatch Process.

Real-Time Market Offer: An offer in a Real-Time Market Submission or Standing Real-Time Market Submission submitted by a Market Participant to AEMO for a Registered Facility to supply a Market Service via the Central Dispatch Process.

~~**Real-Time Market Offer Shortfall**: Has the meaning given in clause 4.26.1G.~~

~~**Real-Time Market Reserve Capacity Deficit**: Has the meaning given in clause 4.26.1B.~~

Real-Time Market Submission: A notice submitted by a Market Participant to AEMO setting out the parameters under which it intends to have a Registered Facility participate in the Real-Time Market, in accordance with clauses 7.4.39, 7.4.40, 7.4.41, 7.4.42 and 7.4.44.

Real-Time Market Submission Acceptance Horizon: The point in time before a Dispatch Interval after which a Market Participant may submit Real-Time Market Submissions for a Registered Facility for that Dispatch Interval.

Real-Time Market Timetable: The timetable documented by AEMO under clause 7.1.2(a) for the operation of the Real-Time Market, which must include the timelines referred to in clause 7.1.3.

Reassessment Fee: A fee determined by AEMO under clause 2.24.2.

Recover: Means, in relation to SWIS Frequency Operating Standards, the time at which the SWIS Frequency returns to the applicable Normal Operating Frequency Band, provided it does not go outside that range at any time over the following 1 minute.

Rectification Plan: Means a plan submitted by a Market Participant responsible for a Transmission Connected Generating System in respect of a Transmission Connected Generating System, an alternative Rectification Plan proposed by AEMO or amended Rectification Plan under section 3A.11.

Reference Node: Is:

(a) up to the New WEM Commencement Day, the Muja 330 kV bus-bar; and

(b) on and from the New WEM Commencement Day, the Southern Terminal 330 kV bus-bar,

(relative to which Loss Factors are defined and Constraint Equations are formulated).

Reference Scenario: The Scenario that represents AEMO's best estimate of future dispatch and market outcomes.

Reference Trading Price: Means, for a Trading Interval, the price determined in accordance with clause 7.11A.1(b).

~~**Refund Exempt Planned Outage Count**: In respect of a Separately Certified Component of a Scheduled Facility or Semi-Scheduled Facility and a period of time, the sum over all Trading Intervals in that period of:~~

~~(a) if no Capacity Credits were associated with the Separately Certified Component in the Trading Interval, zero; or~~

~~(b) otherwise:~~

~~i. if the Trading Interval occurs before 8:00 AM on 1 June 2016, zero;~~

~~ii. if the Trading Interval occurs on or after 8:00 AM on 1 June 2016 and before New WEM Commencement Day, the total MW quantity of Refund Exempt Planned Outage determined for the relevant Scheduled Generator (or Scheduled Generators) in the Trading Interval under the ESM Rules that were in force immediately before New WEM Commencement Day, divided by the number of Capacity Credits associated with the Scheduled Generator (or Scheduled Generators) in the Trading Interval; or~~

~~iii. if the Trading Interval occurs on or after New WEM Commencement Day, the total Refund Exempt Planned Outage Quantity determined by AEMO for the Separately Certified Component in the Trading Interval under clauses 4.26.1C or 4.26.1CA, divided by the number~~

~~of Capacity Credits associated with the Separately Certified Component in the Trading Interval.~~

~~**Refund Exempt Planned Outage Quantity**: A Capacity Adjusted Planned Outage Quantity for a Separately Certified Component of a Scheduled Facility or Semi-Scheduled Facility in a Trading Interval for which a Facility Reserve Capacity Deficit Refund is not payable, as determined by AEMO under clauses 4.26.1C or 4.26.1CA.~~

~~**Refund Payable Planned Outage Quantity**: A Capacity Adjusted Planned Outage Quantity for a Separately Certified Component of a Scheduled Facility or Semi-Scheduled Facility in a Trading Interval for which a Facility Reserve Capacity Deficit Refund is payable, as determined by AEMO under clauses 4.26.1C or 4.26.1CA.~~

Registered Facility: In respect of a Rule Participant, a Facility registered by that Rule Participant with AEMO in a Facility Class under Chapter 2.

Registered Generator Performance Standard: Means:

(a) in respect of a Transmission Connected Generating System other than an Existing Transmission Connected Generating System, an Ideal Generator Performance Standard or a Negotiated Generator Performance Standard that has been approved and registered in accordance with the process in Chapter 3A; and

(b) in respect of an Existing Transmission Connected Generating System, the standard or technical level of performance in respect of a Technical Requirement that is an Agreed Generator Performance Standard under section 1.40 and deemed to be a Registered Generator Performance Standard under clause 1.40.31.

Registration Correction Notice: Means a notice issued by AEMO under clauses 2.32.7B or 2.32.7BA.

Regulation: Has the meaning defined in clause 3.9.1.

Regulation Lower: Has the meaning defined in clause 3.9.3.

Regulation Lower Market Clearing Price: The Market Clearing Price for Regulation Lower.

Regulation Lower Offer Price Ceiling: The price, in dollars per MW per hour, determined in accordance with clause 2.26.2B, and as may be indexed in accordance with clause 2.26.2U, that is the maximum price that may be associated with a Real-Time Market Submission or Standing Real-Time Market Submission for the provision of Regulation Lower.

Regulation Raise: Has the meaning defined in clause 3.9.2.

Regulation Raise Market Clearing Price: The Market Clearing Price for Regulation Raise.

Regulation Raise Offer Price Ceiling: The price, in dollars per MW per hour, determined in accordance with clause 2.26.2B, and as may be indexed in accordance with clause 2.26.2U, that is the maximum price that may be associated with a Real-Time Market Submission or Standing Real-Time Market Submission for the provision of Regulation Raise.

Regulations: Any regulations made under the Electricity Industry Act 2004 (WA) including the ESM Regulations, AEMO Regulations and the Electricity Industry (Independent Market Operator) Repeal Regulations 2018.

Relevant Demand: The DSP Energy Level, expressed in MW, of a Demand Side Programme in a Trading Interval as determined in clause 4.26.2CA.

Relevant Generator Modification: Means a Potential Relevant Generator Modification that the Network Operator declares to be a Relevant Generator Modification under clause 3A.13.4.

Relevant Level: Means the MW quantity determined by AEMO in accordance with the Relevant Level Method.

Relevant Level Method: Means the method of determining the Relevant Level specified in Appendix 9.

Relevant Settlement Adjustment Date: Means, for a Trading Week, any of Settlement Adjustment Date 1, Settlement Adjustment Date 2 or Settlement Adjustment Date 3, as the case may be.

Relevant Settlement Statement: Has the meaning given in clause 9.3.6.

Reliable Operating State: The state of the SWIS defined in clause 3.3.1.

Remaining Available Capacity: For each Dispatch Interval included in an Outage, the remaining capability of a Facility or Facility Technology Type of a Facility, as relevant, to provide an Outage Capability, in units as described in the WEM Procedure referred to in clause 3.18.4.

Repaid Amount: Has the meaning given in clause 9.20.2(a).

Repaid Amount Levy: The amount, in respect of a given Market Participant and in the circumstance of a particular Repaid Amount, determined by AEMO in accordance with clause 9.20.2A.

Representative: In relation to a person means a representative of that person, including an employee, agent, officer, director, auditor, adviser, partner, consultant, joint venturer or sub-contractor, of that person.

Request for Expression of Interest: In respect of a Reserve Capacity Cycle, the request for expression of interest made available in accordance with clause 4.2.2.

Required Level: The level of output (expressed in MW) required to be met by a Facility as determined in clauses 4.11.3B, 4.11.3BB, 4.11.3BC or 4.11.3BD, as applicable.

Reserve Capacity: Capacity associated with a Facility. Capacity may be either Peak Capacity or both Peak Capacity and Flexible Capacity, and may be:

(a) the capacity of Energy Producing Systems to produce electricity and send it out into a Network forming part of the SWIS; or

(b) the capability of a Demand Side Programme to reduce the consumption of electricity at connection points to a Network forming part of the SWIS.

Reserve Capacity Cycle: The cycle of events described in clause 4.1.

~~**Reserve Capacity Deficit:** Has the meaning given in clause 4.26.1A.~~

Reserve Capacity Information Pack: A package of information, including the information described in clause 4.7.3, pertaining to a Reserve Capacity Cycle.

Reserve Capacity Mechanism: Chapter 4 of the ESM Rules.

Reserve Capacity Obligations: For a Market Participant holding Capacity Credits, determined in accordance with clause 4.12.1 or clause 4.28C.

~~**Reserve Capacity Obligation Quantity**: The specific amount of capacity required to be provided in a Dispatch Interval or Trading Interval as part of a Reserve Capacity Obligation set by AEMO in accordance with clauses 4.12.4 to 4.12.6.~~

Reserve Capacity Performance Improvement Report: A report including the information specified in clause 4.27.4A of the ESM Rules, provided by a Market Participant to AEMO under clause 4.27.5(b) in response to a request made under clause 4.27.3(b).

Reserve Capacity Performance Report: A report including the information specified in clause 4.27.4 of the ESM Rules, provided by a Market Participant to AEMO under clause 4.27.5(a) in response to a request made under clause 4.27.3(a).

Reserve Capacity Price: The Peak Reserve Capacity Price or the Flexible Reserve Capacity Price or both (as the context requires).

Reserve Capacity Price Factors: Means the BRCP Cap Factor, the EZ BRCP Factor, EZ and AZ used in the formula specified in clause 4.29.1(b)(iv).

Reserve Capacity Requirement: For a Reserve Capacity Cycle, the Peak Reserve Capacity Requirement or the Flexible Reserve Capacity Requirement or both (as the context requires).

Reserve Capacity Security: The reserve capacity security to be provided for a Facility (other than a Demand Side Programme) that:

(a) has the meaning given in clause 4.13.5; and

(b) is as calculated and re-calculated under section 4.13 and section 4.28C.

Reserve Capacity Security Compensation Amount: The amount determined in accordance with clause 4.28.4D.

Reserve Capacity Target: For a Capacity Year, the Peak Reserve Capacity Target or the Flexible Reserve Capacity Target or both (as the context requires).

Reserve Capacity Test: Means a test of the Reserve Capacity associated with a Facility as conducted under section 4.25.

Restoration Profile: The profile over time of the expected change in Withdrawal by the Loads associated with an Interruptible Load after activation in response to a Contingency Event, from the time the Interruptible Load begins to restore Load until the Facility has returned to normal operations.

Review Period: In the case of the first Review Period, the 3 year period commencing on 1 July in the calendar year following the calendar year in which Energy Market Commencement occurs. For each subsequent Review Period, the 3 year period commencing on the third anniversary of the commencement of the previous Review Period.

Reviewable Decision: Decisions made by the Coordinator, AEMO, the Economic Regulation Authority or a Network Operator, that are listed in Schedule 2 of the ESM Regulations, in respect of which an eligible person may apply to the Electricity Review Board for a review of a decision in accordance with the ESM Regulations.

RLM Reference Period: For a Reserve Capacity Cycle, the five year period ending at 8:00 AM on 1 October of Year 1 of the previous Reserve Capacity Cycle.

RoCoF Causer: Means the set of Rule Participants identified in accordance with Appendix 2B that must pay for the RoCoF Control Service.

RoCoF Control Requirement: Means the quantity of RoCoF Control Service scheduled or dispatched in a Dispatch Interval or Pre-Dispatch Interval which is the sum of the Minimum RoCoF Control Requirement and the Additional RoCoF Control Requirement.

RoCoF Control Service Market Clearing Price: The Market Clearing Price for RoCoF Control Service.

RoCoF Control Service Offer Price Ceiling: The price, in dollars per MWs per hour, determined in accordance with clause 2.26.2B, and as may be indexed in accordance with clause 2.26.2U, that is the maximum price that may be associated with a Real-Time Market Submission or Standing Real-Time Market Submission for the provision of RoCoF Control Service.

RoCoF Control Service or Rate of Change of Frequency Control Service: Has the meaning defined in clause 3.9.7.

RoCoF Limit: Means a limit on the average frequency rate of change over a particular time period.

RoCoF Ride Through Capability: Is the highest RoCoF Limit at which the Facility can operate safely and reliably, expressed over the same timeframe specified in the RoCoF Safe Limit.

RoCoF Ride-Through Cost Recovery Limit: Means the limit set by AEMO under clause 2.34A.12l that is used to determine the set of RoCoF Causers that must pay for the RoCoF Control Service under Appendix 2B.

RoCoF Safe Limit: Means the RoCoF Limit referred to in Appendix 13.

RoCoF Upper Limit: Means the maximum RoCoF expected on the SWIS if Contingency Reserve was solely used to maintain SWIS frequency after a Contingency Event.

Rolling Test Window: A period of three consecutive Trading Months, commencing at the start of the first Trading Day of a Trading Month and ending at the end of the last Trading Day of a Trading Month. A Rolling Test Window does not overlap with any other Rolling Test Window with a new Rolling Test Window commencing immediately after the previous one ends.

RTM Suspension Flag: A flag indicating whether the Real-Time Market was suspended by AEMO for a Dispatch Interval under clause 7.11D.1, determined in accordance with clause 7.11D.6.

Rule Change Panel: Has the meaning given to it in the Panel Regulations.

Rule Change Proposal: A proposal made in accordance with clause 2.5 proposing that the Coordinator makes Amending Rules.

Rule Participant: Any person registered as a Rule Participant in accordance with Chapter 2 and AEMO.

Satisfactory Operating State: The state of the SWIS defined in clause 3.4.1.

Scenario: Means a set of inputs used to generate forecast Dispatch Targets and Market Clearing Prices and the set of resulting outputs.

Scheduled Facility: A Facility that can respond to a Dispatch Target from AEMO such that it can maintain its Injection or Withdrawal within its Tolerance Range for a specified period and is registered as such in accordance with clauses 2.29.4G and 2.29.4I.

Scheduling Day: In respect of a Trading Day, the calendar day immediately preceding the calendar day on which the Trading Day commences.

Season: As the context requires, any of the Cold Season, Intermediate Season or Hot Season.

Secure Operating State: The state of the SWIS defined in clause 3.4.2.

Secure Operational Voltage Envelope: Means the voltage limits for the secure operation of an Operating Zone as determined by AEMO under clause 3.1A.9.

Security Deposit: Means a cash deposit made with AEMO (on terms acceptable to AEMO in its absolute discretion) by or on behalf of a Rule Participant.

Security Limit: Any technical limit on the operation of the SWIS as a whole, or a region of the SWIS, necessary to maintain the Power System Security, including both static and dynamic limits, and limits to allow for and to manage contingencies.

Security Provider: Means a person or entity which meets the Acceptable Credit Criteria and which itself is not a Rule Participant.

Self-Scheduling Outage Facility: A Facility that is included on the Self-Scheduling Outage Facility List.

Self-Scheduling Outage Facility List: The list maintained by AEMO under clause 3.18A.6.

Semi-Scheduled Facility: A Facility that can reduce the value of its Injection or increase the value of its Withdrawal to comply with a Dispatch Cap issued by AEMO and is registered as such in accordance with clauses 2.29.4G and 2.29.4I.

Sent Out Metered Schedule: Means the Metered Schedule converted to sent out MWh quantities using applicable Loss Factors.

Separate Facility: A Facility that meets the requirements of clause 2.31.2K and has been approved by AEMO under clause 2.31.2F.

Separately Certified Component: Any component of a Scheduled Facility or Semi-Scheduled Facility which AEMO has assessed separately in the determination of Certified Reserve Capacity for the Facility, and for which AEMO assigned Capacity Credits for any Trading Interval in the Capacity Year.

Separation Event: Means a Credible Contingency Event that results in the formation of an Island.

Service Fee Settlement Amount: Means the amounts determined in accordance with section 9.13.

SESSM: Means the mechanism to procure Frequency Co-optimised Essential System Services under section 3.15A.

SESSM Availability Payment: Means the dollar amount payable to the Market Participant for offering the SESSM Availability Quantity of Frequency Co-optimised Essential System Service into the market according to the SESSM Service Specification.

SESSM Availability Quantity: Means the MW or MWs quantity of a Frequency Co-optimised Essential System Service to be made available in a Dispatch Interval under a SESSM Award.

SESSM Availability Requirement: For a SESSM Award, the percentage of Dispatch Intervals in the SESSM Service Timing in which the Facility must include the sum of the SESSM Availability Quantity and the Base ESS Quantity in its Real-Time Market Submissions for the relevant Frequency Co-optimised Essential System Service from an Available Capacity or In-Service Capacity or be required to pay a Facility SESSM Refund calculated under Appendix 2C.

SESSM Award: Means the acceptance of an offer by AEMO to provide Frequency Co-optimised Essential System Services by a Market Participant in accordance with a SESSM Submission through the SESSM.

SESSM Award Duration: Means the period over which obligations and payments under a SESSM Submission apply and must be no longer than three years.

SESSM Offer Cap: Means the price referred to in clause 3.15A.20(c).

SESSM Service Commencement Date: Means the date a Frequency Co-optimised Essential System Service procured through the SESSM is required to commence.

SESSM Service Quantity Profile: Means the MW or MWs quantity of Frequency Co-optimised Essential System Service sought through the SESSM for each Dispatch Interval in the SESSM Service Timing (which may be zero at some times of the year or in some hours of the day).

SESSM Service Specification: for a Frequency Co-optimised Essential System Service being procured under the SESSM, as set out in clause 3.15A.6.

SESSM Service Timing: Means the time period and Dispatch Intervals during which a Frequency Co-optimised Essential System Service procured through the SESSM is required to be provided.

SESSM Submission: Means a submission made by a Market Participant in respect of a Facility to provide Frequency Co-optimised Essential System Services in accordance with clause 3.15A.21 through the SESSM.

Settlement Adjustment Date 1: Has the meaning given in clause 9.3.7(a).

Settlement Adjustment Date 2: Has the meaning given in clause 9.3.7(b).

Settlement Adjustment Date 3: Has the meaning given in clause 9.3.7(c).

Settlement Date: The Business Day, determined under clause 9.3.1(d), on which all amounts payable under these ESM Rules are settled for the relevant Trading Week for an original Settlement Statement or, in respect of any adjusted Settlement Statement for that Trading Week, the Business Day, determined under clause 9.3.1(i), on which all amounts payable under these ESM Rules are settled for the relevant adjusted Settlement Statement.

Settlement Disagreement Deadline: Has the meaning given in clause 9.16.2.

Settlement Statement: Means an original settlement statement issued under clause 9.3.3(a) in relation to a Trading Week and containing the information described in clause 9.14 and, in respect of the Adjustment Process, each adjusted settlement statement in relation to that Trading Week issued under clause 9.15.1(b) and containing the information described in clause 9.15.3, respectively.

Settlement Statement Date: The Business Day, determined in accordance with clause 9.3.1(b) on which AEMO releases original Settlement Statements for a Trading Week, and each Business Day, determined in accordance with clause 9.3.1(h) on which AEMO releases adjusted Settlement Statements for the Adjustment Process for that Trading Week, respectively.

~~**Shared Reserve Capacity Cost**: The amount determined in accordance with clause 4.28.4.~~

Short Term Energy Market (STEM): A forward market operated under Chapter 6 in which Market Participants can purchase electricity from, or sell electricity to, AEMO.

Short Term PASA: A PASA covering the period in clause 3.16.1(b).

Single Facility Raise Risk: The maximum estimated MW change for a CR Facility resulting in a decrease in SWIS Frequency due to a Facility Raise Contingency for the CR Facility in a Dispatch Interval or Pre-Dispatch Interval (as applicable), excluding any consequential changes to the Injection or Withdrawal of other Facilities and taking into account the output of the Dispatch Algorithm for the Dispatch Interval or Pre-Dispatch Interval (as applicable) (and expressed as a non-negative number).

Small Aggregation: One or more Facilities connected to the distribution system and located at the same Electrical Location.

Small Generating Unit: An Energy Producing System which has a rated capacity of less than 10MW.

South West interconnected system (SWIS): Has the meaning given in the Electricity Industry Act.

Stable: Means when the SWIS will return to an acceptable steady-state operating condition following a disturbance.

Stabilise: Means, in relation to SWIS Frequency Operating Standards, when the SWIS Frequency has remained above or below the required level for at least 20 seconds.

Standard Rule Change Process: The process for dealing with Rule Change Proposals set out in clause 2.7.

Standard Small User Facility: Has the meaning given in clause 3.25.1.

Standing Bilateral Submission: A submission by a Market Participant to AEMO made in accordance with section 6.2A.

Standing Data: Data maintained by AEMO under clause 2.34.1.

Standing DSP Profile Submission: A default DSP Profile Submission for a Demand Side Programme for Dispatch Intervals starting at specified times on Trading Days of a specified type.

Standing Enablement Maximum: In relation to a Facility and a Frequency Co-optimised Essential System Service, the maximum level of Injection or Withdrawal for which a response is capable of being provided for a Frequency Co-optimised Essential System Service.

Standing Enablement Minimum: In relation to a Facility and a Frequency Co-optimised Essential System Service, the minimum level of Injection or Withdrawal for which a response is capable of being provided for a Frequency Co-optimised Essential System Service.

Standing High Breakpoint: For a Facility and a Frequency Co-optimised Essential System Service, the maximum level of generation (in MW) above which the Facility cannot provide its maximum quantity of that Frequency Co-optimised Essential System Service.

Standing Low Breakpoint: For a Facility and a Frequency Co-optimised Essential System Service, the minimum level of generation (in MW) below which the Facility cannot provide its maximum quantity of that Frequency Co-optimised Essential System Service.

Standing Maximum Downwards Ramp Rate: The Facility's maximum physical ability, in MW per minute, on a linear basis, to decrease the magnitude of Injection or increase the magnitude of Withdrawal on the receipt of a Dispatch Instruction.

Standing Maximum Upwards Ramp Rate: The Facility's maximum physical ability, in MW per minute, on a linear basis, to increase the magnitude of Injection or decrease the magnitude of Withdrawal on the receipt of a Dispatch Instruction.

Standing Real-Time Market Submission: A default Real-Time Market Submission for a Registered Facility and Market Service for Dispatch Intervals starting at specified times on Trading Days of a specified type.

Standing STEM Submission: A submission by a Market Participant to AEMO made in accordance with clause 6.3C.

Start Decision Cutoff: For a Registered Facility and Dispatch Interval, the latest time before the start of the Dispatch Interval at which a Market Participant could decide to change a quantity of Available Capacity to In-Service Capacity so as to make the capacity ready for dispatch in that Dispatch Interval, as reflected in its Real-Time Market Submission.

State Electricity Objective: The objectives set out in Section 3A(1) of the Electricity Industry Act and repeated in clause 1.2.1 of these ESM Rules.

Statement of Corporate Intent: The statement of corporate intent as agreed by the Minister or otherwise deemed to apply by Division 2 of Part 5 of the Electricity Corporations Act.

Statement of Opportunities Report: A report prepared in accordance with clause 4.5.13 presenting the results of the Long Term PASA study, including a statement of required investment if Power System Security and Power System Reliability are to be maintained.

STEM: See Short Term Energy Market.

STEM Auction: The process, described in clause 6.9, used to clear the STEM.

STEM Bid: A bid to purchase energy from AEMO via the STEM Auction for a Trading Interval.

STEM Clearing Price: Has the meaning given in clause 6.9.7.

STEM Clearing Quantity: Has the meaning given in clause 6.9.8.

STEM Offer: An offer to provide energy through the STEM Auction for a Trading Interval determined by AEMO in accordance with clause 6.9.3.

STEM Peak Reserve Capacity Obligation Quantity: An estimate of the Peak Reserve Capacity Obligation Quantity for a Scheduled Facility or Semi-Scheduled Facility, or a Separately Certified Component of a Scheduled Facility or Semi-Scheduled Facility, for a Dispatch Interval that is determined by AEMO on the Scheduling Day for the relevant Trading Day in accordance with clause 6.3A.3(h).

~~**STEM Reserve Capacity Obligation Quantity**: An estimate of the Reserve Capacity Obligation Quantity for a Scheduled Facility or Semi-Scheduled Facility, or a Separately Certified Component of a Scheduled Facility or Semi-Scheduled Facility, for a Dispatch Interval that is determined by AEMO on the Scheduling Day for the relevant Trading Day in accordance with clause 6.3A.3(h).~~

STEM Results Deadline: Means 11:30 AM on the Scheduling Day for the Trading Day, or such other time as may be notified by AEMO under clause 6.4.6B.

STEM Submission: A submission by a Market Participant to AEMO made in accordance with clause 6.3B containing the information set out in, and in the format prescribed by, clause 6.6.

STEM Submission Cutoff: Means 10:50 AM on the Scheduling Day for the Trading Day, or such other time as may be notified by AEMO under clause 6.4.6B.

STEM Submission Information Window: For a Scheduling Day, the period of eight consecutive Trading Days starting with the Trading Day for the Scheduling Day.

STEM Submission Results Window: For a point in time in the 24-hour period starting at 8:30 AM on a Scheduling Day, the period of eight consecutive Trading Days starting with the Trading Day for the Scheduling Day.

Storage Works: Has the meaning given to it in the Electricity Industry Act.

Supplementary Capacity Contract: An agreement under which a service provider agrees to supply one or more Eligible Services to AEMO, entered into in accordance with section 4.24.

Suspension Event: An event described in clause 9.19.

Suspension Notice: A notice issued by AEMO in accordance with section 2.32 or clause 9.19.7 that a Market Participant is suspended from trading in the Wholesale Electricity Market.

SWIS: See the South West interconnected system.

SWIS Frequency: Means the frequency of the SWIS, or an Island (as applicable).

SWIS Frequency Operating Standards: Means the standards set out in Table 1, Appendix 13.

SWIS Operating Standards: The standards for the operation of the SWIS including the frequency and time error standards and voltage standards set out in clause 3.1.

SWIS Operating State: One or any of the Reliable Operating State, Satisfactory Operating State, Secure Operating State or Emergency Operating State.

Synergy: The body corporate established under section 4(1)(a) of the Electricity Corporations Act.

System Inertia: The total Inertia provided by Registered Facilities, Loads, Network equipment and other equipment connected to the SWIS.

System Operation Function: The functions referred to in clauses 2.1A.1A, 2.1A.2(cA) and 2.1A.2(iA), together with any function conferred on AEMO under these ESM Rules in respect of system operation.

System Restart Plan: The plan described in clause 3.7.4.

System Restart Service: The ability of a Registered Facility with an energy producing system to start without requiring energy to be supplied from a Network to assist in the re-energisation of the SWIS in the event of a system shut down or major supply disruption.

System Restart Service Contract: A contract between AEMO and a Market Participant for the provision of a System Restart Service to AEMO by that Market Participant's Registered Facility.

System Restart Service Provider: A Market Participant who provides System Restart Service to AEMO under a System Restart Service Contract.

System Restart Standard: The standard, determined by AEMO under clause 3.7.1 and described in clause 3.7.2, for procurement of System Restart Services.

System Size: In respect of a Facility, a quantity equalling the sum of:

(a) the minimum of:

i. the Declared Sent Out Capacity at the Connection Point for the Facility; and

ii. the sum over all energy producing equipment comprising the Energy Producing System at the Facility (calculated for each individual piece of energy equipment), of each energy producing equipment's maximum nameplate capacity expressed in MW; and

(b) if the Facility contains no Electric Storage Resource, then zero, otherwise the minimum of:

i. the absolute value of the maximum Withdrawal capacity for all Electric Storage Resource units, expressed in MW; or

ii. the absolute value of the Contract Maximum Demand in MW for the Connection Point of the Facility.

System Strength: Is a measure of how resilient the voltage waveform is to disturbances such as those caused by a sudden change in Load or an Energy Producing System, the switching of a Network element, tapping of transformers and other types of faults.

System Strength Requirements: Means, the requirements identified to maintain sufficient System Strength on the SWIS, as determined by the processes specified in the WEM Procedure referred to in clause 3.2.7.

~~**Targeted Reserve Capacity Cost:** The cost defined under clause 4.28.1(a).~~

Technical Envelope: The limits for the operation of the SWIS in each SWIS Operating State as established and modified by AEMO in accordance with clause 3.2.6.

Technical Requirement: Means each Technical Requirement for a Transmission Connected Generating System specified in Appendix 12.

Technical Rules: has the meaning given in section 1.3 of the Access Code.

Technical Rules Change Proposal: Means a proposal made in accordance with the procedure developed pursuant to section 12.50A of the Access Code and submitted to the Economic Regulation Authority proposing that the Technical Rules be amended.

Technical Rules Committee: Means the committee established under section 12.16 of the Access Code.

~~**Temperature Dependent Load**: A Non-Dispatchable Load that is not a Non-Temperature Dependent Load.~~

Test: Means a Commissioning Test or a Reserve Capacity Test.

Test Plan: Means a plan approved under Chapter 3 in relation to a Test.

Thermal Network Limit: Means a Network Limit that describes the maximum capacity for electrical throughput of a particular Network element due to temperature or related effects.

Third Party Aggregator: A person, other than the Market Participant for a Non-Dispatchable Load, who controls the operation of an Inverter Energy System in the Non-Dispatchable Load under an agreement with the Market Participant's customer.

Third Party Aggregator Framework: The document published by Synergy under clause 2.34C.1, as amended under clause 2.34C.2.

Third Party Aggregator Model Contract: The document published by Synergy under clause 2.34C.8, as amended under clause 2.34C.9.

Tolerance Range: Means the amount, in MW, determined by AEMO under clause 2.13.16 of the ESM Rules.

Total Amount: Has the meaning given in clause 9.20.3.

Total Sent Out Generation: Means, for a Trading Interval, the sum over all Scheduled Facilities, Semi-Scheduled Facilities and Non-Scheduled Facilities of each Facility's Sent Out Metered Schedule for the Trading Interval or zero (whichever is higher for that Facility).

Trading Conduct Guideline: The guideline published by the Economic Regulation Authority under clause 2.16D.1(b), which may be amended in accordance with 2.16D.2.

Trading Day: A period of 24 hours commencing at 8:00 AM on any day after Energy Market Commencement, except where AEMO declares that part of a Trading Day is to be treated as a full Trading Day under clause 9.1.2, in which case that part is a Trading Day.

Trading Interval: A period of 30 minutes commencing on the hour or half-hour during a Trading Day.

~~**Trading Interval Capacity Cost Refund**: The refund a Market Participant holding Capacity Credits incurs in a Trading Interval, as calculated in accordance with clause 4.26.2F.~~

~~**Trading Interval Refund Rate**: The refund rate applicable in a Trading Interval, and in respect of a Facility, as calculated in accordance with clause 4.26.1(a).~~

Trading Limit: Has the meaning given in clause 2.39.1.

Trading Margin: Has the meaning given in clause 2.41.1.

Trading Month: A period from the beginning of a Trading Day commencing on the first day of a calendar month to the end of the Trading Day that finishes on the first day of the following calendar month.

Trading Week: A period of seven days commencing at 8:00 AM on the day of the week on which the New WEM Commencement Day commences.

Tranche 1 Commencement Date: Means the Trading Day commencing at 8:00 AM on 1 February 2021.

Transitional Component: Means a Separately Certified Component that was part of a Transitional Facility at the time that Facility was assigned Capacity Credits for the 2018 Reserve Capacity Cycle.

Transitional Daily Flexible Reserve Capacity Price: In respect of a Reserve Capacity Cycle, the price per Flexible Capacity Credit for a Trading Day calculated in accordance with clause 4.29.1G for a Transitional Facility or Transitional Component.

Transitional Daily Peak Reserve Capacity Price: In respect of a Reserve Capacity Cycle, the price per Peak Capacity Credit for a Trading Day calculated in accordance with clause 4.29.1B for a Transitional Facility or Transitional Component.

Transitional Facility: Means a Facility (other than a Demand Side Programme) that was assigned Capacity Credits for the 2018 Reserve Capacity Cycle.

Transitional Procedure: A procedure that, in accordance with these ESM Rules, is:

(a) required to be developed prior to the New WEM Commencement Day; and

(b) deemed to be a WEM Procedure from the New WEM Commencement Day, or such other date as specified in these ESM Rules.

Transitional Reserve Capacity Cycle: Means either:

(a) the 2019 Reserve Capacity Cycle; or

(b) any of the subsequent Reserve Capacity Cycles up to and including the 2028 Reserve Capacity Cycle.

Transmission Connected Generating System: Means generating works connected to a transmission system in the SWIS, including an unregistered Energy Producing System supplying an Intermittent Load.

Transmission Loss Factor: A factor representing the average marginal electrical losses incurred when electricity is transmitted through a transmission network.

Transmission Loss Factor Class: A group of one or more connection points with common characteristics assigned a common Transmission Loss Factor.

Transmission Node: A location on a transmission system identified for the purposes of aggregating transfer of electricity through that part of the transmission system.

Transmission Node Identifier: The code identifying the relevant Transmission Node.

Transmission System Plan: A plan prepared and published by a Network Operator in respect of its Network in accordance with section 4.5B.

Trigger Event: Means one or more circumstances specified in a Negotiated Generator Performance Standard, the occurrence of which requires a Market Participant responsible for a Transmission Connected Generating System to undertake required actions to achieve an agreed outcome and or achieve an agreed higher level of performance than the existing Registered Generator Performance Standard applicable in respect of one or more Technical Requirements.

UFLS Requirements: The functional requirements for the SWIS under frequency load shedding system published by AEMO in accordance with section 3.6, and as may be amended from time to time in accordance with section 3.6.

UFLS Specification: The document referred to in clause 3.6.5 containing the Network Operator's design specification for its under frequency load shedding system in respect of its Network, which must meet the UFLS Requirements.

Unadjusted Baseline Method: A variant of the Relevant Demand methodology in Appendix 10 where the Relevant Demand of a Demand Side Programme is calculated under step 4.1(b) of Appendix 10.

Unconstrained Injection Forecast: The expected MW level of Injection at the end of a Dispatch Interval for a Semi-Scheduled Facility or Non-Scheduled Facility, assuming that the Facility will not be subject to a Dispatch Instruction or direction from AEMO that limits its

Injection, and allowing for expected conditions, commitment and control intentions and the effect of any Outages that have not been rejected for the Facility.

Unconstrained Withdrawal Forecast: The expected MW level of Withdrawal at the end of a Dispatch Interval for a Semi-Scheduled Facility or Non-Scheduled Facility, assuming that the Facility will not be subject to a Dispatch Instruction or direction from AEMO that limits its Withdrawal, and allowing for expected conditions, commitment and control intentions and the effect of any Outages that have not been rejected for the Facility.

Uplift Payment Mispricing Trigger: For a Facility and a Dispatch Interval, the value calculated in clause 9.9.9.

Week-Ahead Schedule: A forecast of Market Clearing Prices, Dispatch Targets Dispatch Caps, Dispatch Forecasts and Essential System Services Enablement Quantities for each Pre-Dispatch Interval in the Week-Ahead Schedule Horizon.

Week-Ahead Schedule Horizon: The next 336 Pre-Dispatch Intervals after a Pre-Dispatch Interval.

WEM Procedure: The procedures developed by AEMO, the Economic Regulation Authority, the Coordinator and a Network Operator, as applicable, in accordance with section 2.9 as amended in accordance with the Procedure Change Process.

WEM Regulations: The ESM Regulations.

WEM Rules: The Electricity System and Market Rules.

WEM Technical Standard: A provision of the ESM Rules, identified in clause 2.8.14.

WEM Website: Has the meaning given in the Regulations, and includes any website operated by AEMO to carry out its functions under these ESM Rules.

Western Australian Government's Energy Transformation Strategy: Means the Western Australian Government's Energy Transformation Strategy as announced on 6 March 2019 to be delivered by the Energy Transformation Taskforce in accordance with its Terms of Reference (as may be amended).

Western Power: The body corporate established by section 4(1)(b) of the Electricity Corporations Act.

Western Power Corporation: The body corporate established under the Electricity Corporation Act (1994) as Western Power Corporation.

Western Standard Time: Co-ordinated Universal Time + 8 hours.

Whole of System Plan: A plan prepared and published by the Coordinator in accordance with section 4.5A.

Wholesale Electricity Market: The market established under section 122 of the Electricity Industry Act.

Wholesale Electricity Market and Constrained Network Access Reform: Means:

(a) any proposed change to the operation of the Wholesale Electricity Market or related network access arrangements, or the regulatory regime applying to the Wholesale Electricity Market (including the Electricity Industry Act, the Regulations and these ESM Rules); and

(b) any related activity undertaken by AEMO in connection with implementation of the DER Roadmap,

that has been endorsed by the Minister (whether or not legislation has been made to implement it).

Wholesale Market Objectives: The State Electricity Objective.

Withdrawal: The quantity of power or energy received from a Network, as measured:

(a) for a Scheduled Facility, Semi-Scheduled Facility or Non-Scheduled Facility with a single Measurement Point, at the Measurement Point;

(b) for a Scheduled Facility, Semi-Scheduled Facility or Non-Scheduled Facility with multiple Measurement Points with the same Electrical Location, at the Electrical Location;

(c) [Blank]

(d) for a Non-Dispatchable Load, at the Measurement Point; and

(e) for a Demand Side Programme or Interruptible Load, as the minimum of:

i. zero; and

ii. the sum of the Injection and Withdrawal quantities of the Associated Loads of the Demand Side Programme,

which is measured in instantaneous MW unless specified as MWh over a time period, and is represented as a negative number or zero.

Working Group: A working group as established under clause 2.3.17 of these ESM Rules.

Appendix 1: Standing Data

This Appendix describes the Standing Data to be maintained by AEMO for use by AEMO in market processes and in dispatch processes.

Standing Data required to be provided as a pre-condition of Market Participant registration and which Market Participants are to update as necessary, is described in Appendix 1(a).

Standing Data required to be provided as a pre-condition of Facility registration and which Rule Participants are to update as necessary, is described in Appendix 1(b) to 1(f).

Standing Data not required to be provided as a pre-condition of Facility registration but which AEMO is required to maintain, and which Rule Participants are to update as necessary, includes the data described in Appendix 1(g) to 1(i).

(a) For each Market Participant, the maximum Loss Factor adjusted quantity of energy, in units of MWh, that could be consumed during a Trading Interval by the Market Participant's Registered Facilities and Non-Dispatchable Loads.

(b) For a Scheduled Facility:

i. the total nameplate capacity of the Facility's Energy Producing System, expressed in MW;

ii. the nameplate capacity of each Facility Technology Type in the Facility, excluding Loads;

iii. the System Size;

iv. if the Facility is a Small Aggregation;

v. the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from the Facility under optimal conditions, expressed in MW;

vA. the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from Non-Intermittent Generating Systems in the Facility under optimal conditions, expressed in MW;

vB. the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from Intermittent Generating Systems in the Facility under optimal conditions, expressed in MW;

vC. the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from Electric Storage Resources in the Facility under optimal conditions, expressed in MW;

vD. the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from Electric Storage Resources in the Facility under optimal conditions across the Peak Electric Storage Resource Obligation Duration, expressed in MW;

~~vD. the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply across the Electric Storage Resource Obligation Duration to the relevant Network from Electric Storage Resources in the Facility under optimal conditions, expressed in MW;~~

vi. the maximum Withdrawal capacity of the Facility under optimal conditions, expressed in MW;

vii. the dependence of sent out capacity on temperature at the location of the Facility;

viii. the method to be used for determining the ambient temperature at the site of the Facility (where if no method is specified, a constant temperature of 41 degrees Celsius will be assumed);

ix. if the Facility has a Separately Certified Component that is a Non-Intermittent Generating System, the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from the Non-Intermittent Generating System when it is operated normally at an ambient temperature of:

1. 41 degrees Celsius; and

2. 45 degrees Celsius;

x. if the Facility has a Separately Certified Component that is a Non-Intermittent Generating System, the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from the Non-Intermittent Generating System under optimal conditions, expressed in MW;

xA. if the Facility has a Separately Certified Component that is an Intermittent Generating System, the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from the Intermittent Generating System under optimal conditions, expressed in MW;

xB. if the Facility has a Separately Certified Component that is a Non-Intermittent Generating System, the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from the Non-Intermittent Generating System under optimal conditions, while

meeting the requirements determined under clause 4.10.1A(a)(i), expressed in MW;

xi. if the Facility has a Separately Certified Component that is an Electric Storage Resource, the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from the Electric Storage Resource when it is operated normally at an ambient temperature of:

1. 41 degrees Celsius; and

2. 45 degrees Celsius;

xii. if the Facility has a Separately Certified Component that is an Electric Storage Resource, the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply across the Peak Electric Storage Resource Obligation Duration to the relevant Network from the Electric Storage Resource under optimal conditions, expressed in MW;

xiiA. if the Facility has a Separately Certified Component that is an Electric Storage Resource, the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from the Electric Storage Resource under optimal conditions, across the Peak Electric Storage Resource Obligation Duration, while meeting the requirements determined under clause 4.10.1A(a)(iii), expressed in MW;

xiii. if the Facility has a Separately Certified Component that is an Electric Storage Resource, the minimum Charge Level capability of the Electric Storage Resource;

xiv. details of the fuel or fuels that each Non-Intermittent Generating System in the Facility can use, including dual fuel capabilities and the process for changing fuels;

xv. the dependence of capacity on the type of fuel used by each Non-Intermittent Generating System in the Facility for each fuel described in Appendix 1(b)(xiv);

xvi. details of any potential energy limits of the Facility;

xviA. if the Facility comprises only an Electric Storage Resource, whether the Market Participant requires AEMO to include Constraint Equations in the Dispatch Algorithm under clause 7.5.10 relating to restrictions on the simultaneous dispatch of energy and Frequency Co-optimised Essential System Service;

~~xviA. if the Facility comprises only an Electric Storage Resource, whether the Market Participant requires AEMO to include Constraint Equations in the Dispatch Algorithm under clause 7.5.10 relating to~~

~~restrictions on the simultaneous dispatch of energy and Frequency Co-optimised Essential System Service;~~

xvii. if the Facility is a Fast Start Facility;

xviii. the minimum time to synchronisation for the Facility from each of the following states, if applicable:

1. cold;

2. warm; and

3. hot,

and the number of hours that must have elapsed since the Facility last ran for it to be considered in each of these states;

xviiiA. the minimum time to operation at the minimum stable loading level for each Facility Technology Type from each of the following states, if applicable:

1. cold;

2. warm; and

3. hot,

and the number of hours that must have elapsed since the Facility Technology Type last ran for it to be considered in each of these states;

xix. the minimum time before each Facility Technology Type in the Facility can be restarted after it is shut down, excluding Loads;

xixA. the minimum time before each Facility Technology Type in the Facility can be shut down after it is started, excluding Loads;

xx. the minimum stable loading level of the Facility, expressed in sent out MW;

xxi. the minimum dispatchable loading level of the Facility, expressed in sent out MW;

xxii. the minimum physical response time before the Facility can begin to respond to a Dispatch Instruction, when the Facility is running;

xxiii. any output range between minimum dispatchable loading level and nameplate capacity in which the Facility is incapable of stable or safe operation;

xxiiiA. the output range over which the Facility and each Separately Certified Component is capable of meeting the requirements for Flexible Capacity determined under clause 4.10.1A(a);

xxiv. the minimum load at the Measurement Point of the Facility that will automatically trip off if the Facility fails, expressed in MW;

xxv. sub-transient, transient and steady state impedances (positive, negative and zero sequence) for the Facility;

xxvi. the Standing Maximum Upwards Ramp Rate;

xxvii. the Standing Maximum Downwards Ramp Rate;

xxviii. the emergency upwards ramp rate;

xxix. the emergency downwards ramp rate;

xxx. the overload Injection capacity of the Facility, if any, expressed in MW;

xxxi. the overload Withdrawal capacity of the Facility, if any, expressed in MW;

xxxii. the AGC capabilities of the Facility;

xxxiii. the black start capability of the Facility;

xxxiv. the short circuit capability of Facility equipment;

xxxv. evidence that the communication and control systems required by section 2.35 are in place and operational;

xxxvi. the single line diagram for the Facility, including the locations of transformers, switches, operational and settlement meters;

xxxvii. the network node or nodes at which the Facility can connect;

xxxviii. the Transmission Node Identifier;

xxxix. the National Meter Identifier of each metering point for the Facility, where applicable; and

xl. the Metering Data Agent for the Facility.

(c) For a Semi-Scheduled Facility:

i. the total nameplate capacity of the Facility's Energy Producing System, expressed in MW;

ii. the nameplate capacity of each Facility Technology Type in the Facility, excluding Loads;

iii. the System Size;

iv. if the Facility is a Small Aggregation;

v. the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from the Facility under optimal conditions, expressed in MW;

vA. the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from Non-Intermittent Generating Systems in the Facility under optimal conditions, expressed in MW;

vB. the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from Intermittent Generating Systems in the Facility under optimal conditions, expressed in MW;

vC. the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from Electric Storage Resources in the Facility under optimal conditions, expressed in MW;

vD. the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from Electric Storage Resources in the Facility under optimal conditions across the Electric Storage Resource Obligation Duration, expressed in MW;

~~vD. the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply across the Electric Storage Resource Obligation Duration to the relevant Network from Electric Storage Resources in the Facility under optimal conditions, expressed in MW;~~

vi. the maximum Withdrawal capacity of the Facility under optimal conditions, expressed in MW;

vii. the dependence of sent out capacity on temperature at the location of the Facility, if applicable;

viii. the method to be used for determining the ambient temperature at the site of the Facility (where if no method is specified, a constant temperature of 41 degrees Celsius will be assumed);

ix. if the Facility has a Separately Certified Component that is a Non-Intermittent Generating System, the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from the Non-Intermittent Generating System when it is operated normally at an ambient temperature of:

1. 41 degrees Celsius; and

2. 45 degrees Celsius;

x. if the Facility has a Separately Certified Component that is a Non-Intermittent Generating System, the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from the Non-Intermittent Generating System under optimal conditions, expressed in MW;

xA. if the Facility has a Separately Certified Component that is an Intermittent Generating System, the maximum sent out capacity,

net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from the Intermittent Generating System under optimal conditions, expressed in MW;

xB. if the Facility has a Separately Certified Component that is a Non-Intermittent Generating System, the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from the Non-Intermittent Generating System under optimal conditions, while meeting the requirements determined under clause 4.10.1A(a)(i), expressed in MW;

xi. if the Facility has a Separately Certified Component that is an Electric Storage Resource, the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from the Electric Storage Resource when it is operated normally at an ambient temperature of:

1. 41 degrees Celsius; and

2. 45 degrees Celsius;

xii. if the Facility has a Separately Certified Component that is an Electric Storage Resource, the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from the Electric Storage Resource under optimal conditions across the Electric Storage Resource Obligation Duration, expressed in MW;

xiiA. if the Facility has a Separately Certified Component that is an Electric Storage Resource, the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply across the Peak Electric Storage Resource Obligation Duration to the relevant Network from the Electric Storage Resource under optimal conditions, while meeting the requirements determined under clause 4.10.1A(a)(iii), expressed in MW;

~~xii. if the Facility has a Separately Certified Component that is an Electric Storage Resource, the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply across the Electric Storage Resource Obligation Duration to the relevant Network from the Electric Storage Resource under optimal conditions, expressed in MW;~~

xiii. if the Facility has a Separately Certified Component that is an Electric Storage Resource, the minimum Charge Level capability of the Electric Storage Resource;

xiv. details of the fuel or fuels that each Non-Intermittent Generating System in the Facility can use, including dual fuel capabilities and the process for changing fuels;

xv. the dependence of capacity on the type of fuel used by each Non-Intermittent Generating System in the Facility for each fuel described in Appendix 1(c)(xiv);

xvi. if the Facility is a Fast Start Facility;

xvii. the minimum time to synchronisation for the Facility from each of the following states, if applicable:

1. cold;

2. warm; and

3. hot,

and the number of hours that must have elapsed since the Facility last ran for it to be considered in each of these states;

xviiA. the minimum time to operation at the minimum stable loading level for each Facility Technology Type from each of the following states, if applicable:

1. cold;

2. warm; and

3. hot,

and the number of hours that must have elapsed since the Facility Technology Type last ran for it to be considered in each of these states;

xviii. the minimum time before each Facility Technology Type in the Facility can be restarted after it is shut down, excluding Loads;

xviiiA. the minimum time before each Facility Technology Type in the Facility can be shut down after it is started, excluding Loads;

xix. the minimum stable loading level of the Facility, expressed in sent out MW;

xx. the minimum dispatchable loading level of the Facility, expressed in sent out MW;

xxi. the minimum physical response time before the Facility can begin to respond to a Dispatch Instruction, when the Facility is running;

xxiA. the minimum time required to ramp down from the minimum stable loading level to zero output;

xxii. any output range between minimum dispatchable loading level and nameplate capacity in which the Facility is incapable of stable or safe operation, if applicable;

xxiiA. the output range over which the Facility and each Separately Certified Component is capable of meeting the requirements for Flexible Capacity determined under clause 4.10.1A(a);

xxiii. the minimum load at the Measurement Point of the Facility that will automatically trip off if the Facility fails, expressed in MW;

xxiv. sub-transient, transient and steady state impedances (positive, negative and zero sequence) for the Facility;

xxv. the Standing Maximum Upwards Ramp Rate;

xxvi. the Standing Maximum Downwards Ramp Rate;

xxvii. the emergency upwards ramp rate, if applicable;

xxviii. the emergency downwards ramp rate, if applicable;

xxix. the overload Injection capacity of the Facility, if any, expressed in MW;

xxx. the overload Withdrawal capacity of the Facility, if any, expressed in MW;

xxxi. the short circuit capability of Facility equipment;

xxxii. evidence that the communication and control systems required by section 2.35 are in place and operational;

xxxiii. the single line diagram for the Facility, including the locations of transformers, switches, operational and settlement meters;

xxxiv. the network node or nodes at which the Facility can connect;

xxxv. the Transmission Node Identifier;

xxxvi. the National Meter Identifier of each metering point for the Facility, where applicable; and

xxxvii. the Metering Data Agent for the Facility.

(d) for a Non-Scheduled Facility:

i. the total nameplate capacity of the Facility's Energy Producing System, expressed in MW;

ii. the nameplate capacity of each Facility Technology Type in the Facility, excluding Loads;

iii. the System Size;

iv. if the Facility is a Small Aggregation;

v. the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from the Facility under optimal conditions, expressed in MW;

vA. the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from Non-Intermittent Generating Systems in the Facility under optimal conditions, expressed in MW;

vB. the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from Intermittent Generating Systems in the Facility under optimal conditions, expressed in MW;

vC. the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from Electric Storage Resources in the Facility under optimal conditions, expressed in MW;

vD. the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from Electric Storage Resources in the Facility under optimal conditions across the Electric Storage Resource Obligation Duration, expressed in MW;

~~vD. the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply across the Electric Storage Resource Obligation Duration to the relevant Network from Electric Storage Resources in the Facility under optimal conditions, expressed in MW;~~

vi. the maximum Withdrawal capacity of the Facility under optimal conditions, expressed in MW;

vii. the dependence of sent out capacity on temperature at the location of the Facility, if applicable;

viii. details of the fuel or fuels that each Non-Intermittent Generating System in the Facility can use, including dual fuel capabilities and the process for changing fuels;

ix. the minimum dispatchable loading level of the Facility, expressed in sent out MW;

x. the minimum physical response time before the facility can begin to respond to a direction from AEMO to change its output when the Facility is running;

xi. the minimum load at the Measurement Point of the Facility that will automatically trip off if the Facility fails, expressed in MW;

xii. sub-transient, transient and steady state impedances (positive, negative and zero sequence) for the Facility;

xiii. the Standing Maximum Upwards Ramp Rate;

xiv. the Standing Maximum Downwards Ramp Rate;

xv. the emergency upwards ramp rate, if applicable;

xvi. the emergency downwards ramp rate, if applicable;

xvii. the overload Injection capacity of the Facility, if any, expressed in MW;

xviii. the overload Withdrawal capacity of the Facility, if any, expressed in MW;

xix. the short circuit capability of equipment;

xx. evidence that the communication and control systems required by section 2.35 are in place and operational;

xxi. the single line diagram for the, including the locations of transformers, switches, operational and settlement meters;

xxii. the network node or nodes at which the Facility can connect;

xxiii. the Transmission Node Identifier;

xxiv. the National Meter Identifier of each metering point for the Facility, where applicable; and

xxv. the Metering Data Agent for the Facility.

(e) For an Interruptible Load:

i. evidence that the communication and control systems required by section 2.35 are in place and operational;

ii. details of the real-time telemetry capabilities;

iii. the short circuit capability of Facility equipment;

iv. the single line diagram for the Facility, including the locations of transformers, switches, operational and settlement meters, if applicable;

v. the network nodes at which the Associated Loads of the Facility can connect; and

vi. the Transmission Node Identifier.

(f) For a Demand Side Programme:

i. the maximum number of hours per day that the Facility will be available to provide Reserve Capacity if issued a Dispatch Instruction;

ii. the Trading Intervals where the Demand Side Programme can be curtailed;

iii. any restrictions on the availability of the Demand Side Programme;

iv. the minimum notice period required for dispatch under clause 7.6.15 of the Facility;

v. evidence that the communication and control systems required by clause 2.35 are in place and operational;

vi. details of the real-time telemetry capabilities of the Facility; and

vii. the Transmission Node Identifier.

(g) For a Market Participant serving Non-Dispatchable Loads containing Intermittent Loads:

i. the identity of the metering points measuring the Intermittent Loads;

ii. for each metering point identified in Appendix 1(g)(i), the maximum allowed level of Intermittent Load;

iii. for each metering point identified in Appendix 1(g)(i), the maximum level of net consumption at that meter which is not separately metered and which is not Intermittent Load; and

iv. for each metering point identified in Appendix 1(g)(i), the separately metered Energy Producing Systems and Loads behind that meter which are not to be included in the definition of that Intermittent Load.

(h) For each Facility accredited to provide a Frequency Co-optimised Essential System Service, the Frequency Co-optimised Essential System Service Accreditation Parameters.

(i) For each Facility accredited for RoCoF Ride-Through Capability, the RoCoF Ride-Through Capability of the Facility determined by AEMO.

Appendix 2: [Blank]

Appendix 2A: Contingency Reserve Raise and Additional RoCoF Requirement Cost Share Calculation Method

1. Interpretation

1.1 Where anything is to be determined, calculated or done in this Appendix 2A, then except where otherwise stated, AEMO will determine, calculate or do, as the case may be, those things.

1.2 AEMO must calculate a Market Participant p's total share of procuring Contingency Reserve Raise and the Additional RoCoF Requirement component of RoCoF Control Service in Dispatch Interval DI by following each of the steps set out in the rest of this Appendix 2A.

1.3 In this Appendix 2A, "CR Facility Name" means:

(a) for a CR Facility that is a Scheduled Facility, Semi-Scheduled Facility or Non-Scheduled Facility, the name of the Facility recorded by AEMO in accordance with clause 2.34B.1(e); and

(b) for a CR Facility that is a Non-Dispatchable Load containing an Intermittent Load, the name of the Intermittent Load recorded by AEMO in accordance with clause 2.34B.1(f).

2. Define Facility Sets and Facility Contingencies

2.1 Determine CRFacilities(DI) as the set of all CR Facilities in Dispatch Interval DI.

2.2 For each member f of CRFacilities(DI), determine SingleFacilityRisk(f,DI) as the Single Facility Raise Risk for CR Facility f in Dispatch Interval DI as published under clause 7.13.1EA(c)(i).

2.3 Determine CRApplicableFacilities(DI), which comprises those members f of CRFacilities(DI) for which:

SingleFacilityRisk(f,DI)≥10MW

3. Applicable Facility Shares

3.1 Rank the CR Facilities in the set CRApplicableFacilities(DI) in Dispatch Interval DI in the ascending order of the value of SingleFacilityRisk(f,DI) as determined in clause 2.2 of this Appendix 2A. If two or more CR Facilities in that set have the same SingleFacilityRisk(f,DI) value, AEMO shall rank those CR Facilities, as between each other, in ascending alphanumeric order of CR Facility Name. The CR Facility with the lowest SingleFacilityRisk(f,DI) value will have rank(f, DI) = 1,

and the CR Facility with the highest SingleFacilityRisk(f,DI) value will have rank(f, DI) = n, where n is the number of CR Facilities in the set CRApplicableFacilities(DI).

3.2 Calculate RunwayComponentMW(DI), which is the SingleFacilityRisk(f,DI) of the Facility which has the rank(f,DI) = n as determined in clause 3.1 of this Appendix 2A.

3.3 Determine for each CR Facility f in CRApplicableFacilities(DI), its runway share of the runway component of procuring Contingency Reserve Raise and the Additional RoCoF Control Requirement of RoCoF Control Service as follows:

$$\text{CRFacilityRunwayShare}(f,DI)=\sum_{i=1}^{\text{rank}(f,DI)}\frac{\text{CRFacilityMW}(i,DI)\ -\ \text{CRFacilityMW}(i\ -1,\ DI)}{\text{CRFacilityMW}(n,DI)\times(n+1-i)}$$

where:

(a) CRFacilityMW(i,DI) is the SingleFacilityRisk(x,DI) value of CR Facility x with rank(x,DI) = i in Dispatch Interval DI, where CRFacilityMW(0,DI)=0, and x∈CRApplicableFacilities(DI);

(b) rank(f,DI) is the rank of CR Facility f in Dispatch Interval DI as determined in clause 3.1 of this Appendix 2A; and

(c) n is the number of CR Facilities in the set CRApplicableFacilities(DI) in Dispatch Interval DI.

4. Non-Runway Contingency Shares

4.1. Calculate NonRunwayComponentMW(DI) as follows:

NonRunwayComponentMW(DI)=

max(0,LargestSupplyContingencyMW(DI) - RunwayComponentMW(DI))

where:

(a) LargestSupplyContingencyMW(DI) is the Largest Credible Supply Contingency in Dispatch Interval DI; and

(b) RunwayComponentMW(DI) is the quantity determined in clause 3.2 of this Appendix 2A.

4.2. If NonRunwayComponentMW(DI) is equal to zero then go to clause 5.1 of this Appendix 2A.

4.3. Determine ApplicableFRContingencies(DI), which is the set of Facility Raise Contingencies which set the Largest Credible Supply Contingency in Dispatch Interval DI.

4.4. Determine ApplicableNRContingencies(DI), which is the set of Network Raise Contingencies which set the Largest Credible Supply Contingency in Dispatch Interval DI.

4.5. Calculate rm(DI) as the sum of the number of members in ApplicableFRContingencies(DI) and the number of members in ApplicableNRContingencies(DI).

4.6. For each member nc of ApplicableNRContingencies(DI), nc, perform the following steps:

(a) from the information published under clause 7.13.1EA(c)(iiA)(2), determine CauserCRFacilities(nc,DI), which is the set of CR Facilities f for which:

NCFacilityRaiseRisk(f,nc,DI) > 0

where:

i. NCFacilityRaiseRisk(f,nc,DI) is the Network Facility Raise Risk for CR Facility f and Network Raise Contingency nc in Dispatch Interval DI as published under clause 7.13.1EA(c)(iiA)(2);

(b) determine NCTotalApplicableRisk(nc,DI) as follows:

NCTotalApplicableRisk(nc,DI)=

$$\max(\text{NRRisk}(nc,DI), \sum_{f \in \text{CauserCRFacilities}(nc,DI)} \text{NCFacilityRaiseRisk}(f,nc,DI))$$

where:

i. NRRisk(nc,DI) is the Network Raise Risk for Network Raise Contingency nc in Dispatch Interval DI as published under clause 7.13.1EA(c)(iiA)(1);

ii. NCFacilityRaiseRisk(f,nc,DI) is the Network Facility Raise Risk for CR Facility f and Network Raise Contingency nc in Dispatch Interval DI as published under clause 7.13.1EA(c)(iiA)(2); and

iii. $f \in$CauserCRFacilities(nc,DI) denotes all CR Facilities f in CauserCRFacilities(nc,DI); and

(c) determine for each CR Facility f, which is a member of CauserCRFacilities(nc,DI), its share of the non-runway component (attributable to Network Raise Contingency nc) of procuring Contingency Reserve Raise and the Additional RoCoF Control Requirement component of RoCoF Control Service in Dispatch Interval DI as follows:

$$\text{NCFacilityShare}(f,nc,DI)=\frac{\text{NCFacilityRaiseRisk}(f,nc,DI)}{\text{NCTotalApplicableRisk}(nc,DI)} \times \frac{1}{\text{rm}(DI)}$$

where:

i. NCFacilityRaiseRisk(f,nc,DI) is the Network Facility Raise Risk for CR Facility f and Network Raise Contingency nc in Dispatch Interval DI as published under clause 7.13.1EA(c)(iiA)(2);

ii. NCTotalApplicableRisk(nc,DI) is the quantity determined for Network Raise Contingency nc in Dispatch Interval DI in clause 4.7(b) of this Appendix 2A; and

iii. rm(DI) is the number determined for Dispatch Interval DI in clause 4.5 of this Appendix 2A.

4.7. Determine the cost share of procuring the non-runway component of Contingency Reserve Raise and the Additional RoCoF Control Requirement of RoCoF Control Service in Dispatch Interval DI that is allocated to Synergy's Non-Dispatchable Loads as follows:

NDLNonRunwayShare(DI)=

NDLNonRunwayShare(DI)=

$$1 - \sum_{nc \in ApplicableNRContingencies(DI)} \sum_{f \in CauserCRFacilities(nc,DI)} NCFacilityShare(f,nc,DI)$$

where:

(a) NCFacilityShare(f,nc,DI) is CR Facility f's cost share associated with Network Raise Contingency nc in Dispatch Interval DI as calculated in clause 4.6(c) of this Appendix 2A;

(b) nc∈ApplicableNRContingencies(DI) denotes all Network Raise Contingencies nc in ApplicableNRContingencies(DI); and

(c) f∈CauserCRFacilities(nc,DI) denotes all CR Facilities f in CauserCRFacilities(nc,DI).

5. Cost Shares

5.1 Calculate the cost shares associated with the non-runway and runway components of procuring Contingency Reserve Raise and the Additional RoCoF Control Requirement of RoCoF Control Service as follows:

(a) calculate the cost share associated with the non-runway component in Dispatch Interval DI as follows:

$$NonRunwayComponent(DI) = \frac{NonRunwayComponentMW(DI)}{LargestSupplyContingencyMW(DI)}$$

where:

i. NonRunwayComponentMW(DI) is the quantity determined for Dispatch Interval DI in clause 4.1 of this Appendix 2A; and

ii. LargestSupplyContingencyMW(DI) is the Largest Credible Supply Contingency in Dispatch Interval DI; and

(b) calculate the cost share associated with the runway component in Dispatch Interval DI as follows:

$$RunwayComponent(DI) = 1 - NonRunwayComponent(DI)$$

where:

i. NonRunwayComponent(DI) is the quantity determined in clause 5.1(a) of this Appendix 2A.

5.2 Calculate Market Participant p's total share of the cost of procuring Contingency Reserve Raise and the Additional RoCoF Requirement component of RoCoF Control Service in Dispatch Interval DI as follows:

$$CR_Cost_Share(p,DI) = \begin{cases} CRRunwayShare(p,DI), & \text{if } NonRunwayComponent(DI) = 0 \\ CRRunwayShare(p,DI) + CRNonRunwayShare(p,DI), & \text{otherwise} \end{cases}$$

where:

(a) CRRunwayShare(p,DI) is calculated as follows:

$$CRRunwayShare(p,DI) = RunwayComponent(DI) \times \sum_{f \in CRApplicableFacilities(p,DI)} CRFacilityRunwayShare(f,DI)$$

where:

i. RunwayComponent(DI) is the cost share associated with the runway component of procuring Contingency Reserve Raise and the Additional RoCoF Requirement component of RoCoF Control Service in Dispatch Interval DI calculated in clause 5.1(b) of this Appendix 2A;

ii. $f \in CRApplicableFacilities(p,DI)$ denotes each CR Facility f in CRApplicableFacilities(DI) that belongs to Market Participant p in Dispatch Interval DI; and

iii. CRFacilityRunwayShare(f,DI) is Facility f's runway share of the runway component of procuring Contingency Reserve Raise and the Additional RoCoF Control Requirement component of RoCoF Control Service in Dispatch Interval DI as calculated in clause 3.3 of this Appendix 2A;

(b) NonRunwayComponent(DI) is the cost share associated with the non runway component of procuring Contingency Reserve Raise and the Additional RoCoF Requirement component of RoCoF Control Service in Dispatch Interval DI calculated in clause 5.1(a) of this Appendix 2A; and

(c) CRNonRunwayShare(p,DI) is calculated as follows:

$$CRNonRunwayShare(p,DI) = NonRunwayComponent(DI) \times$$

$$\left(\text{NDLPNonRunwayShare}(p,DI) + \sum_{nc \in \text{ApplicableNRContingencies}(DI)} \sum_{f \in \text{CauserCRFacilities}(p,nc,DI)} \text{NCFacilityShare}(f,nc,DI)\right)$$

where:

i. NonRunwayComponent(DI) is the cost share associated with the non-runway component of procuring Contingency Reserve Raise and the Additional RoCoF Requirement component of RoCoF Control Service in Dispatch Interval DI calculated in clause 5.1(a) of this Appendix 2A;

ii. NDLPNonRunwayShare(p,DI) is:

1. the quantity determined for Dispatch Interval DI in clause 4.7 of this Appendix 2A, if Market Participant p is Synergy; and

2. zero, otherwise;

iii. nc∈ApplicableNRContingencies(DI) denotes all Network Raise Contingencies nc in ApplicableNRContingencies(DI);

iv. f∈CauserCRFacilities(p,nc,DI) denotes each CR Facility f in CauserCRFacilities(nc,DI) that belongs to Market Participant p in Dispatch Interval DI; and

v. NCFacilityShare(f,nc,DI) is CR Facility f's cost share associated with Network Raise Contingency nc in Dispatch Interval DI as calculated in clause 4.6(c) of this Appendix 2A.

Appendix 2B: Minimum RoCoF Control Service cost recovery method

1. Interpretation

1.1 Where anything is to be determined, calculated or done in this Appendix 2B, then except where otherwise stated, AEMO will determine, calculate or do, as the case may be, those things.

2. Cost recovery calculations for Minimum RoCoF Control Requirement

2.1 AEMO must calculate a Rule Participant's share of the Minimum RoCoF Control Requirement component of the RoCoF Control Service cost in Trading Interval t by following each of the steps set out in the rest of this Appendix 2B.

2.2 For each Trading Interval t, define the set of RoCoF Causers(t), being each of:

(a) Network Causer(t): the set of Networks registered to Western Power which are RoCoF Causers under clause 2.34A.12J in Trading Interval t;

(b) Injection Causer(t): the set of Scheduled Facilities, Semi-Scheduled Facilities or Non-Scheduled Facilities that are recorded in Standing Data as including an Energy Producing System, which have a non-zero Metered Schedule in Trading Interval t and which are RoCoF Causers under clause 2.34A.12J in Trading Interval t; and

(c) Offtake Causer(t): the set of:

i. all Scheduled Facilities, Semi-Scheduled Facilities or Non-Scheduled Facilities which comprise only Loads; and

ii. all Non-Dispatchable Loads (including Synergy's Notional Wholesale Meter where Synergy is the Market Participant),

which have non-zero Metered Schedules in Trading Interval t and which are RoCoF Causers under clause 2.34A.12J in Trading Interval t.

2.3 For each Trading Interval t, define a Causer Factor for each subset of RoCoF Causers(t) as follows:

(a) $\text{NetworkCauserFactor}(t) = \begin{cases} 0 & \text{if the Network Causer}(t) \text{ subset is empty} \\ 1 & \text{otherwise} \end{cases}$,

(b) $\text{InjectionCauserFactor}(t) = \begin{cases} 0 & \text{if the Injection Causer}(t) \text{ subset is empty} \\ 1 & \text{otherwise} \end{cases}$,

and

(c) $\text{OfftakeCauserFactor}(t) = \begin{cases} 0 & \text{if the Offtake Causer}(t) \text{ subset is empty} \\ 1 & \text{otherwise} \end{cases}$

2.4 Determine the total number of causer groups n(t) in Trading Interval t as follows:

$$n(t) = NetworkCauserFactor(t) + InjectionCauserFactor(t) + OfftakeCauserFactor(t)$$

where:

(a) NetworkCauserFactor(t) is the Causer Factor for the subset Network Causer(t) in Trading Interval t as calculated in clause 2.3(a) of this Appendix 2B.

(b) InjectionCauserFactor(t) is the Causer Factor for the subset Injection Causer(t) in Trading Interval t as calculated in clause 2.3(b) of this Appendix 2B.

(c) OfftakeCauserFactor(t) is the Causer Factor for the subset Offtake Causer(t) in Trading Interval t as calculated in clause 2.3(c) of this Appendix 2B.

2.5 Determine Western Power's share of the Minimum RoCoF Control Requirement component of the RoCoF Control Service cost in Trading Interval t as follows:

$$WPShare(t) = \frac{1}{n(t)} \times NetworkCauserFactor(t)$$

where:

(a) NetworkCauserFactor(t) is the Causer Factor for the subset Network Causer(t) in Trading Interval t as calculated in clause 2.3(a) of this Appendix 2B; and

(b) n(t) is the total number of causer groups in Trading Interval t as calculated in clause 2.4 of this Appendix 2B.

2.6 For each Registered Facility, f, which is a member of Injection Causer(t), determine its share of the Minimum RoCoF Control Requirement component of RoCoF Control Service cost in Trading Interval t as follows:

$$InjectionShare(f,t) = \frac{1}{n(t)} \times InjectionCauserFactor(t) \times \frac{|MeteredSchedule(f,t)|}{\sum_{i \in InjectionCauser(t)} |MeteredSchedule(i,t)|}$$

where:

(a) n(t) is the total number of causer groups in Trading Interval t as calculated in clause 2.4 of this Appendix 2B;

(b) InjectionCauserFactor(t) is the Causer Factor for the subset Injection Causer(t) in Trading Interval t as calculated in clause 2.3(b) of this Appendix 2B;

(c) MeteredSchedule(f,t) is the value of the Metered Schedule for Registered Facility f which is a member of the subset Injection Causer(t), such subset as defined in clause 2.2(b) of this Appendix 2B, in Trading Interval t;

(d) i∈InjectionCauser(t) denotes all Registered Facilities in the subset Injection Causer(t), such subset as defined in clause 2.2(b) of this Appendix 2B, in Trading Interval t; and

(e) MeteredSchedule(i,t) is the value of the Metered Schedule for Registered Facility i in the subset Injection Causer(t), such subset as defined in clause 2.2(b) of this Appendix 2B, in Trading Interval t.

2.7 For each facility that is a member of Offtake Causer(t), determine in Trading Interval t:

$$\text{OfftakeShare}(l,t) = \frac{1}{n(t)} \times \text{OfftakeCauserFactor}(t) \times \frac{|\text{MeteredSchedule}(l,t)|}{\sum_{i \in \text{OfftakeCauser}(t)} |\text{MeteredSchedule}(i,t)|}$$

where:

(a) n(t) is the total number of causer groups in Trading Interval t as calculated in clause 2.4 of this Appendix 2B.

(b) OfftakeCauserFactor(t) is the Causer Factor for the subset Offtake Causer(t) in Trading Interval t as calculated in clause 2.3(c) of this Appendix 2B.

(c) MeteredSchedule(l,t) is the value of the Metered Schedule for member l of the subset Offtake Causer(t), such subset as defined in clause 2.2(c) of this Appendix 2B in Trading Interval t;

(d) i∈OfftakeCauser(t) denotes all members of the subset Offtake Causer(t), as defined in clause 2.2(c) of this Appendix 2B in Trading Interval t; and

(e) MeteredSchedule(i,t) is the value of the Metered Schedules for a member i of the subset Offtake Causer(t), such subset as defined in clause 2.2(c) of this Appendix 2B in Trading Interval t.

2.8 Determine Rule Participant p's share of Minimum RoCoF Control Requirement component of RoCoF Control Service cost in Trading Interval t as follows:

$$\text{MinRCSShare}(p,t) = \sum_{f \in p} \text{InjectionShare}(f,t) + \sum_{l \in p} \text{OfftakeShare}(l,t) + \text{NOShare}(p,t)$$

where:

(a) InjectionShare(f,t) is, for each Registered Facility which is a member of Injection Causer(t), the Registered Facility f's share of the Minimum RoCoF Control Requirement component of the RoCoF Control Service cost in Trading Interval t as calculated in clause 2.6 of this Appendix 2B;

(b) f∈p denotes all Registered Facilities which are a member of Injection Causer(t) and registered to Rule Participant p;

(c) OfftakeShare(l,t) is the share of the Minimum RoCoF Control Requirement component of the RoCoF Control Service cost in Trading Interval t for each facility which is a member of Offtake Causer(t), as calculated in clause 2.7 of this Appendix 2B;

(d) $l \in p$ denotes all facilities which are members of Offtake Causer(t) and associated with Rule Participant p; and

(e) NOShare(p,t) is, for Western Power, WPShare(t), as calculated in clause 2.5 of this Appendix 2B, and for all other Rule Participants, zero.

Appendix 2C: SESSM refund calculation method

1. Interpretation

1.1 Where anything is to be determined, calculated or done in this Appendix 2C, then except where otherwise stated, AEMO will determine, calculate or do, as the case may be, those things.

2. Supplementary Essential System Service Mechanism refund calculation methodology

2.1 AEMO must calculate the refund payable by a Market Participant in respect of their Registered Facility for not meeting the SESSM Availability Requirements set out in the relevant SESSM Awards by following each of the steps set out in the rest of this Appendix 2C.

2.2 Where AEMO has made a SESSM Award a in respect of a Registered Facility to provide a specific Frequency Co-optimised Essential System Service, that award specifies the following terms (which terms are applicable to the rest of this Appendix 2C):

(a) the BaseQuantity(a,DI), which is the Base ESS Quantity for SESSM Award a in Dispatch Interval DI;

(b) the AvailabilityQuantity(a,DI), which is the SESSM Availability Quantity for SESSM Award a in Dispatch Interval DI ;

(c) the AvailabilityPayment(a,DI), which is:

i. the Per-Dispatch Interval Availability Payment for SESSM Award a in Dispatch Interval DI if AvailabilityQuantity(a,DI) is greater than zero; or

ii. if otherwise, zero; and

(d) MinAvailability(a), which is the SESSM Availability Requirement for SESSM Award a.

2.3 For each Registered Facility that is providing a Frequency Co-optimised Essential System Service under a SESSM Award a, and for the duration of that SESSM Award a:

(a) determine N(a) to be the number of Dispatch Intervals in the SESSM Service Timing where AvailabilityQuantity(a,DI) is greater than zero;

(b) determine the maximum number of Dispatch Intervals for which the Registered Facility providing a Frequency Co-optimised Essential System

Service under SESSM Award a may be unavailable during the SESSM Service Timing, as follows:

$$\text{MaxUnavailability}(a) = \text{FLOOR}\left(\text{N}(a) \times \left(1 - \text{MinAvailability}(a)\right)\right)$$

where:

i. the FLOOR() function rounds any non-integer figure down to the nearest integer; and

ii. MinAvailability(a) is the percentage determined under clause 2.2(d) of this Appendix 2C; and

(c) determine the total SESSM Availability Payments that would be made over the SESSM Service Timing if it met its SESSM Availability Requirement under SESSM Award a:

$$\text{PaymentCap}(a) = \sum_{DI \in a} \text{AvailabilityPayment}(a,DI)$$

where:

i. $DI \in a$ denotes all Dispatch Intervals in the SESSM Service Timing; and

ii. AvailabilityPayment(a,DI) is the quantity determined under clause 2.2(c) of this Appendix 2C.

2.4 For each Dispatch Interval DI determine whether a Registered Facility f was available (in respect of its obligations under SESSM Award a to provide Frequency Co-optimised Essential System Service c):

$$\text{IsAvailable}(a,DI) = \begin{cases} 1 \text{ if } \text{ESSOffer}(f,c,DI) \geq (\text{BaseQuantity}(a,DI) + \text{AvailabilityQuantity}(a,DI)) \\ \text{or } \text{AvailabilityQuantity}(a,DI) = 0, \\ 0 \text{ otherwise} \end{cases}$$

where:

(a) ESSOffer(f,c,DI) is:

i. the sum of the quantities offered in the relevant Market Participant's Real-Time Market Submission in respect of Registered Facility f to provide Frequency Co-optimised Essential System Service c in Dispatch Interval DI; or

ii. if:

1. Registered Facility f is subject to a Planned Outage or a Forced Outage in Dispatch Interval DI; and

2. in AEMO's view, the sum of the quantities offered in the relevant Market Participant's Real-Time Market Submission in respect of Registered Facility f does not accurately reflect the Facility's capability to provide Frequency Co-optimised Essential System Service c in Dispatch Interval DI,

then, AEMO's reasonable estimate of Registered Facility f's capability in MW or MWs, as the case may be, to provide Frequency Co-optimised Essential System Service c in Dispatch Interval DI, if that quantity is lower than the quantity specified in clause 2.4(a)(i) of this Appendix 2C; or

iii. if the relevant Real-Time Market Submission:

1. did not present the relevant Essential System Service Enablement Quantity as In-Service Capacity in accordance with clause 7.4.5(c)(i); or

2. did not offer sufficient capacity as In-Service for energy to allow the Registered Facility to be dispatched for energy between its enablement limits in accordance with clause 7.4.5(c)(ii),

then AEMO's reasonable estimate of Registered Facility f's capability in MW or MWs, as applicable, that was In-Service Capacity in respect of Frequency Co-optimised Essential System Service c in Dispatch Interval DI, if that quantity is lower than the quantities specified in clauses 2.4(a)(i) or (if applicable) 2.4(a)(ii) of this Appendix 2C;

(b) BaseQuantity(a,DI) is the quantity determined under clause 2.2(a) of this Appendix 2C; and

(c) AvailabilityQuantity(a,DI) is the quantity determined under clause 2.2(b) of this Appendix 2C.

2.5 Calculate the number of Dispatch Intervals the Registered Facility providing Frequency Co-optimised Essential System Services under SESSM Award a has been unavailable for, from the first Dispatch Interval in the SESSM Service Timing up to and including Dispatch Interval DI:

$$\text{SESSMOutageCount}(a,DI)=\sum_{i=1}^{DI}\left(1-\text{IsAvailable}(a,i)\right)$$

where:

(a) IsAvailable(a,i) means Registered Facility was available in respect of its obligations under SESSM Award a to provide Frequency Co-optimised Essential System Service c in Dispatch Interval i; and

(b) i is a Dispatch Interval in the SESSM Service Timing.

2.6 Calculate the refund due in Dispatch Interval DI for the relevant Registered Facility providing Frequency Co-optimised Essential System Services under SESSM Award a, as follows:

SESSMRefund(a,DI)=

$$\begin{cases} 0 \text{ if } SESSMOutageCount(a,DI) \le MaxUnavailability(a) \text{ or} \\ \sum_{i=1}^{DI-1} SESSMRefund(a,i) \ge PaymentCap(a) \text{ or} \\ AvailabilityQuantity(a,DI) = 0 \text{ or } RTMSuspFlag(DI) = 1, \\ \min\left(\begin{array}{c} AvailabilityPayment(a,DI) \times SESSMRefundFactor \times SESSMShortfall(a,DI), \\ PaymentCap(a) - \sum_{i=1}^{DI-1} SESSMRefund(a,i) \end{array} \right) \text{otherwise} \end{cases}$$

where:

(a) SESSMOutageCount(a,DI) is the quantity determined under clause 2.5 of this Appendix 2C;

(b) MaxUnavailability(a) is the number of Dispatch Intervals determined in clause 2.3(b) of this Appendix 2C;

(c) SESSMRefund(a,i) is the refund due in Dispatch Interval i for the relevant Registered Facility providing Frequency Co-optimised Essential System Services under SESSM Award a;

(d) PaymentCap(a) is the quantity determined under clause 2.3(c) of this Appendix 2C;

(e) SESSMRefundFactor is 3;

(f) [Blank]

(g) AvailabilityQuantity(a,DI) is the quantity determined under clause 2.2(b) of this Appendix 2C;

(h) AvailabilityPayment(a,DI) is the quantity determined under clause 2.2(c) of this Appendix 2C;

(i) SESSMShortfall(a,DI) is the quantity determined under clause 2.7 of this Appendix 2C; and

(j) RTMSuspFlag(DI) is the RTM Suspension Flag for Dispatch Interval DI.

2.7 Calculate the SESSM shortfall for each SESSM Award for each Dispatch Interval as follows:

SESSMShortfall(a,DI) =

$$\max\left(0, \frac{AvailabilityQuantity(a,DI) - \max\left(0, ESSOffer(f,c,DI) - BaseQuantity(a,DI)\right)}{AvailabilityQuantity(a,DI)}\right)$$

where:

(a) AvailabilityQuantity(a,DI) is the quantity determined under clause 2.2(b) of this Appendix 2C;

(b) ESSOffer(f,c,DI) is the quantity determined under clause 2.4(a) of this Appendix 2C; and

(c) BaseQuantity(a,DI) is the quantity determined under clause 2.2(a) of this Appendix 2C.

2.8 Calculate the Per-Dispatch Interval Facility Availability Payments and Facility SESSM Refunds for Registered Facility f, as follows:

(a) calculate the Per-Dispatch Interval Facility Availability Payments for Registered Facility f in respect of each Frequency Co-optimised Essential System Service in Dispatch Interval DI as follows:

$RR_AvailabilityPayment(f,DI) = \sum_{a \in ARR} AvailabilityPayment(a,DI)$;

$RL_AvailabilityPayment(f,DI) = \sum_{a \in ARL} AvailabilityPayment(a,DI)$;

$CR_AvailabilityPayment(f,DI) = \sum_{a \in ACR} AvailabilityPayment(a,DI)$;

$CL_AvailabilityPayment(f,DI) = \sum_{a \in ACL} AvailabilityPayment(a,DI)$;

$RCS_AvailabilityPayment(a,DI) = \sum_{a \in ARCS} AvailabilityPayment(a,DI)$;

where:

i. $a \in ARR$ is the set of SESSM Awards awarded to the Market Participant to whom Registered Facility f is registered to provide Regulation Raise in Dispatch Interval DI;

ii. $a \in ARL$ is the set of SESSM Awards awarded to the Market Participant to whom Registered Facility f is registered to provide Regulation Lower in Dispatch Interval DI;

iii. $a \in ACR$ is the set of SESSM Awards awarded to the Market Participant to whom Registered Facility f is registered to provide Contingency Reserve Raise in Dispatch Interval DI;

iv. $a \in ACL$ is the set of SESSM Awards awarded to the Market Participant to whom Registered Facility f is registered to provide Contingency Reserve Lower in Dispatch Interval DI;

v. $a \in ARCS$ is the set of SESSM Awards awarded to the Market Participant to whom Registered Facility f is registered to provide RoCoF Control Service in Dispatch Interval DI; and

vi. AvailabilityPayment(a,DI) is the quantity determined under clause 2.2(c) of this Appendix 2C; and

(b) calculate the Facility SESSM Refunds for Registered Facility f in respect of each Frequency Co-optimised Essential System Service in Dispatch Interval DI, as follows:

RR_SESSMRefund(f,DI) = $\sum_{a \in ARR}$ SESSMRefund(a,DI);

RL_SESSMRefind(f,DI) = $\sum_{a \in ARL}$ SESSMRefund(a,DI);

CR_SESSMRefund(f,DI) = $\sum_{a \in ACR}$ SESSMRefund(a,DI);

CL_SESSMRefund(f,DI) = $\sum_{a \in ACL}$ SESSMRefund(a,DI); and

RCS_SESSMRefund(f,DI) = $\sum_{a \in ARCS}$ SESSMRefund(a,DI),

where:

i. SESSMRefund(a,DI) is the quantity determined under clause 2.6 of this Appendix 2C;

ii. a∈ARR is the set of SESSM Awards awarded to the Market Participant to whom Registered Facility f is registered to provide Regulation Raise in Dispatch Interval DI;

iii. a∈ARL is the set of SESSM Awards awarded to the Market Participant to whom Registered Facility f is registered to provide Regulation Lower in Dispatch Interval DI;

iv. a∈ACR is the set of SESSM Awards awarded to the Market Participant to whom Registered Facility f is registered to provide Contingency Reserve Raise in Dispatch Interval DI;

v. a∈ACL is the set of SESSM Awards awarded to the Market Participant to whom Registered Facility f is registered to provide Contingency Reserve Lower in Dispatch Interval DI; and

vi. a∈ARCS is the set of SESSM Awards awarded to the Market Participant to whom Registered Facility f is registered to provide RoCoF Control Service in Dispatch Interval DI.

Appendix 2E: Contingency Reserve Lower Cost Share Calculation Method

1. Interpretation

1.1 Where anything is to be determined, calculated or done in this Appendix 2E, then except where otherwise stated, AEMO will determine, calculate or do, as the case may be, those things.

1.2 AEMO must calculate a Market Participant p's total share of the cost of procuring Contingency Reserve Lower in Dispatch Interval DI in respect of its CL Facilities by following each of the steps set out in the rest of this Appendix 2E.

1.3 In this Appendix 2E:

(a) "CL Facility Name" means:

i. for a CL Facility that is a Scheduled Facility, Semi-Scheduled Facility or Non-Scheduled Facility, the name of the Facility recorded by AEMO in accordance with clause 2.34B.1(e); and

ii. for a CL Facility that is a Major Load, a unique identifier assigned by AEMO to the Major Load.

2. Define CL Facility Sets and determine Facility Lower Risks

2.1 Determine CLFacilities(DI) as the set of all CL Facilities in Dispatch Interval DI.

2.2 For each member f of CLFacilities(DI), determine FacilityLowerRisk(f,DI) as the Facility Lower Risk for CL Facility f in Dispatch Interval DI as published under clause 7.13.1EA(c)(v).

2.3 Determine ApplicableCLFacilities(DI) as the set which comprises those members f of CLFacilities(DI) for which:

$$FacilityLowerRisk(f,DI) > CLThreshold$$

where:

(a) FacilityLowerRisk(f,DI) is the quantity determined for CL Facility f in Dispatch Interval DI in clause 2.2 of this Appendix 2E; and

(b) CLThreshold is the CL Threshold.

3. Determine Facility Shares

3.1 If the number of CL Facilities in ApplicableCLFacilities(DI) is zero:

(a) set FacilityComponentMW(DI) equal to the CL Threshold; and

(b) go to clause 4.1 of this Appendix 2E.

3.2 Rank the CL Facilities in the set ApplicableCLFacilities(DI) in ascending order of the value of FacilityLowerRisk(f,DI) as determined in clause 2.3 of this Appendix 2E. If two or more CL Facilities in that set have the same FacilityLowerRisk(f,DI) value, AEMO must rank those CL_Facilities, as between each other, in ascending alphanumeric order of CL Facility Name. The CL Facility with the lowest FacilityLowerRisk(f,DI) value will have rank(f,DI) =1, and the CL Facility with the highest FacilityLowerRisk(f,DI) value will have rank(f,DI) = n, where n is the number of CL Facilities in the set ApplicableCLFacilities(DI).

3.3 Calculate FacilityComponentMW(DI), which is the FacilityLowerRisk(f,DI) of the CL Facility which has the rank(f,DI) = n as determined in clause 3.2 of this Appendix 2E.

3.4 Determine for each member f of ApplicableCLFacilities(DI), its individual runway share of the Facility component of procuring Contingency Reserve Lower in Dispatch Interval DI as follows:

$$\text{CLRunwayShare}(f,DI) = \sum_{i=1}^{\text{rank}(f,DI)} \frac{\text{FacilityMW}(i,DI) - \text{FacilityMW}(i-1, DI)}{\text{FacilityMW}(n,DI) \times (n + 1 - i)}$$

where:

(a) FacilityMW(i,DI) is the FacilityLowerRisk(x,DI) value of Facility x with rank(x,DI) = i in Dispatch Interval DI, where FacilityMW(0,DI) = the CL Threshold, and x∈ApplicableCLFacilities(DI);

(b) rank(f,DI) is the rank of CL Facility f in Dispatch Interval DI as determined in clause 3.2 of this Appendix 2E; and

(c) n is the number of CL Facilities in the set ApplicableCLFacilities(DI) in Dispatch Interval DI.

4. Determine Network Shares

4.1 Calculate NetworkComponentMW(DI) as follows:

NetworkComponentMW(DI) =
max(0,LargestContingencyMW(DI) – FacilityComponentMW(DI))

where:

(a) LargestContingencyMW(DI) is the Largest Credible Load Contingency in Dispatch Interval DI; and

(b) FacilityComponentMW(DI) is the quantity determined in clauses 3.1 or 3.3 (as applicable) of this Appendix 2E.

4.2 If NetworkComponentMW(DI) is equal to zero then go to clause 5.1 of this Appendix 2E.

4.3 Determine NetworkContingencies(DI), which is the set of Network Lower Contingencies that are taken into account when setting the Contingency Reserve Lower requirement under clause 7.2.4 in Dispatch Interval DI.

4.4 For each member in NetworkContingencies(DI), nc, calculate NetworkRisk(nc,DI) in Dispatch Interval DI as follows:

(a) NetworkRisk(nc,DI) is the Network Lower Risk for Network Lower Contingency nc in Dispatch Interval DI as published by AEMO under clause 7.13.1EA(c)(vi)(1), if nc sets the Largest Credible Load Contingency in Dispatch Interval DI; and

(b) NetworkRisk(nc,DI) is zero otherwise.

4.5 Determine ApplicableNetworkContingencies(DI), which comprises those members nc of NetworkContingencies(DI) for which:

NetworkRisk(nc,DI) > 0 MW

4.6 Calculate m(DI) as the number of members of ApplicableNetworkContingencies(DI).

4.7 For each member of ApplicableNetworkContingencies(DI), nc, perform the following steps:

(a) from the information published under clause 7.13.1EA(c)(vi)(2), determine MaterialCausers(nc,DI), which is the set of CL Facilities f for which:

NCFacilityLowerRisk(f,nc,DI) > CLThreshold

where:

i. NCFacilityLowerRisk(f,nc,DI) is the Network Facility Lower Risk for CL Facility f and Network Lower Contingency nc in Dispatch Interval DI as published under clause 7.13.1EA(c)(vi)(2); and

ii. CLThreshold is the CL Threshold;

(b) determine NCTotalApplicableRisk(nc,DI) as follows:

$$NCTotalApplicableRisk(nc,DI) = \max\left(NetworkRisk(nc,DI), \sum_{f \in MaterialCausers(nc,DI)} NCFacilityLowerRisk(f,nc,DI)\right)$$

where:

i. NetworkRisk(nc,DI) is the quantity determined for Network Lower Contingency nc in Dispatch Interval DI in clause 4.4 of this Appendix 2E;

ii. NCFacilityLowerRisk(f,nc,DI) is the Network Facility Lower Risk for CL Facility f and Network Lower Contingency nc in Dispatch Interval DI as published under clause 7.13.1EA(c)(vi)(2); and

iii. $f \in$ MaterialCausers(nc,DI) denotes all CL Facilities f in MaterialCausers(nc,DI); and

(c) for each member of MaterialCausers(nc,DI), f, calculate its share of the network component of procuring Contingency Reserve Lower in Dispatch Interval DI attributable to its contribution to Network Lower Contingency nc as:

$$\text{NCContribution}(f,nc,DI) = \frac{1}{m(DI)} \times \frac{\text{NCFacilityLowerRisk}(f,nc,DI)}{\text{NCTotalApplicableRisk}(nc,DI)}$$

where:

i. m(DI) is the number of members of ApplicableNetworkContingencies(DI) determined in clause 4.6 of this Appendix 2E;

ii. NCFacilityLowerRisk(f,nc,DI) is the Network Facility Lower Risk for CL Facility f and Network Lower Contingency nc in Dispatch Interval DI as published under clause 7.13.1EA(c)(vi)(2); and

iii. NCTotalApplicableRisk(nc,DI) is the quantity determined for Network Lower Contingency nc in Dispatch Interval DI in clause 4.7(b) of this Appendix 2E.

5. Determine Cost Shares

5.1 Calculate the cost share associated with the Network Lower Contingency component of procuring Contingency Reserve Lower in Dispatch Interval DI as follows:

$$\text{NetworkComponent}(DI) = \frac{\text{NetworkComponentMW}(DI)}{\text{LargestContingencyMW}(DI)}$$

where:

(a) NetworkComponentMW(DI) is the quantity determined in clause 4.1 of this Appendix 2E; and

(b) LargestContingencyMW(DI) is the Largest Credible Load Contingency in Dispatch Interval DI.

5.2 Calculate the cost share associated with the Facility Lower Contingency component of procuring Contingency Reserve Lower in Dispatch Interval DI as follows:

$$\text{FacilityComponent}(DI) = 1 - \text{NetworkComponent}(DI)$$

where:

(a) NetworkComponent(DI) is the quantity determined in clause 5.1 of this Appendix 2E.

5.3 Calculate for each member of CLFacilities(DI), f, its share of the Facility Lower Contingency component of the cost of procuring Contingency Reserve Lower in Dispatch Interval DI as:

$$CLFacilityCostShare(f,DI)=\begin{cases}FacilityComponent(DI)\times CLRunwayShare(f,DI), & \text{if } f\in ApplicableCLFacilities(DI)\\ 0, & \text{otherwise}\end{cases}$$

where:

(a) FacilityComponent(DI) is the quantity determined for Dispatch Interval DI in clause 5.2 of this Appendix 2E; and

(b) CLRunwayShare(f,DI) is the quantity determined for CL Facility f in Dispatch Interval DI in clause 3.4 of this Appendix 2E; and

(c) ApplicableCLFacilities(DI) is the set determined for Dispatch Interval DI in clause 2.3 of this Appendix 2E.

5.4 Calculate for each member of CLFacilities(DI), f, its share of the Network Lower Contingency component of the cost of procuring Contingency Reserve Lower in Dispatch Interval DI as:

$$CLNetworkCostShare(f,DI)=\begin{cases}0, & \text{if } NetworkComponent(DI)=0\\ NetworkComponent(DI)\times \sum_{nc\in FacilityNC(f,DI)} NCContribution(f,nc,DI), & \text{otherwise}\end{cases}$$

where:

(a) NetworkComponent(DI) is the quantity determined for Dispatch Interval DI in clause 5.1 of this Appendix 2E; and

(b) nc∈FacilityNC(f,DI) denotes all Network Lower Contingencies nc in ApplicableNetworkContingencies(DI) for which CL Facility f is a member of MaterialCausers(nc,DI); and

(c) NCContribution(f,nc,DI) is the quantity determined for CL Facility f and Network Lower Contingency nc in Dispatch Interval DI in clause 4.7(b) of this Appendix 2E.

5.5 Calculate for each member of CLFacilities(DI), f, its share of the cost of procuring Contingency Reserve Lower in Dispatch Interval DI as:

$$CLCostShare(f,DI)=CLFacilityCostShare(f,DI)+CLNetworkCostShare(f,DI)$$

where:

(a) CLFacilityCostShare(f,DI) is the quantity determined for CL Facility f in Dispatch Interval DI in clause 5.3 of this Appendix 2E; and

(b) CLNetworkCostShare(f,DI) is the quantity determined for CL Facility f in Dispatch Interval DI in clause 5.4 of this Appendix 2E.

5.6 Calculate Market Participant p's total share of the cost of procuring Contingency Reserve Lower in respect of its CL Facilities in Dispatch Interval DI as:

$$CL_Cost_Share(p,DI)= \sum_{f \in CLFacilities(p,DI)} CLCostShare(f,DI)$$

where:

(a) $f \in CLFacilities(p,DI)$ denotes each CL Facility f in CLFacilities(DI) that belongs to Market Participant p in Dispatch Interval DI; and

(b) CLCostShare(f,DI) is the quantity determined for CL Facility f in Dispatch Interval DI in clause 5.5 of this Appendix 2E.

Appendix 3: Determination of Network Access Quantities

The objectives of this appendix are:

1. To prevent AEMO determining Network Access Quantities (and assigning Peak Capacity Credits) for Facilities that have been assigned Peak Certified Reserve Capacity that have insufficient access to the Network and availability to usefully address the Peak Reserve Capacity Requirement. A single algorithm is used for testing of Peak Certified Reserve Capacity and for determining whether, in respect of a Reserve Capacity Cycle, a Network Access Quantity will be determined for any new Candidate Fixed Price Facilities for the current Reserve Capacity Cycle. The process is:
    - if the Facilities, for which Peak Capacity Credits for the current Reserve Capacity Cycle are being sought, do not include a Candidate Fixed Price Facility or a Candidate Fixed Price Component, set out in Part A; and
    - if the Facilities, for which Peak Capacity Credits for the current Reserve Capacity Cycle are being sought, include a Candidate Fixed Price Facility or a Candidate Fixed Price Component, set out in Part B.
2. To determine, using the Network Access Quantity Model:
    - whether a Network Access Quantity will be determined for a new Facility, or Facility Upgrade, for the current Reserve Capacity Cycle and, if so, to determine a Network Access Quantity for that Facility or Facility Upgrade;
    - a preliminary Network Access Quantity or an Indicative Network Access Quantity for an Early CRC Facility, as applicable; and
    - a Network Access Quantity (which may be zero) for other NAQ Facilities for the current Reserve Capacity Cycle.

Terms defined in this Appendix 3 are defined for the purposes of this Appendix 3 alone and must not be used to infer the meaning of those words, or other words, in these ESM Rules. Terms which are defined in the ESM Rules will apply to this Appendix unless defined in this Appendix.

AEMO must use the applicable Constraint Sets in the Network Access Quantity Model for the Facilities assessed in each step of this Appendix 3.

In this Appendix 3:

- "current Reserve Capacity Cycle" means the Reserve Capacity Cycle for which the processes in this Appendix are being undertaken to procure Reserve Capacity for the Capacity Year for that Reserve Capacity Cycle;
- "Early CRC Facility" is a Facility for which:

- an application for Early Certified Reserve Capacity has been made under section 4.28C to deliver Peak Capacity for a future Reserve Capacity Cycle; and
- pursuant to that application, AEMO has assigned Peak Early Certified Reserve Capacity to the Facility in accordance with section 4.28C;

- "Facility Upgrade" means, for a NAQ Facility, an increase in the nameplate capacity of the NAQ Facility, being the difference between:
  - the nameplate capacity specified under clause 4.10.1(dA), for the NAQ Facility, as provided in the Reserve Capacity Cycle immediately preceding the current Reserve Capacity Cycle; and
  - the nameplate capacity specified under clause 4.10.1(dA), for the NAQ Facility as provided in the current Reserve Capacity Cycle;
- "future Reserve Capacity Cycle" means a Reserve Capacity Cycle that is subsequent to the current Reserve Capacity Cycle;
- "Indicative NAQ Facility" means an Early CRC Facility for which an Indicative Network Access Quantity was determined for the Facility under Step 10(c)(ii) of Part A or Part B as applicable in the Reserve Capacity Cycle immediately preceding the current Reserve Capacity Cycle, but does not include:
  - an Early CRC Facility that is also a Network Augmentation Funding Facility; or
  - an NAQ Facility;
- “NAQ Facility” means:
  - a Facility for which a Final Network Access Quantity has been determined in a previous Reserve Capacity Cycle and the Facility has been assigned Peak Certified Reserve Capacity for the current Reserve Capacity Cycle;
  - an Early CRC Facility where the current Reserve Capacity Cycle is the Reserve Capacity Cycle in which the Facility will first deliver Peak Capacity; or
  - a Facility that has been assigned Peak Certified Reserve Capacity and is subject to an NCESS Contract for the current Reserve Capacity Cycle,

  but excludes a Facility for which AEMO has received a notice under section 4.4A.1 that the Facility is expected to retire in the Capacity Year to which the current Reserve Capacity Cycle relates and the notice has not been withdrawn under clause 4.4A.6;
- “NAQ rules” means:

- the preliminary Network Access Quantity determined for a Facility under a step in Part A or Part B, as applicable, cannot be reduced, but can be increased, in a subsequent step; and
- the maximum preliminary Network Access Quantity that can be determined for a Facility at the end of a step in Part A or Part B, as applicable, cannot exceed the Peak Certified Reserve Capacity assigned to the Facility for the current Reserve Capacity Cycle;

- "preliminary Network Access Quantity" is the Network Access Quantity first determined by AEMO for a Facility in a step, as may be adjusted by AEMO in a subsequent step;
- "prioritisation order" means, if two or more Facilities are tied with respect to the selection criteria such that assigning a preliminary Network Access Quantity to all but one of them would result in the total preliminary Network Access Quantity assigned to those Facilities exceeding the Peak Reserve Capacity Requirement, then those tied Facilities are to be selected according to the following rules until the tie is resolved:
  - in order of Capability Class, with Facilities in Capability Class 1 being selected first, then Facilities in Capability Class 3, and then Facilities in Capability Class 2;
  - the ratio of a Facility's preliminary Network Access Quantity to Peak Certified Reserve Capacity from highest to lowest; then
  - the combination of the Peak Certified Reserve Capacity for Facilities that will minimise the excess of the total Network Access Quantities to be assigned to the Facilities to achieve the Peak Reserve Capacity Requirement; then
  - whether or not the Facility was included in an Expression of Interest submission, with Facilities included in Expression of Interest submissions being selected first;
  - in the order of the time Expression of Interest submissions were received by AEMO, with the Facility to which the earlier submission relates being selected first; then
  - in the order of the time the applications for Certified Reserve Capacity were received by AEMO, with the Facility to which the earlier application relates being selected first.

Part A No Candidate Fixed Price Facility or Candidate Fixed Price Component

Step 1: Identify the Peak Reserve Capacity Requirement for the relevant Capacity Year.

Step 2: Let the Network Access Quantity Model contain:

(a) NAQ Facilities; and

(b) Indicative NAQ Facilities.

Step 3: [Blank]

Step 3A: Subject to the NAQ rules, using the Network Access Quantity Model determine the preliminary Network Access Quantity for each NAQ Facility and, if applicable, Indicative Network Access Quantity for each Indicative NAQ Facility, which is a value up to the minimum of:

(a) the Network Access Quantity determined for the NAQ Facility or Indicative NAQ Facility in the Reserve Capacity Cycle immediately preceding the current Reserve Capacity Cycle, which:

i. for an Early CRC Facility is deemed to be:

1. for an Early CRC Facility that is also a Network Augmentation Funding Facility, the preliminary Network Access Quantity determined for the Facility at Step 10(c)(i) in a previous Reserve Capacity Cycle; or

2. for each other Early CRC Facility, the Indicative Network Access Quantity determined for the Facility in the Reserve Capacity Cycle immediately preceding the current Reserve Capacity Cycle; and

ii. for an NAQ Facility subject to an NCESS Contract, that was not assigned a Network Access Quantity in the Reserve Capacity Cycle immediately preceding the current Reserve Capacity Cycle, is deemed to be the Peak Certified Reserve Capacity for the NAQ Facility; and

(b) the Peak Certified Reserve Capacity for the NAQ Facility or Peak Early Certified Reserve Capacity for the Indicative NAQ Facility,

then go to Step 3B.

Step 3B: Using the Network Access Quantity Model and, subject to the NAQ Rules, adjust the preliminary Network Access Quantity determined for an NAQ Facility under a prior step up to the Highest Network Access Quantity for the NAQ Facility where this is greater than the preliminary Network Access Quantity determined for the NAQ Facility in a prior step and, if applicable, adjust the Indicative Network Access Quantity determined under a prior step for an Indicative NAQ Facility up to the Peak Early Certified Reserve Capacity for the Indicative NAQ Facility,

then go to Step 3C.

Step 3C: Using the Network Access Quantity Model and, subject to the NAQ rules, adjust the preliminary Network Access Quantity determined for an NAQ Facility or Indicative Network Access Quantity for an Indicative NAQ Facility under a prior step up to the Peak Certified Reserve Capacity for the NAQ Facility or Peak Early

Certified Reserve Capacity for an Indicative NAQ Facility, excluding, for the NAQ Facility, any associated Facility Upgrade, where this is greater than the preliminary Network Access Quantity determined in a prior step.

Step 4: Add all new committed Network Augmentation Funding Facilities (as defined in section 4.10A) and all Facilities deemed to be a Network Augmentation Funding Facility under clause 4.5.12A to the Network Access Quantity Model, then using the Network Access Quantity Model and, subject to the NAQ rules:

(a) determine the preliminary Network Access Quantity for each such Network Augmentation Funding Facility; and

(b) if applicable, adjust the preliminary Network Access Quantity determined for a Facility under a prior step or the Indicative Network Access Quantity for an Indicative NAQ Facility.

To avoid doubt, an Early CRC Facility that is also a Network Augmentation Funding Facility is not a Network Augmentation Funding Facility for the purposes of this Step 4.

Step 5: Add to the Network Access Quantity Model:

(a) any remaining committed Facilities, excluding any new Early CRC Facilities; and

(b) any committed Facility Upgrade for an NAQ Facility, then:

(c) using the Network Access Quantity Model and, subject to the NAQ rules:

i. determine the preliminary Network Access Quantity for each such Facility or Facility Upgrade; and

ii. if applicable, adjust the preliminary Network Access Quantity determined for a Facility or Facility Upgrade under a prior step or the Indicative Network Access Quantity for an Indicative NAQ Facility.

Step 6: If the sum of the preliminary Network Access Quantity determined for each Facility and Facility Upgrade under all prior steps fully covers the Peak Reserve Capacity Requirement, go to Step 8. Otherwise:

(a) add all remaining Facilities and Facility Upgrades, excluding any new Early CRC Facilities to the Network Access Quantity Model; then

(b) using the Network Access Quantity Model and, subject to the NAQ rules, determine the preliminary Network Access Quantity for each Facility or Facility Upgrade added in Step 6(a); then

(c) select Facilities and Facility Upgrades, subject to, if applicable, the preliminary Network Access Quantity determined for a Facility or Facility Upgrade being not less than the Minimum Capacity Credits Quantity for the Facility or Facility Upgrade, until the Peak Reserve Capacity Requirement

is fully covered, applying the prioritisation order, if required, or until there are no Facilities or Facility Upgrades left to be selected; then

(d) remove any Facilities and Facility Upgrades not selected under Step 6(c) from the Network Access Quantity Model; then

(e) using the Network Access Quantity Model and, subject to the NAQ rules:

i. determine the preliminary Network Access Quantity for each Facility or Facility Upgrade selected under Step 6(c); and

ii. if applicable, adjust the preliminary Network Access Quantity determined for a Facility or Facility Upgrade under a prior step or the Indicative Network Access Quantity for an Indicative NAQ Facility.

For the purposes of Step 8, Facilities that have not been selected under Step 6(c) will not be treated as a Facility for which a preliminary Network Access Quantity has been determined.

Step 7: If a preliminary Network Access Quantity has been determined for each Facility and Facility Upgrade in the Network Access Quantity Model (except for any Facilities or Facility Upgrades that were not selected due to the preliminary Network Access Quantity determined for the Facility or Facility Upgrade being less than the Minimum Capacity Credits Quantity for the Facility or Facility Upgrade) but the Peak Reserve Capacity Requirement has not been covered, then record the difference as the Peak Capacity shortfall.

Step 8: Record:

(a) for an Indicative NAQ Facility, if the Indicative Network Access Quantity has been adjusted under this Part A, the adjusted Indicative Network Access Quantity; and

(b) for each other Facility, the preliminary Network Access Quantity determined under this Part A as the Final Network Access Quantity for the Facility.

Step 9: Report the Peak Capacity shortfall, which indicates the amount that may be procured through the supplementary capacity process in section 4.24.

Step 10: Add the Facilities referred to in Step 10(a) and Step 10(b) (each comprising a "group") in the order specified to the Network Access Quantity Model, except that before adding the next group of Facilities to the Network Access Quantity Model, undertake the applicable determination in Step 10(c) for that group of Facilities before adding the next group of Facilities and repeating Step 10(c) for that subsequent group of Facilities:

(a) new Early CRC Facilities that are also Network Augmentation Funding Facilities; then

(b) any other new Early CRC Facilities; then

(c) using the Network Access Quantity Model and, subject to the NAQ rules:

i. determine the preliminary Network Access Quantity for each Facility in the group of Facilities described in Step 10(a); and

ii. determine the Indicative Network Access Quantity for each Facility in the group of Facilities described in Step 10(b).

Step 11: End.

Part B Candidate Fixed Price Facility or Candidate Fixed Price Component

Step 1: Identify the Peak Reserve Capacity Requirement for the relevant Capacity Year.

Step 2: Let the Network Access Quantity Model contain:

(a) NAQ Facilities; and

(b) Indicative NAQ Facilities.

Step 3: [Blank]

Step 3A: Subject to the NAQ rules, using the Network Access Quantity Model determine the preliminary Network Access Quantity for each NAQ Facility and, if applicable, Indicative Network Access Quantity for each Indicative NAQ Facility, which is a value up to the minimum of:

(a) the Network Access Quantity determined for the NAQ Facility or Indicative NAQ Facility in the Reserve Capacity Cycle immediately preceding the current Reserve Capacity Cycle, which:

i. for an Early CRC Facility is deemed to be:

1. for an Early CRC Facility that is also a Network Augmentation Funding Facility, the preliminary Network Access Quantity determined for the Facility at Step 10(c)(i) in a previous Reserve Capacity Cycle; or

2. for each other Early CRC Facility, the Indicative Network Access Quantity determined for the Facility in the Reserve Capacity Cycle immediately preceding the current Reserve Capacity Cycle; and

ii. for an NAQ Facility subject to an NCESS Contract, that was not assigned a Network Access Quantity in the Reserve Capacity Cycle immediately preceding the current Reserve Capacity Cycle, is deemed to be the Peak Certified Reserve Capacity for the NAQ Facility; and

(b) the Peak Certified Reserve Capacity for the NAQ Facility or Peak Early Certified Reserve Capacity for the Indicative NAQ Facility,

then go to Step 3B.

Step 3B: Using the Network Access Quantity Model and, subject to the NAQ Rules, adjust the preliminary Network Access Quantity determined for an NAQ Facility under a prior step up to the Highest Network Access Quantity for the NAQ Facility where this is greater than the preliminary Network Access Quantity determined for the NAQ Facility in a prior step and, if applicable, adjust the Indicative Network Access Quantity determined under a prior step for an Indicative NAQ Facility up to the Peak Early Certified Reserve Capacity for the Indicative NAQ Facility,

then go to Step 3C.

Step 3C: Using the Network Access Quantity Model and, subject to the NAQ rules, adjust the preliminary Network Access Quantity determined for an NAQ Facility or Indicative Network Access Quantity for an Indicative NAQ Facility under a prior step up to the Peak Certified Reserve Capacity for the NAQ Facility or Peak Early Certified Reserve Capacity for an Indicative NAQ Facility, excluding, for the NAQ Facility any associated Facility Upgrade, where this is greater than the preliminary Network Access Quantity determined in a prior step.

Step 4: Add all new committed Network Augmentation Funding Facilities (as defined in section 4.10A) and all Facilities deemed to be a Network Augmentation Funding Facility under clause 4.5.12A to the Network Access Quantity Model, then using the Network Access Quantity Model and, subject to the NAQ rules:

(a) determine the preliminary Network Access Quantity for each such Network Augmentation Funding Facility; and

(b) if applicable, adjust the preliminary Network Access Quantity determined for a Facility under a prior step or the Indicative Network Access Quantity for an Indicative NAQ Facility.

To avoid doubt, an Early CRC Facility that is also a Network Augmentation Funding Facility is not a Network Augmentation Funding Facility for the purposes of this Step 4.

Step 5: Add to the Network Access Quantity Model:

(a) any remaining committed Facilities, excluding:

i. any new Early CRC Facilities; and

ii. any committed Candidate Fixed Price Facilities or Candidate Fixed Price Components; and

(b) any committed Facility Upgrade for an NAQ Facility, excluding any that are Candidate Fixed Price Components, then:

(c) using the Network Access Quantity Model and, subject to the NAQ rules:

i. determine the preliminary Network Access Quantity for each such Facility, or Facility Upgrade; and

ii. if applicable, adjust the preliminary Network Access Quantity determined for a Facility or Facility Upgrade under a prior step or the Indicative Network Access Quantity for an Indicative NAQ Facility.

Step 6: If the sum of the preliminary Network Access Quantity determined for each Facility or Facility Upgrade under all prior steps is:

(a) less than the Peak Reserve Capacity Requirement plus 3%, then go to Step 6A; or

(b) equal to or more than the Peak Reserve Capacity Requirement plus 3%, then go to Step 7.

Step 6A: Add all committed Candidate Fixed Price Facilities and committed Candidate Fixed Price Components to the Network Access Quantity Model, then, using the Network Access Quantity Model and, subject to the NAQ rules:

(a) determine the preliminary Network Access Quantity for each Facility and each Facility Upgrade; and

(b) if applicable, adjust the preliminary Network Access Quantity determined for a Facility or Facility Upgrade under a prior step or the Indicative Network Access Quantity for an Indicative NAQ Facility.

Step 6B: If the sum of the preliminary Network Access Quantity determined for each Facility under all prior steps does not fully cover the Peak Reserve Capacity Requirement, then:

(a) add the Facilities and Facility Upgrades referred to in Step 6B(a)(i) and Step 6B(a)(ii) (each step comprising a "group") in the order specified to the Network Access Quantity Model, except that before adding the next group of Facilities and Facility Upgrades to the Network Access Quantity Model, undertake Steps 6B(b), 6B(c), 6B(d) and 6B(e)(i) for that group of Facilities and Facility Upgrades, and Step 6B(e)(ii) in respect to the Facilities and Facility Upgrades referred to in Step 6B(e)(ii), before adding the next group of Facilities and Facility Upgrades, if required, and repeating Steps 6B(b), 6B(c), 6B(d) and 6B(e)(i) for that subsequent group of Facilities and Facility Upgrades, and Step 6B(e)(ii) in respect to the Facilities referred to in Step 6B(e)(ii):

i. any remaining Facilities that are not committed and are not Candidate Fixed Price Facilities, and any remaining Facility Upgrades that are not committed and are not Candidate Fixed Price Components; then

ii. Candidate Fixed Price Facilities that are not committed and Candidate Fixed Price Components that are not committed; then

(b) using the Network Access Quantity Model and, subject to the NAQ rules, determine the preliminary Network Access Quantity for each Facility and Facility Upgrade in that group of Facilities and Facility Upgrades; then

(c) select Facilities and Facility Upgrades from that group of Facilities and Facility Upgrades, subject to, if applicable, the preliminary Network Access Quantity determined for a Facility or Facility Upgrade in that group of Facilities and Facility Upgrades being not less than the Minimum Capacity Credits Quantity for the Facility or Facility Upgrade, until the Peak Reserve Capacity Requirement is fully covered, applying the prioritisation order, if required, or until there are no Facilities or Facility Upgrades left to be selected; then

(d) remove any Facilities and Facility Upgrade not selected under Step 6B(c) from that group from the Network Access Quantity Model; then

(e) using the Network Access Quantity Model and, subject to the NAQ rules:

i. determine the preliminary Network Access Quantity for each Facility and Facility Upgrade selected under Step 6B(c); and

ii. if applicable, adjust the preliminary Network Access Quantity determined for a Facility or Facility Upgrade under a prior step (other than a step in this Step 6B) or the Indicative Network Access Quantity for an Indicative NAQ Facility,

then go to Step 7.

For the purposes of Step 8, Facilities that have not been selected under Step 6B(c) will not be treated as a Facility for which a preliminary Network Access Quantity has been determined.

Step 7: If a preliminary Network Access Quantity has been determined for all Facilities and Facility Upgrades in the Network Access Quantity Model (except for any Facilities or Facility Upgrades that were not selected due to the preliminary Network Access Quantity determined for the Facility or Facility Upgrade being less than the Minimum Capacity Credits Quantity for the Facility or Facility Upgrade) but the Peak Reserve Capacity Requirement has not been covered, then record the difference as the capacity shortfall for Peak Capacity.

Step 8: Record:

(a) for an Indicative NAQ Facility, if the Indicative Network Access Quantity has been adjusted under this Part B, the adjusted Indicative Network Access Quantity; and

(b) for each other Facility, the preliminary Network Access Quantity determined under this Part B as the Final Network Access Quantity for the Facility.

Step 9: Report the capacity shortfall for Peak Capacity, which indicates the amount that may be procured through the supplementary capacity process in section 4.24.

Step 10: Add the Facilities referred to in Step 10(a) and Step 10(b) (each comprising a "group") in the order specified to the Network Access Quantity Model, except that before adding the next group of Facilities to the Network Access Quantity Model, undertake the applicable determination in Step 10(c) for that group of Facilities before adding the next group of Facilities and repeating Step 10(c) for that subsequent group of Facilities:

(a) new Early CRC Facilities that are also Network Augmentation Funding Facilities; then

(b) any other new Early CRC Facilities; then

(c) using the Network Access Quantity Model and, subject to the NAQ rules:

i. determine the preliminary Network Access Quantity for each Facility in the group of Facilities described in Step 10 (a); and

ii. determine the Indicative Network Access Quantity for each Facility in the group of Facilities described in Step 10 (b).

Step 11: End.

Appendix 4: Flexible Individual Reserve Capacity Requirements~~[Blank]~~

This Appendix presents the method that must be used by AEMO to determine, for a Trading Month n:

- Indicative Flexible Individual Reserve Capacity Requirements as required under clause 4.28.6A;
- Flexible Individual Reserve Capacity Requirements as required under clause 4.28.7A; and
- revised Flexible Individual Reserve Capacity Requirements as required under clause 4.28.11B.

AEMO must perform steps 1 to 3 to determine the Indicative Flexible Individual Reserve Capacity Requirements, Flexible Individual Reserve Capacity Requirements or revised Flexible Individual Reserve Capacity Requirements for Trading Month n.

For the purpose of this Appendix:

1. All references, apart from those in step 1(c)(ii), to meters are to interval meters.
2. The Notional Wholesale Meter is to be treated as a registered interval meter. This meter is denoted by meter m=m*.
3. The Post Capacity Year New Notional Wholesale Meter, determined in accordance with step 1(c), is to be treated as a registered interval meter. This meter is denoted by m=m+.
4. A meter measuring a Facility containing an Intermittent Load is to be included in these calculations as a single meter representing a Non-Dispatchable Load, with metered consumption calculated according to clause 2.30B.11 and clause 9 of this Appendix 4.
5. The meter registration data to be used in the calculations is to be the most current complete set of meter registration data as at the time of commencing the calculations.
6. When calculating the Indicative Flexible Individual Reserve Capacity Requirements AEMO must assume that all meters registered to a Market Participant on the day of calculation will remain registered to that Market Participant for all future Trading Intervals.
7. A meter measuring a Scheduled Facility, Semi-Scheduled Facility or Non-Scheduled Facility not containing an Intermittent Load is to be included in these calculations with metered consumption calculated in accordance with clause 9 of this Appendix 4.
8. Each meter measuring an Aggregated Facility is to be included as a separate meter with metered consumption calculated in accordance with clause 9 of this Appendix 4.

9. Metered consumption for meter m, in Trading Interval t, is zero when AEMO issues a direction under clause 7.7.5 in respect of an Electric Storage Resource associated with m for a Dispatch Interval within t, otherwise it is -1 x min(0, SOMS(m, t)), where SOMS(m, t) is the Sent Out Metered Schedule of m in t.

10. If meter m measures an Associated Load of a Demand Side Programme then:

    (a) If the Demand Side Programme was issued a Dispatch Instruction under clause 7.6.5A for a quantity determined under clause 7.6.5A in a Flexible IRCR Interval t, then the metered consumption in Trading Interval t equals the Unadjusted Baseline Energy for that load in the Trading Interval as calculated in Step 2.2 of Appendix 10.

    (b) Otherwise, the metered consumption of meter m is given by its Sent Out Metered Schedule in Trading Interval t.

11. References to the "relevant Capacity Year" are to the Capacity Year which contains Trading Month n.

Step 1: Determine the contribution of each meter m to the Flexible Reserve Capacity Requirement as:

(a) for a meter, including the Notional Wholesale Meter, for which Sent Out Metered Schedules exist for all of the Flexible IRCR Intervals for the relevant Capacity Year:

$$\mathrm{FRCRC(m)} = 2 \times \frac{\sum_{\mathrm{d \in FIRCRD}} \max_{\mathrm{t \in FIRCRI(d)}} (\mathrm{Demand\left(m, LatestInterval(d)\right)} - \mathrm{Demand(m,t)})}{3}$$

where:

i. Demand(m,t) is the metered consumption in MWh of meter m in Trading Interval t;

ii. d∈FIRCRD refers to all Trading Days in the relevant Capacity Year which contain Flexible IRCR Intervals;

iii. t∈FIRCRI(d) refers to all Flexible IRCR Trading Intervals on Trading Day d; and

iv. LatestInterval(d) is the latest Flexible IRCR Trading Interval on Trading Day d;

(b) for a meter, excluding the Post Capacity Year New Notional Wholesale Meter, for which Sent Out Metered Schedules do not exist for all of the Flexible IRCR Intervals, but for which Sent Out Metered Schedules exist for all Trading Intervals in Trading Month n-3:

$$\mathrm{FRCRC(m)} = 2 \times \max_{\mathrm{M \in PTM}} \left(\frac{\sum_{\mathrm{d \in 3HRTD(M)}} \left(\max_{\mathrm{t \in HRTI(d)}} (\mathrm{Demand\left(m, Highest4HDI(d)\right)} - \mathrm{Demand(m,t)}) \right)}{3} \right)$$

where:

i. Demand(m,t) is the metered consumption in MWh of meter m in Trading Interval t; and

ii. d∈3HRTD(M) refers to all Trading Days in the 3 High-Ramp Trading Days in Trading Month M;

iii. t∈HRTI(d) refers to the Trading Interval with the highest Four-Hour Demand Increase on Trading Day d and the seven prior Trading Intervals;

iv. Highest4HDI(d) is the Trading Interval with the highest Four-Hour Demand Increase on Trading Day d; and

v. M∈PTM refers to all Trading Months from the start of the relevant Capacity Year to Trading Month n-3 inclusive; and

(c) for the Post Capacity Year New Notional Wholesale Meter:

$$\mathrm{FRCRC}(\mathrm{m}^{+}) = \frac{\mathrm{FRCRC}(\mathrm{m}^{*})}{\mathrm{NIMCount}(\mathrm{FMPCY})} \times \left(\mathrm{NIMCount}(\mathrm{n}-3) - \mathrm{NIMCount}(\mathrm{FMPCY})\right)$$

where:

i. FRCRC(m*) is the contribution to the Flexible Reserve Capacity Requirement by the Notional Wholesale Meter calculated under step 1(a);

ii. NIMCount(FMPCY) is the number of non-interval or accumulation meters that existed at the end of the final Trading Month of the Capacity Year before the relevant Capacity Year; and

iii. NIMCount(n-3) is the number of non-interval or accumulation meters that existed at the end of Trading Month n-3.

Step 2: For each Market Participant p, calculate the contribution to the Flexible Reserve Capacity Requirement as:

$$\mathrm{FRCRC}(\mathrm{p}) = \sum_{\mathrm{m}\in\mathrm{Meters}(\mathrm{p})} \mathrm{FRCRC}(\mathrm{m})$$

where:

(a) FRCRC(m) is the contribution to the Flexible Reserve Capacity Requirement of meter m calculated under step 1; and

(b) m∈Meters(p) refers to all meters registered to Market Participant p.

Step 3: For each Market Participant p, calculate the Indicative Flexible Individual Reserve Capacity Requirement or Flexible Individual Reserve Capacity Requirement, as applicable as:

$$\mathrm{FIRCR(p)} = \frac{\mathrm{FRCRC(p)}}{\sum_{\mathrm{p}} \mathrm{FRCRC(p)}} \times \min(\mathrm{FRCR}, \mathrm{FCC})$$

where:

(a) FRCRC(p) is the contribution to the Flexible Reserve Capacity Requirement by Market Participant p calculated under step 2;

(b) FRCR is the Flexible Reserve Capacity Requirement for the relevant Capacity Year; and

(c) FCC is the number of Flexible Capacity Credits held by Market Participants on the relevant Trading Day.

~~Appendix 4A: Individual Intermittent Load Reserve Capacity Requirements~~

~~This Appendix describes how the Individual Intermittent Load Reserve Capacity Requirement for Intermittent Load k for Trading Month n is determined.~~

~~The Individual Intermittent Load Reserve Capacity Requirement is only to be determined for Intermittent Loads that are and continue to be deemed to be Intermittent Loads under clause 1.48.2.~~

~~Define:~~

- ~~MaxL(k) is the nominated load level for Intermittent Load k to apply for Trading Month n as specified in clause 4.28.8(c);~~
- ~~RM is the reserve margin for the Reserve Capacity Cycle defined as negative one plus the ratio of the Reserve Capacity Requirement for the relevant Capacity Year as described in clause 4.6.1 and the expected peak demand for the relevant Capacity Year as described in clause 4.6.2;~~

~~Calculate Req(k), which equals MaxL(k) multiplied by RM.~~

~~When setting the Individual Intermittent Load Reserve Capacity Requirement for an Intermittent Load k for a Trading Month n in accordance with Appendix 5:~~

- ~~If, at the time AEMO determines the Indicative Individual Reserve Capacity Requirements for Trading Month n, Intermittent Load k is registered and operating or AEMO reasonably expects it to be registered and operating during Trading Month n (based on information provided to AEMO in accordance with clause 4.28.8(c)), then set the Individual Intermittent Load Reserve Capacity Requirement for Intermittent Load k equal to Req(k).~~
- ~~If, at the time AEMO determines the Indicative Individual Reserve Capacity Requirements for Trading Month n, AEMO reasonably expects Intermittent Load k not to be registered or operating during Trading Month n (based on information provided to AEMO in accordance with clause 4.28.8(c)), then set the Individual Intermittent Load Reserve Capacity Requirement for Intermittent Load k equal to zero.~~

Appendix 5: Peak Individual Reserve Capacity Requirements

This Appendix presents the method that must be used by AEMO to determine, for a Trading Month n:

- Peak Individual Reserve Capacity Requirement Contributions as required for assigning Certified Reserve Capacity and Flexible Certified Reserve Capacity to Demand Side Programmes for a Reserve Capacity Cycle under clauses 4.11.1(j) and 4.11.1(jA);
- Indicative Peak Individual Reserve Capacity Requirements as required under clause 4.28.6;
- Peak Individual Reserve Capacity Requirements as required under clause 4.28.7; and
- revised Peak Individual Reserve Capacity Requirements as required under clause 4.28.11A.

AEMO must perform steps 1 to 4 to determine the Indicative Peak Individual Reserve Capacity Requirements, Peak Individual Reserve Capacity Requirements or revised Peak Individual Reserve Capacity Requirements for Trading Month n.

AEMO must perform step 1 as required to determine the Peak Individual Reserve Capacity Requirement Contribution of an individual metered Associated Load for Trading Month n, using as input the relevant values calculated by AEMO in its most recent determination of the Peak Individual Reserve Capacity Requirements for Trading Month n.

For the purpose of this Appendix:

1. All references, apart from those in step 1(c), to meters are to Interval Meters.
2. The Notional Wholesale Meter is to be treated as an Interval Meter registered to Synergy during Trading Month n. This meter is denoted by meter m=m*.
3. The "**Post Hot Season New Notional Wholesale Meter**", determined in accordance with step 1(c), is to be treated as an Interval Meter registered to Synergy during Trading Month n. This meter is denoted by m=m+.

3A. The "**Ex-NWM New Interval Meter**", determined in accordance with step 1(cA), is to be treated as an Interval Meter registered to Synergy during Trading Month n. This meter is denoted by m=m#.

4. A meter measuring a Facility containing an Intermittent Load, that is and continues to be deemed to be an Intermittent Load under clause 1.48.2, is to be included in these calculations as if it were two meters, one representing the Intermittent Load and processed in step 1(d) and one representing other load at the Facility and processed in step 1(a), with metered energy calculated according to clause 2.30B.10 and clause 10 of this Appendix 5.

5. A meter measuring a Facility containing an Intermittent Load, for which an application was accepted under clause 2.30B.6 on or after New WEM Commencement Day, is to be included in these calculations as a single meter representing a Non-Dispatchable Load, with metered energy calculated according to clause 2.30B.11 and clause 10 of this Appendix 5.

6. The meter registration data to be used in the calculations is to be the most current complete set of meter registration data as at the time of commencing the calculations.

7. When calculating the Indicative Peak Individual Reserve Capacity Requirements AEMO must assume all meters registered to a Market Participant on the day of calculation will remain registered to that Market Participant for all future Trading Intervals.

8. A meter measuring a Scheduled Facility, Semi-Scheduled Facility or Non-Scheduled Facility not containing an Intermittent Load is to be included in these calculations with metered energy calculated in accordance with clause 10 of this Appendix 5.

9. Each meter measuring an Aggregated Facility is to be included as a separate meter with metered energy calculated in accordance with clause 10 of this Appendix 5.

10. Metered energy for meter m, in Trading Interval t is:

    (a) zero, if AEMO has issued a direction under clause 7.7.5 in respect of an Electric Storage Resource associated with m for a Dispatch Interval within Trading Interval t;

    (b) if meter m measures an Associated Load of a Demand Side Programme which was issued a Dispatch Instruction under clause 7.6.5A for a non-zero MW quantity in Trading Interval t:

    $$-1 \times ALBE(m,t)$$

    where ALBE(m,t) is the Associated Load Baseline Energy of the Associated Load for Trading Interval t as calculated in step 5.1 of Appendix 10;

    (c) if meter m is associated with a Scheduled Facility, Semi-Scheduled Facility or Non-Scheduled Facility:

    $$-1 \times min\left(0, SOMS(m,t)\right)$$

    where SOMS(m,t) is the Sent Out Metered Schedule of meter m in Trading Interval t; and

    (d) otherwise:

    $$-1 \times SOMS(m,t)$$

    where SOMS(m,t) is the Sent Out Metered Schedule of meter m in Trading Interval t.

Step 1: Determine the contribution of each meter m to the Peak Reserve Capacity Requirement as:

(a) for a meter, including the Notional Wholesale Meter, that is not an Intermittent Load meter and for which Sent Out Metered Schedules exist for all Peak IRCR Intervals for the relevant Capacity Year:

$$PRCRC(m) = 2 \times MedianIRCRIntervals(m)$$

where MedianIRCRIntervals(m) is the median metered energy of meter m in the Peak IRCR Intervals for the relevant Capacity Year;

(b) for a meter, excluding the Post Hot Season New Notional Wholesale Meter and the Ex-NWM New Interval Meter, that is not an Intermittent Load meter and for which Sent Out Metered Schedules do not exist for all of the Peak IRCR Intervals, but for which Sent Out Metered Schedules do exist for all Trading Intervals in Trading Month n-3:

$$PRCRC(m) = 2 \times max_{M \in PTM}(Median4Peaks(m, M))$$

where:

i. M∈PTM refers to all Trading Months from the first month after the end of the previous Hot Season to Trading Month n-3 inclusive; and

ii. Median4Peaks(m,M) is the median metered energy of meter m in the 4 Peak SWIS Trading Intervals of Trading Month M;

(c) for the Post Hot Season New Notional Wholesale Meter:

$$PRCRC(m^{+}) = \frac{PRCRC(m^{*})}{NIMCount(FMPHS)} \times (NIMCount(n-3) - NIMCount(FMPHS))$$

where:

i. PRCRC(m*) is the contribution to the Peak Reserve Capacity Requirement by the Notional Wholesale Meter calculated under step 1(a);

ii. NIMCount(n-3) is the number of non-interval or accumulation meters that existed at the end of Trading Month n-3; and

iii. NIMCount(FMPHS) is the number of non-interval or accumulation meters that existed at the end of the final Trading Month of the previous Hot Season;

(cA) for the Ex-NWM New Interval Meter:

$$PRCRC(m\#) = -1 \times \sum_{m \in NM} PRCRC(m)$$

where:

i. m∈NM denotes all meters identified in step 1(b) of this Appendix 5 which measured energy that was measured by meter m=m* during the preceding Hot Season; and

ii. PRCRC(m) is the contribution to the Peak Individual Reserve Capacity Requirement by meter m calculated under step 1(b); and

(d) for an Intermittent Load meter defined under clause 2.30B.9(b):

i. if the Intermittent Load is registered and operating or AEMO reasonably expects it to be registered and operating during Trading Month n based on information provided to AEMO in accordance with clause 4.28.8:

$$PRCRC(m) = MaxL(m) \times \left(\frac{PRCR}{EPD} - 1\right)$$

where:

1. MaxL(m) is the nominated load level for Intermittent Load m to apply for Trading Month n as specified in clause 4.28.8;

2. PRCR is the Peak Reserve Capacity Requirement for the Capacity Year in which Trading Month n falls; and

3. EPD is the expected peak demand corresponding to the Peak Reserve Capacity Requirement for the Capacity Year in which Trading Month n falls, as described in clause 4.6.2; and

ii. otherwise:

$$\mathrm{PRCRC}(m) = 0$$

Step 1A: For each meter m and each Market Participant p, calculate the value of d(m,p) as:

$$d(m,p) = \frac{RegDays(m,p)}{TMDays}$$

where:

(a) RegDays(m,p) is the number of full Trading Days that meter m was registered to Market Participant p in Trading Month n; and

(b) TMDays is the number of Trading Days in Trading Month n.

Step 2: For each Market Participant p, calculate the contribution to the Peak Reserve Capacity Requirement as:

$$PRCRC(p) = max(0, \sum_{m \in Meters} (PRCRC(m) \times d(m,p)))$$

where:

(a) PRCRC(m) is the contribution to the Peak Reserve Capacity Requirement by meter m calculated under step 1;

(b) m∈Meters denotes all meters for which a value was determined under step 1 of this Appendix 5; and

(c) d(m,p) is the value calculated for meter m and Market Participant p under step 1A.

Step 3: Calculate:

$$Total_Ratio = \frac{min(PRCR, PCC)}{\sum_{p \in MP} PRCRC(p)}$$

where:

(a) PRCR is the Peak Reserve Capacity Requirement for the Capacity Year in which Trading Month n falls;

(b) PCC is the number of Peak Capacity Credits held by Market Participants for Trading Month n at the time of the calculation;

(c) p∈MP denotes all Market Participants; and

(d) PRCRC(p) is the contribution to the Peak Reserve Capacity Requirement by Market Participant p calculated under step 2.

Step 4: For each Market Participant p, calculate the Indicative Peak Individual Reserve Capacity Requirement or Peak Individual Reserve Capacity Requirement, as applicable, as:

$$PIRCR(p) = PRCRC(p) \times Total_Ratio$$

where:

(a) PRCRC(p) is the contribution to the Peak Reserve Capacity Requirement by Market Participant p calculated under step 2; and

(b) Total_Ratio is the value determined under step 3.

~~Appendix 5: Individual Reserve Capacity Requirements~~

~~This Appendix presents the method that must be used by AEMO to determine, for a Trading Month n:~~

~~Individual Reserve Capacity Requirement Contributions as required for the determination of Relevant Demands under clause 4.26.2CA;~~

~~Indicative Individual Reserve Capacity Requirements as required under clause 4.28.6;~~

~~Individual Reserve Capacity Requirements as required under clause 4.28.7; and~~

~~revised Individual Reserve Capacity Requirements as required under clause 4.28.11A.~~

AEMO must perform Steps 1 to 10A to determine the Indicative Individual Reserve Capacity Requirements, Individual Reserve Capacity Requirements or revised Individual Reserve Capacity Requirements for Trading Month n.

AEMO must perform Step 11 as required to determine the Individual Reserve Capacity Requirement Contribution of an individual metered Associated Load for Trading Month n, using as input the relevant values calculated by AEMO when it determined the Indicative Individual Reserve Capacity Requirements for Trading Month n.

For the purpose of this Appendix:

1. All references, apart from those in Step 5A, to meters are interval meters.

2. The Notional Wholesale Meter is to be treated as a registered interval meter measuring Temperature Dependent Load. This meter is denoted by Temperature Dependent Load meter v=v*.

3. The New Notional Wholesale Meter, determined in accordance with Step 5A, is to be treated as a registered interval meter measuring Temperature Dependent Load.

4. A meter measuring a Facility containing an Intermittent Load, that is and continues to be deemed to be an Intermittent Load under clause 1.48.2, is to be included in these calculations as if it were two meters, one representing the Intermittent Load and included in the set indexed by w, and one representing other load at the Facility and included in the set indexed by u or v as applicable, with metered consumption calculated according to clause 2.30B.10 and clause 11 of this Appendix 5.

5. A meter measuring a Facility containing an Intermittent Load, for which an application was approved under clause 2.30B.6 on or after New WEM Commencement Day, is to be included in these calculations as a single meter representing a Non-Dispatchable Load and included in the set indexed by u or v as applicable, with metered consumption calculated according to clause 2.30B.11 and clause 12 of this Appendix 5.

6. The meter registration data to be used in the calculations is to be the most current complete set of meter registration data as at the time of commencing the calculations.

7. The 12 Peak SWIS Trading Intervals to be used in the calculations are the 12 Peak SWIS Trading Intervals determined and published by AEMO under clause 4.1.23A for the Hot Season preceding the start of the Capacity Year in which Trading Month n falls (the “preceding Hot Season”).

8. The 4 Peak SWIS Trading Intervals for a Trading Month to be used in the calculations are the 4 Peak SWIS Trading Intervals determined and published by AEMO under clause 4.1.23B for that Trading Month.

9. When calculating the Indicative Individual Reserve Capacity Requirements it is assumed that all meters registered to a Market Participant on the day of calculation will remain registered to that Market Participant for the entirety of Trading Month n.

10. A meter measuring a Scheduled Facility, Semi-Scheduled Facility or Non-Scheduled Facility not containing an Intermittent Load is to be included in these calculations and included in the set indexed by u or v as applicable, with metered consumption calculated in accordance with clause 12 of this Appendix 5.

11. Each meter measuring an Aggregated Facility is to be included as a separate meter and included in the set indexed by u or v as applicable, with metered consumption calculated in accordance with clause 12 of this Appendix 5.

12. Metered consumption for meter m, in Trading Interval t, is zero when AEMO issues a direction under clause 7.7.5 in respect of an Electric Storage Resource associated with m for a Dispatch Interval within t, otherwise it is -1 x min(0, SOMS(m, t)), where SOMS(m, t) is the Sent Out Metered Schedule of m in t.

Step 1: Calculate:

$RR = \min(RCR, CC)$

$FL = FL_RCR \times RR / RCR$

where:

RCR is the Reserve Capacity Requirement for the relevant Reserve Capacity Cycle

CC is the total number of Capacity Credits assigned for Trading Month n at the time of the calculation

FL_RCR is the peak demand associated with the Reserve Capacity Requirement for the relevant Reserve Capacity Cycle as specified in clause 4.6.2

Step 2: For each meter, u, measuring Non-Temperature Dependent Load that was registered with AEMO for all of the 12 Peak SWIS Trading Intervals determine NTDL(u), where:

NTDL(u) is the contribution to the system peak load of meter u during the preceding Hot Season where this contribution is double the median value of the metered consumption during the 12 Peak SWIS Trading Intervals

Step 3: For each meter, v, measuring Temperature Dependent Load that was registered with AEMO for all of the 12 Peak SWIS Trading Intervals determine TDL(v), where:

TDL(v) is the contribution to the system peak load of meter v during the preceding Hot Season where this contribution is double the median value of the metered consumption during the 12 Peak SWIS Trading Intervals

Step 4: For each Intermittent Load meter w set its Individual Intermittent Load Reserve Capacity Requirement, IILRCR(w), to equal the amount defined in accordance with Appendix 4A.

Step 5: Identify meters that were not registered with AEMO during one or more of the 12 Peak SWIS Trading Intervals but which were registered by the end of Trading Month n.

For a new meter u that measures Non-Temperature Dependent Load set NMNTCR(u) to be 1.1 times the MW figure formed by doubling the median value of the metered consumption for that meter during the 4 Peak SWIS Trading Intervals of Trading Month n-3.

For a new meter v that measures Temperature Dependent Load set NMTDCR(v) to be 1.3 times the MW figure formed by doubling the median value of the metered consumption for that meter during the 4 Peak SWIS Trading Intervals of Trading Month n-3.

Step 5A:

Find the MW figure formed by doubling the median value of the metered consumption for the Notional Wholesale Meter v*, during the 4 Peak SWIS Trading Intervals of Trading Month n-3 (“Median Notional Wholesale Meter”).

Divide the Median Notional Wholesale Meter by the number of non-interval or accumulation meters that existed at the end of Trading Month n-3 (“Average Non - Interval Meter”).

Subtract the number of non-interval or accumulation meters disconnected between the end of the preceding Hot Season and the end of Trading Month n-3 from the number of non-interval or accumulation meters connected between the end of the preceding Hot Season and the end of Trading Month n-3 (“Non-Interval Meter Growth”).

Multiply the Non-Interval Meter Growth and the Average Non-Interval Meter. (“New Notional Wholesale Meter”).

For the New Notional Wholesale Meter set NMTDCR(v) equal to be 1.3 times the New Notional Wholesale Meter.

Step 6: Calculate the values of d(u,i) for Non-Temperature Dependent Load, d(v,i) for Temperature Dependent Loads and d(w,i) for Intermittent Loads such that:

d(u,i) has a value of zero if meter u measures Intermittent Load or was not registered to Market Participant i during Trading Month n, otherwise it has a value equal to the number of full Trading Days the meter was registered to Market Participant i in Trading Month n divided by the number of days in Trading Month n.

d(v,i) has a value of zero if meter v measures Intermittent Load or was not registered to Market Participant i during Trading Month n, otherwise it has a value equal to the number of full Trading Days the meter was registered to Market Participant i in Trading Month n divided by the number of days in Trading Month n.

d(w,i) has a value of zero if meter w was not registered to Market Participant i during Trading Month n, otherwise it has a value of one if Market Participant i nominated capacity for the Intermittent Load measured by meter w in accordance with clause 4.28.8(c), with the exception that if the Intermittent Load was for Load at a meter registered to Market Participant i for only part of Trading Month n, then it has a value equal to the number of full Trading Days that meter was registered to Market Participant i in Trading Month n divided by the number of days in Trading Month n.

Step 7: Identify the set NM of all those new meters v that measured consumption that was measured by meter v=v* during the preceding Hot Season and set TDLn(v) for meter v=v* to equal:

$$TDLn(v^*) = TDL(v^*) - Sum(v \in NM, NMTDCR(v))$$

Step 8: For each Market Participant i, calculate:

$$ILRCR(i) = Sum(IILRCR(w) \times d(w,i))$$

Step 8A: Calculate:

$$NRR = RR - Sum(i, ILRCR(i))$$

$$NTDL_Ratio = NRR / FL$$

Step 8B: For each Market Participant i, calculate:

$$NTDLRCR(i) = Sum(NTDL(u) \times d(u,i)) \times NTDL_Ratio$$

Step 8C: Calculate:

$$TDL_Ratio = (NRR - Sum(i, NTDLRCR(i))) / Sum(i, Sum(MTDL(v) \times d(v,i)))$$

where

MTDL(v) = TDL(v) for all v except v* and
MTDL(v) = TDLn(v*) for v=v*

Step 8D: For each Market Participant i, calculate:

TDLRCR(i) = (Sum MTDL(v) × d(v,i)) × TDL_Ratio

Step 9: For each Market Participant i, calculate

X(i) = Sum(i, ILRCR(i) + NTDLRCR(i) + TDLRCR(i)) + Sum(u, NMNTCR(u) × d(u,i)) + Sum(v, NMTDCR(v) × d(v,i))

Step 10: Calculate:

Total_Ratio = RR / Sum(i, X(i))

Step 10A: For each Market Participant i, set the Indicative Individual Reserve Capacity Requirement or Individual Reserve Capacity Requirement, as applicable, for Trading Month n to:

X(i) × Total_Ratio

Step 11: The Individual Reserve Capacity Requirement Contribution of an individual metered Associated Load for Trading Month n of a Capacity Year is determined as follows:

(a) for meter u at a connection point measuring Non-Temperature Dependent Load that was registered with AEMO for all of the 12 Peak SWIS Trading Intervals equals (NTDL(u) x NTDL_Ratio x Total_Ratio);

(b) for meter v at a connection point measuring Temperature Dependent Load that was registered with AEMO for all of the 12 Peak SWIS Trading Intervals equals (TDL(v) x TDL_Ratio x Total_Ratio);

(c) for meter u at a new connection point identified in Step 5 measuring Non-Temperature Dependent Load equals (NMNTCR(u) x Total_Ratio); and

(d) for meter v at a new connection point identified in Step 5 measuring Temperature Dependent Load equals (NMTDCR(v) x Total_Ratio).

~~Appendix 5A: Non-Temperature Dependent Load Requirements~~

~~This Appendix specifies how AEMO must determine whether or not to accept a Load measured by an interval meter nominated in accordance with clauses 4.28.8(a) or 4.28.8C as a Non-Temperature Dependent Load for the purposes of clause 4.28.9.~~

~~For the purpose of this Appendix:~~

~~AEMO must use the current set of meter data (as at the time when it commences its calculations);~~

~~the 4 Peak SWIS Trading Intervals in a Trading Month are the 4 Peak SWIS Trading Intervals determined and published by AEMO under clause 4.1.23B for that Trading Month; and~~

~~AEMO must treat each Measurement Point measured by an interval meter measuring a Scheduled Facility, Semi-Scheduled Facility or Non-Scheduled Facility as if it were a separate Non-Dispatchable Load.~~

~~AEMO must perform the following steps (in sequential order) when determining whether or not to accept a Load measured by an interval meter nominated in accordance with clauses 4.28.8(a) or 4.28.8C as a Non-Temperature Dependent Load for the purposes of clause 4.28.9:~~

~~Step 1:~~

~~If, in accordance with clause 4.28.8(a), the Market Participant provides AEMO in Trading Month n-2 with the identity of an interval meter associated with that Market Participant which measures a Load that it nominates as a Non-Temperature Dependent Load from Trading Month n;~~

~~If the identity of the interval meter is provided by the date and time specified in clause 4.1.23; and~~

~~If the Load was treated as a Non-Temperature Dependent Load in Trading Month n-8,~~

~~then AEMO must accept the Load as a Non-Temperature Dependent Load if:~~

~~(a) the median value of the metered consumption for the Load, calculated for the set of Trading Intervals defined as the 4 Peak SWIS Trading Intervals in each of the Trading Months starting from the start of Trading Month n-11 to the end of Trading Month n-3, exceeded 1.0 MWh; and~~

~~(b) the metered consumption for the Load did not deviate downwards from the median value in paragraph (a) by more than 10% for more than 10% of the time~~

during the period from the start of Trading Month n-11 to the end of Trading Month n-3, except during Trading Intervals for which:

i. the metered consumption was 0 MWh; or

ii. consumption was reduced at the request of AEMO; or

iii. AEMO has accepted a Consumption Deviation Application for the Load under clause 4.28.9D.

Step 2:

If, in accordance with clauses 4.28.8(a) or 4.28.8C, the Market Participant provides AEMO in Trading Month n-2 with the identity of an interval meter associated with that Market Participant which measures a Load that it nominates as a Non-Temperature Dependent Load from Trading Month n;

If the Load was not treated as a Non-Temperature Dependent Load in Trading Month n-1; and

If the Load was not treated as a Non-Temperature Dependent Load for any of the Trading Months in the Capacity Year in which Trading Month n falls,

then AEMO must accept the Load as a Non-Temperature Dependent Load for Trading Month n if:

(a) the median value of the metered consumption for the Load during the 4 Peak SWIS Trading Intervals in Trading Month n-3 exceeded 1.0 MWh; and

(b) the metered consumption for the Load did not deviate downwards from the median value in paragraph (a) by more than 10% for more than 10% of the time during Trading Month n-3, except during Trading Intervals for which:

i. the metered consumption was 0 MWh; or

ii consumption was reduced at the request of AEMO; or

iii. AEMO has accepted a Consumption Deviation Application for the Load under clause 4.28.9D.

Step 3:

If a Load was not accepted under Step 1 as a Non-Temperature Dependent Load for Trading Month n; and

If the Load was accepted under Step 2, or previously under this Step 3, as a Non-Temperature Dependent Load for Trading Month n-1,

then AEMO must accept the Load as a Non-Temperature Dependent Load for Trading Month n if:

(a) the median value of the metered consumption for the Load, calculated for the set of Trading Intervals defined as the 4 Peak SWIS Trading Intervals in each of the Trading Months commencing at the start of the Trading Month for which metered consumption was used by AEMO to accept the Load as a Non-Temperature Dependent Load under Step 2 to the end of Trading Month n-3, exceeded 1.0 MWh; and

(b) the metered consumption for the Load did not deviate downwards from the median value in paragraph (a) by more than 10% for more than 10% of the time during the period from the start of the Trading Month for which metered consumption was used by AEMO to accept the Load as a Non-Temperature Dependent Load under Step 2 to the end of Trading Month n-3, except during Trading Intervals for which:

i. the metered consumption was 0 MWh; or

ii. consumption was reduced at the request of AEMO; or

iii. AEMO has accepted a Consumption Deviation Application for the Load under clause 4.28.9D.

Step 4:

Otherwise, AEMO must treat a Load as a Temperature Dependent Load.

Appendix 6: STEM Price Curve Determination

The first part of this appendix describes a process for converting a Market Participant's Portfolio Supply Curve and Portfolio Demand Curve into a single STEM Price Curve and to then convert a Market Participant's STEM Price Curve into STEM Bids and STEM Offers relative to its Net Bilateral Position.

For each Market Participant and for each Trading Interval in the Trading Day except those for which AEMO has recorded that the Market Participant has not made a STEM Submission:

(a) Determine for every price between the Energy Offer Price Floor and the Energy Offer Price Ceiling:

i. the maximum cumulative quantity the Market Participant is prepared to sell into the STEM from all of its Price-Quantity Pairs in its Portfolio Supply Curve;

ii. the minimum cumulative quantity the Market Participant is prepared to sell into the STEM from all of its Price-Quantity Pairs in its Portfolio Supply Curve;

iii. the maximum cumulative quantity the Market Participant is prepared to buy from the STEM from all of its Price-Quantity Pairs in its Portfolio Demand Curve;

iv. the minimum cumulative quantity the Market Participant is prepared to buy from the STEM from all of its Price-Quantity Pairs in its Portfolio Demand Curve;

v. the STEM Price Curve quantity for that price where:

1. the minimum STEM Price Curve quantity for that price equals the value in Appendix 6(a)(ii) less the value in Appendix 6(a)(iii);

2. the maximum STEM Price Curve quantity for that price equals the value in Appendix 6(a)(i) less the value in Appendix 6(a)(iv); and

3. the STEM Price Curve for that price includes all quantities between those in Appendix 6(a)(v)(1) and Appendix 6(a)(v)(2).

(b) If the minimum of the quantities determined under Appendix 6(a)(v)(1) for the Market Participant for the Trading Interval is greater than the Net Bilateral Position of the Market Participant in the Trading Interval then:

i. if, for every price between the Energy Offer Price Floor and the Energy Offer Price Ceiling, the quantity determined under Appendix 6(a)(v)(1) is equal to the quantity determined under Appendix

6(a)(v)(2), then amend the STEM Price Curve for the Energy Offer Price Floor to include all quantities between the Net Bilateral Position of the Market Participant and the quantity determined for the Energy Offer Price Floor under Appendix 6(a)(v)(2); and

ii. otherwise, amend the STEM Price Curve for the lowest price for which the quantity determined under Appendix 6(a)(v)(1) is not equal to the quantity determined under Appendix 6(a)(v)(2), to include all quantities between the Net Bilateral Position of the Market Participant and the quantity determined for the price under Appendix 6(a)(v)(2).

(c) If the maximum of the quantities determined under Appendix 6(a)(v)(2) for the Market Participant for the Trading Interval is less than the Net Bilateral Position of the Market Participant then:

i. if, for every price between the Energy Offer Price Floor and the Energy Offer Price Ceiling, the quantity determined under Appendix 6(a)(v)(1) is equal to the quantity determined under Appendix 6(a)(v)(2), then amend the STEM Price Curve for the Energy Offer Price Ceiling to include all quantities between the quantity determined for the Energy Offer Price Ceiling under Appendix 6(a)(v)(1) and the Net Bilateral Position of the Market Participant; and

ii. otherwise, amend the STEM Price Curve for the highest price for which the quantity determined under Appendix 6(a)(v)(1) is not equal to the quantity determined under Appendix 6(a)(v)(2), to include all quantities between the quantity determined for the price under Appendix 6(a)(v)(1) and the Net Bilateral Position of the Market Participant.

(d) If the Net Bilateral Position equals the minimum STEM Price Curve quantity then there are no STEM Bids, otherwise:

i. for the STEM Price Curve between the minimum STEM Price Curve quantity and the Net Bilateral Position of that Market Participant identify each price for which more than one STEM Price Curve quantity is defined;

ii. for each price identified in Appendix 6(d)(i) identify the minimum STEM Price Curve quantity for which that price applies, such that the STEM Price Curve quantity lies between the minimum STEM Price Curve quantity and the Net Bilateral Position;

iii. for each price identified in Appendix 6(d)(i) identify the maximum STEM Price Curve quantity for which that price applies, such that the STEM Price Curve quantity lies between the minimum STEM Price Curve quantity and the Net Bilateral Position;

iv. for each price identified in Appendix 6(d)(i) set a Price-Quantity Pair price equal to that price;

v. for each price identified in Appendix 6(d)(i) set a Price-Quantity Pair quantity equal to the quantity defined in Appendix 6(d)(iii) less the quantity defined in Appendix 6(d)(ii); and

vi. set the Market Participant's STEM Bids to be the set of Price-Quantity Pairs defined in Appendix 6(d)(iv) and Appendix 6(d)(v) where each Price-Quantity Pair means that the Market Participant is prepared to buy a quantity of energy from the STEM for that Price-Quantity Pair equal to:

1. 0 MWh if the STEM Clearing Price is greater than the Price-Quantity Pair price;

2. the Price-Quantity Pair quantity if the STEM Clearing Price is less than the Price-Quantity Pair price; and

3. an amount between 0 MWh and the Price-Quantity Pair quantity if the STEM Clearing Price equals the Price-Quantity Pair price.

(e) If the Net Bilateral Position equals the maximum STEM Price Curve quantity then there are no STEM Offers, otherwise:

i. for the STEM Price Curve between the Net Bilateral Position of that Market Participant and the maximum STEM Price Curve quantity identify each price for which more than one STEM Price Curve quantity is defined;

ii. for each price identified in Appendix 6(e)(i) identify the minimum STEM Price Curve quantity for which that price applies, such that the STEM Price Curve quantity lies between the Net Bilateral Position and the maximum STEM Price Curve quantity;

iii. for each price identified in Appendix 6(e)(i) identify the maximum STEM Price Curve quantity for which that price applies, such that the STEM Price Curve quantity lies between the minimum STEM Price Curve quantity and the Net Bilateral Position;

iv. for each price identified in Appendix 6(e)(i) set a Price-Quantity Pair price equal to that price;

v. for each price identified in Appendix 6(e)(i) set a Price-Quantity Pair quantity equal to the quantity defined in Appendix 6(e)(iii) less the quantity defined in Appendix 6(e)(ii); and

vi. set the Market Participant's STEM Offers to be the set of Price-Quantity Pairs defined in Appendix 6(e)(iv) and Appendix 6(e)(v) where each Price-Quantity Pair means that the Market Participant is prepared to sell a quantity of energy into the STEM for that Price-Quantity Pair equal to:

1. 0 MWh if the STEM Clearing Price is less than the Price-Quantity Pair price;
2. the Price-Quantity Pair quantity if the STEM Clearing Price is greater than the Price-Quantity Pair price; and
3. an amount between 0 MWh and the Price-Quantity Pair quantity if the STEM Clearing Price equals the Price-Quantity Pair price.

Appendix 7: [Blank]

Appendix 8: [Blank]

Appendix 9: Relevant Level Determination

Appendix 9 Overview

- Part A of this Appendix 9 sets out definitions and introductory material.
- Part B sets out the Relevant Level Method.

Part A: Introduction

Interpretations and Definitions

A.1. This Appendix 9 presents the method for determining the Relevant Levels for Facilities or components of Facilities ("**Candidates**") for which:

(a) Market Participants have applied for:

i. Peak Certified Reserve Capacity for a given Reserve Capacity Cycle ("**Current Reserve Capacity Cycle**") under section 4.9;

ii. Conditional Peak Certified Reserve Capacity for a future Reserve Capacity Cycle under section 4.9 and AEMO is required under clause 4.9.7A to process the application at the time it processes applications for Certified Reserve Capacity for the Current Reserve Capacity Cycle; or

iii. Peak Early Certified Reserve Capacity for a Reserve Capacity Cycle under clause 4.28C.2 and AEMO is required under clause 4.28C.7 to process the application at the time it processes applications for Peak Certified Reserve Capacity for the Current Reserve Capacity Cycle;

(b) the Market Participant's application includes all required supporting information and is deemed by AEMO to be complete; and

(c) the Peak Certified Reserve Capacity, Conditional Peak Certified Reserve Capacity or Peak Early Certified Reserve Capacity (as applicable) is required to be determined using the Relevant Level Method;

A.2. In this Appendix 9:

(a) a reference to a step is the process step so numbered in this Appendix 9;

(b) the steps in Parts B and C are to be carried out sequentially unless stated otherwise;

(c) the full operation date of a Candidate for the Current Reserve Capacity Cycle ("**Full Operation Date**") is:

i. if at the time the application is made the Candidate is yet to enter service, the date provided under clause 4.10.1(c)(iii)(7) or revised in accordance with clause 4.27.11A; or

ii. otherwise the date most recently provided for a Reserve Capacity Cycle under clause 4.10.1(k);

(d) a "**Committed Candidate**" is a Candidate which is the subject of an application for Peak Certified Reserve Capacity for the Current Reserve Capacity Cycle and has been allocated Peak Capacity Credits in a previous Reserve Capacity Cycle;

(e) a "**Proposed Candidate**" is a Candidate which is the subject of an application for Peak Certified Reserve Capacity for the Current Reserve Capacity Cycle and has not been allocated Peak Capacity Credits in a previous Reserve Capacity Cycle;

(f) an "**Early Candidate**" is a Candidate which is the subject of an application for Peak Early Certified Reserve Capacity for a future Reserve Capacity Cycle that AEMO is required, under clause 4.28C.7, to process at the time it processes applications for Peak Certified Reserve Capacity for the Current Reserve Capacity Cycle; and

(g) "Conditional **Candidate**" is a Candidate which is the subject of an application for Conditional Peak Certified Reserve Capacity for a future Reserve Capacity Cycle that AEMO is required, under clause 4.9.7A, to process at the time it processes applications for Peak Certified Reserve Capacity for the Current Reserve Capacity Cycle.

A.3. AEMO must determine the Relevant Levels for Candidates for the Current Reserve Capacity Cycle by following each of the steps set out in Part B, using the subprocesses in Part C and Part D as specified.

Part B: Process Steps

Step B.1: Determine Candidate Historical Output

B.1.1. For each Candidate, determine:

(a) for each Trading Interval (if any) in the RLM Reference Period that falls after 8:00 AM on the Full Operation Date for the Candidate, the quantity of energy (in MWh) sent out by the Candidate using:

i. Facility Sub-Metering, if the Candidate is a component of a Facility for which Facility Sub-Metering is required to be installed; and

ii. Sent Out Metered Schedules, if the Candidate is not a component of a Facility for which Facility Sub-Metering is required to be installed;

(b) for each Trading Interval (if any) in the RLM Reference Period that falls before 8:00 AM on the Full Operation Date for the Candidate, an estimate of the quantity of energy (in MWh) that would have been sent out by the Candidate in the Trading Interval, if it had been in operation with the configuration proposed under clause 4.10.1(dA) in the relevant application for certification of Reserve Capacity. The estimates must reflect the estimates in the expert report provided for the Candidate under clause 4.10.3, unless AEMO reasonably considers the estimates in the expert report to be inaccurate.

B.1.2. For each Candidate, identify any Trading Intervals in the RLM Reference Period that fall after 8:00 AM on the Full Operation Date for the Candidate where the output of the parent Facility was restricted by a Dispatch Instruction or Network limitation, and estimate the output of that Candidate had it not been restricted by a Dispatch Instruction or Network limitation.

B.1.3. For each Candidate and Trading Interval identified in step B.1.2 identify the higher of:

(a) the actual quantity as determined in step B1.1(a); and

(b) AEMO's estimate made under clause 7.13.6 or AEMO's revised estimate made under clause 7.13.7 as applicable.

B.1.4. Determine the "**Historical Output**" for each Candidate for each Trading Interval t in the RLM Reference Period as:

(a) for Trading Intervals that fall after 8:00 AM on the Full Operation Date for the Candidate, the MWh quantity determined in step B.1.1(a) or estimated in step B.1.3 as applicable, multiplied by 2 to convert to units of MW; and

(b) for Trading Intervals that fall before 8:00 AM on the Full Operation Date for the Candidate, the MWh quantity determined in step B.1.1(b) for the Candidate and Trading Interval, multiplied by 2 to convert to units of MW.

Step B.2: Determine Reference Demand Profile

B.2.1. Determine the "Observed Demand" (in MW) for each Trading Interval in the RLM Reference Period as:

$$Observed_Demand(t) = (Total_Generation(t) + Interruptible_Reduction(t) + Involuntary_Reduction(t) + DSP_Reduction(t) + SC_Reduction(t) + NCESS_Reduction(t)) \times 2$$

where:

(a) Total_Generation(t) is the Total Sent Out Generation in Trading Interval t;

(b) Interruptible_Reduction(t) is the quantity published under clause 7.13.1F(b) for Trading Interval t;

(c) Involuntary_Reduction(t) is the quantity published under clause 7.13.1F(a) for Trading Interval t;

(d) DSP_Reduction(t) is the quantity published under clause 7.13.1F(c) for Trading Interval t;

(e) SC_Reduction(t) is the quantity published under clause 7.13.1FA(a) for Trading Interval t; and

(f) NCESS_Reduction(t) is the quantity published under clause 7.13.1FA(b) for Trading Interval t.

B.2.2. Determine the "**DER Adjusted Demand Profile**" for the RLM Reference Period by adjusting the Observed Demand for each Trading Interval determined under step B.2.1 to account for the change in behind-the-meter photovoltaic capacity in the SWIS over time, so that the resulting system demand is equal to AEMO's best estimate of what the Observed Demand would have been in that Trading Interval if the level of behind-the-meter photovoltaic capacity had been equal to the level that AEMO expects to exist on 1 October in Year 3 of the Current Reserve Capacity Cycle.

B.2.3. Identify the Capacity Year in the RLM Reference Period with the lowest maximum demand in the DER Adjusted Demand Profile.

B.2.4. Determine the "**ELCC Reference Period**" by selecting all Trading Intervals in the RLM Reference Period except those in the Capacity Year identified in step B.2.3.

B.2.5. Determine the "**Reference Demand Profile**" for the ELCC Reference Period by adjusting the DER Adjusted Demand Profile so that the peak demand and total annual energy for each Capacity Year in the ELCC Reference Period matches the values determined for the Capacity Year commencing on 1 October of the Current Reserve Capacity Cycle in the scenario described in clause 4.5.10(a)(iv).

Step B.3: Determine Non-Candidate fleet parameters

B.3.1. Identify all Facilities or components of Facilities ("**Non-Candidates**") that:

(a) were allocated Peak Capacity Credits in a previous Reserve Capacity Cycle;

(b) AEMO expects to assign Peak Certified Reserve Capacity for the Current Reserve Capacity Cycle; and

(c) are not Candidates.

B.3.2. Determine the "**Non-Candidate Forced Outage Rate**" for each Non-Candidate that is a Non-Intermittent Generating System or an Electric Storage Resource as the Forced Outage rate for that Non-Candidate:

(a) as determined under clause 4.11.1A for the Current Reserve Capacity Cycle; or

(b) if a Forced Outage rate has not been determined for the Non-Candidate under clause 4.11.1A, the expected Forced Outage rate provided for the Non-Candidate under clause 4.10.1(e)(vi) or clause 4.10.1(fA)(v).

B.3.3. Determine the Non-Candidate Forced Outage Rate for each Non-Candidate that is a Demand Side Programme or a Non-Scheduled Facility as zero.

B.3.4 Determine at least 50 "**Non-Candidate Availability Scenarios**", which identify, for each Non-Candidate, in each Trading Interval of the ELCC Reference Period, whether the Non-Candidate is available. The likelihood of a Non-Candidate being unavailable in each Trading Interval of a Non-Candidate Availability Scenario must match the Non-Candidate Forced Outage Rate for that Non-Candidate.

B.3.5. Determine the "**Default Capacity Obligation Quantity**" for each Non-Candidate nc for each Trading Interval t in the ELCC Reference Period as follows:

(a) the quantity of Peak Certified Reserve Capacity that AEMO expects to assign to Non-Candidate f for the Current Reserve Capacity Cycle if:

i. Non-Candidate nc is a Non-Intermittent Generating System;

ii. Non-Candidate nc is an Electric Storage Resource and Trading Interval t is a Peak Electric Storage Resource Obligation Interval for Non-Candidate nc;

iii. Non-Candidate nc is a Non-Scheduled Facility consisting solely of an Electric Storage Resource and Trading Interval t is a Default Peak Electric Storage Resource Obligation Interval; or

iv. Non-Candidate nc is a Demand Side Programme and Trading Interval t falls in a period specified for the Facility under clause 4.10.1(f)(vi); and

(b) zero otherwise.

Step B.4: Determine the Facility Average Performance Level

B.4.1. Identify all Peak IRCR Intervals~~the 12 Peak SWIS Trading Intervals~~ for each Capacity Year in the ELCC Reference Period.

B.4.2. Count the number of Trading Intervals identified in step B.4.1.

B.4.3. For each Candidate, determine the "**Facility Average Performance Level**" as:

$$FAPL(c) = \frac{\sum_{t \in IRCRIntervals} HistoricalOutput(c,t)}{IntervalCount}$$

where:

(a) HistoricalOutput(c,t) is the Historical Output for Candidate c in Trading Interval t determined in step B.1.4;

(b) t ∈ IRCRIntervals denotes the set of Trading Intervals identified in step B.4.1; and

(c) IntervalCount refers to the number of Trading Intervals determined in step B.4.2.

Step B.5: Determine Relevant Levels for Committed Candidates

B.5.1. Determine the "**Committed Fleet Capacity**" for the ELCC Reference Period, by applying the subprocess in Part C using the fleet of Committed Candidates as the Part C Candidate Fleet;

B.5.2. Determine the "**Committed Candidate Scaling Factor**" as:

$$CCSF = \frac{CFC}{\sum_{c \in CC} FAPL(c)}$$

where:

(a) CFC is the Committed Fleet Capacity determined in step B.5.1;

(b) c ∈ CC denotes all Committed Candidates; and

(c) FAPL(c) is the Facility Average Performance Level for Candidate c determined in step B.4.3.

B.5.3. Determine the Relevant Level for each Committed Candidate c as:

$$RelevantLevel(c) = max(0, FAPL(c) \times CCSF)$$

where:

(a) FAPL(c) is the Facility Average Performance Level of Candidate c determined in step B.4.3; and

(b) CCSF is the Committed Candidate Scaling Factor determined in step B.5.2.

Step B.6: Determine Relevant Levels for Proposed Candidates

B.6.1. Determine the "**Committed and Proposed Fleet Capacity**" for the ELCC Reference Period as:

(a) if the sum of the nameplate capacities of all Proposed Candidates is greater than or equal to 5 MW, by applying the subprocess in Part C using the fleet of Committed Candidates and Proposed Candidates as the Part C Candidate Fleet; and

(b) otherwise, the Committed Fleet Capacity determined in step B.5.1, plus:

i. the sum of the Facility Average Performance Levels of all Proposed Candidates; multiplied by

ii. the Committed Candidate Scaling Factor determined in step B.5.2.

B.6.2. Determine the "**Proposed Fleet Capacity**" for the ELCC Reference Period as:

$$PFC = CPFC - CFC$$

where:

(a) CPFC is the Committed and Proposed Fleet Capacity determined in step B.6.1; and

(b) CFC is the Committed Fleet Capacity determined in step B.5.1.

B.6.3. Determine the "**Proposed Candidate Scaling Factor**" as:

(a) if the sum of the nameplate capacities of all Proposed Candidates is greater than or equal to 5 MW:

$$PCSF = \frac{PFC}{\sum_{c \in PC} FAPL(c)}$$

where:

i. PFC is the Proposed Fleet Capacity determined in step B.6.2;

ii. c ∈ PC denotes all Proposed Candidates; and

iii. FAPL(c) is the Facility Average Performance Level for Candidate c determined in step B.4.3; and

(b) otherwise, the Committed Candidate Scaling Factor determined in step B.5.2.

B.6.4. Determine the Relevant Level for each Proposed Candidate c as:

$$RelevantLevel_c = max(0, FAPL(c) \times PCSF)$$

where:

(a) FAPL(c) is the Facility Average Performance Level of Candidate c determined in step B.4.3; and

(b) PCSF is the Proposed Candidate Scaling Factor determined in step B.6.3.

Step B.7: Determine Relevant Levels for Early Candidates

B.7.1. Determine the "**Committed Proposed and Early Fleet Capacity**" for the ELCC Reference Period as:

(a) if the sum of the nameplate capacities of all Early Candidates is greater than or equal to 5 MW, by applying the subprocess in Part C using the fleet of Committed Candidates, Proposed Candidates, and Early Candidates as the Part C Candidate Fleet; and

(b) otherwise, the Committed and Proposed Fleet Capacity determined in step B.6.1, plus:

i. the sum of the Facility Average Performance Levels of all Early Candidates; multiplied by

ii. the Committed Candidate Scaling Factor determined in step B.5.2.

B.7.2. Determine the "**Early Fleet Capacity**" for the ELCC Reference Period as:

$$EFC = CPEFC - CPFC$$

where:

(a) CPEFC is the Committed and Proposed and Early Fleet Capacity determined in step B.7.1; and

(b) CPFC is the Committed and Proposed Fleet Capacity determined in step B.6.1.

B.7.3. Determine the "Early Candidate Scaling Factor" as:

(a) if the sum of the nameplate capacities of all Early Candidates is greater than or equal to 5 MW:

$$ECSF = \frac{EFC}{\sum_{c \in EC} FAPL(c)}$$

where:

i. EFC is the Early Fleet Capacity determined in step B.7.2;

ii. c ∈ EC denotes all Early Candidates; and

iii. FAPL(c) is the Facility Average Performance Level for Candidate c determined in step B.4.3.

(b) otherwise, the Committed Candidate Scaling Factor determined in step B.5.2.

B.7.4. Determine the Relevant Level for each Early Candidate c as:

$$RelevantLevel_c = max(0, FAPL(c) \times ECSF)$$

where:

(a) FAPL(c) is the Facility Average Performance Level of Candidate c determined in step B.4.3; and

(b) ECSF is the Early Candidate Scaling Factor determined in step B.7.3.

Step B.8: Determine Relevant Levels for Conditional Candidates

B.8.1. Determine the "**Committed Proposed Early and Conditional Fleet Capacity**" for the ELCC Reference Period as:

(a) if the sum of the nameplate capacities of all Conditional Candidates is greater than or equal to 5 MW, by applying the subprocess in Part C using the fleet of Committed Candidates, Proposed Candidates, Early Candidates, and Conditional Candidates as the Part C Candidate Fleet;

(b) otherwise, the Committed and Proposed and Early Fleet Capacity determined in step B.7.1, plus:

i. the sum of the Facility Average Performance Levels of all Committed Candidates; multiplied by

ii. the Committed Candidate Scaling Factor determined in step B.5.2.

B.8.2. Determine the "**Conditional Fleet Capacity**" for the ELCC Reference Period as:

$$ConFC = CPEConFC - CPEFC$$

where:

(a) CPEConFC is the Committed and Proposed and Early and Conditional Fleet Capacity determined in step B.8.1; and

(b) CPEFC is the Committed and Proposed and Early Fleet Capacity determined in step B.7.1.

B.8.3. Determine the "**Conditional Candidate Scaling Factor**" as:

(a) if the sum of the nameplate capacities of all Conditional Candidates is greater than or equal to 5 MW:

$$ConCSF = \frac{ConFC}{\sum_{c \in ConC} FAPL(c)}$$

where:

i. ConFC is the Conditional Fleet Capacity determined in step B.8.2;

ii. c ∈ ConC denotes all Conditional Candidates; and

iii. FAPL(c) is the Facility Average Performance Level for Candidate c determined in step B.4.3.

(b) otherwise, the Committed Candidate Scaling Factor determined in step B.5.2.

B.8.4. Determine the Relevant Level for each Conditional Candidate c as:

$$RelevantLevel_c = max(0, FAPL(c) \times ConCSF)$$

where:

(a) FAPL(c) is the Facility Average Performance Level of Candidate c determined in step B.4.3; and

(b) ConCSF is the Conditional Candidate Scaling Factor determined in step B.8.3.

Step B.9: Publish Inputs and Results on the WEM Website

B.9.1. Publish on the WEM Website by the date specified in clause 4.1.9 (as modified or extended) for the relevant Reserve Capacity Cycle:

(a) the Observed Demand for the RLM Reference Period determined in step B.2.1;

(b) the estimated historical and future levels of behind-the-meter photovoltaic capacity in the SWIS that AEMO used to determine the DER Adjusted Demand Profile for the RLM Reference Period in step B.2.2;

(c) the DER Adjusted Demand Profile for the RLM Reference Period determined in step B.2.2;

(d) the Reference Demand Profile for the ELCC Reference Period determined in step B.2.5; and

(e) for each Committed Candidate from the previous Reserve Capacity Cycle which is in Commercial Operation:

i. the Historical Output values determined in step B.1.4(a) for each Trading Interval in the RLM Reference Period; and

ii. an estimate of the Facility Average Performance Level, determined in accordance with step B.4 and:

1. using as input:

i. Historical Output values as determined under step B.1.4(a), where available; or

ii. estimates in the expert report provided for the Candidate under clause 4.10.3 in the previous Reserve Capacity Cycle; and

2. excluding any of the Trading Intervals identified under step B.4.1 in the ELCC Reference Period for which there is no data available under step B.9.1(e)(ii)(1) for a Candidate and adjusting the IntervalCount under step B.4.3 accordingly.

B.9.2. Publish on the WEM Website by the date specified in clause 4.1.16 (as modified or extended) for the Current Reserve Capacity Cycle:

(a) the Committed Fleet Capacity determined in step B.5.1;

(b) the Proposed Fleet Capacity determined in step B.6.1;

(c) the Early Fleet Capacity determined in step B.7.1;

(d) the Conditional Fleet Capacity determined in step B.8.1; and

(e) for each Candidate:

i. whether the Candidate is a Committed Candidate, a Proposed Candidate, an Early Candidate or a Conditional Candidate;

ii. the Historical Output values determined in step B.1.4 for each Trading Interval in the RLM Reference Period; and

iii. the Facility Average Performance Level determined in step B.4.3.

Part C: Subprocess to determine total capacity to be allocated to a given Candidate Fleet

C.1. This Part C subprocess requires as input a fleet of Candidates for which a capacity quantity is to be determined ("**Part C Candidate Fleet**").

C.2. Determine the "**Whole Period ELCC**" by applying the subprocess in Part D using:

(a) the Part C Candidate Fleet set under clause C.1 as the Part D Candidate Fleet; and

(b) the ELCC Reference Period as the Part D ELCC Period.

C.3. Determine the "**Capacity Year ELCC**" for each Capacity Year in the ELCC Reference Period by applying the subprocess in Part D using:

(a) the Part C Candidate Fleet set under clause C.1 as the Part D Candidate Fleet; and

(b) the Capacity Year as the Part D ELCC Period.

C.4. Determine the "**Mean Capacity Year ELCC**" for the ELCC Reference Period as:

$$MCYELCC = \frac{\sum_{cy \in ELCCRP} CapacityYearELCC(cy)}{4}$$

where:

(a) CapacityYearELCC(cy) is the Capacity Year ELCC for Capacity Year cy; and

(b) cy ∈ ELCCRP denotes all Capacity Years in the ELCC Reference Period.

C.5. Determine the total capacity to be allocated to the Part C Candidate Fleet as the lesser of:

(a) the Whole Period ELCC determined in step C.2; and

(b) the Mean Capacity Year ELCC determined in step C.4.

Part D: Subprocess to Calculate Effective Load Carrying Capacity of a Candidate Fleet for a Given Time Period

D.1. This Part D subprocess requires the following inputs:

(a) a fleet of Candidates for which an ELCC is to be determined ("**Part D Candidate Fleet**"); and

(b) a period of time over which the ELCC is to be determined ("**Part D ELCC Period**").

D.2 Determine the "**Reference Unserved Energy Target**" for the Part D ELCC Period as:

$$RUET = PCUET \times \sum_{t \in EP} ReferenceDemand(t)$$

where:

(a) PCUET is the Planning Criterion unserved energy target percentage in clause 4.5.9(b);

(b) ReferenceDemand(t) is the demand in Trading Interval t in the Reference Demand Profile; and

(c) t ∈ EP denotes all Trading Intervals in the Part D ELCC Period.

D.3. Determine the "**Initial Demand Adjustment**" as the MW quantity (which may be positive or negative) which gives Mean Initial Unserved Energy equal to the Reference Unserved Energy Target for the Part D ELCC Period, where:

(a) The "Mean Initial Unserved Energy" is:

$$MIUE = \frac{\sum_{s \in NCAS} SIUE(s)}{Count(NCAS)}$$

where:

i. SIUE(s) is the Scenario Initial Unserved Energy for Non-Candidate Availability Scenario s as calculated in step D.3(b);

ii. s ∈ NCAS denotes all Non-Candidate Availability Scenarios; and

iii. Count(NCAS) denotes the number of Non-Candidate Availability Scenarios.

(b) The "**Scenario Initial Unserved Energy**" for each Non-Candidate Availability Scenario s is:

$$SIUE(s) = \sum_{t \in ERP} max\big(0, ReferenceDemand(t) + InitialDemandAdjustment - \sum_{nc \in ANC(s,t)} DCOQ(nc,t)\big)$$

where:

i. ReferenceDemand(t) is the demand in Trading Interval t in the Reference Demand Profile;

ii. InitialDemandAdjustment is the Initial Demand Adjustment;

iii. DCOQ(nc,t) is the Default Capacity Obligation Quantity of Non-Candidate nc in Trading Interval t;

iv. t ∈ ERP denotes all Trading Intervals in the Part D ELCC Reference Period; and

v. nc ∈ ANC(s,t) denotes all Non-Candidates which are available in Trading Interval t in Non-Candidate Availability Scenario s.

D.4. Determine the "**Final Demand Adjustment**" as the MW quantity (which may be positive or negative) which gives Mean Final Unserved Energy equal to the Reference Unserved Energy Target for the Part D ELCC Period, where:

(a) the "Mean Final Unserved Energy" is:

$$MFUE = \frac{\sum_{s \in NCAS} SFUE(s)}{Count(NCAS)}$$

where:

i. SFUE(s) is the Scenario Final Unserved Energy for Non-Candidate Availability Scenario s as calculated in step D.4(b);

ii. s ∈ NCAS denotes all Non-Candidate Availability Scenarios; and

iii. Count(NCAS) denotes the number of Non-Candidate Availability Scenarios.

(b) the "**Scenario Final Unserved Energy**" for each Non-Candidate Availability Scenario s is:

$$SFUE(s) = \sum_{t \in ERP} Max\big(0, ReferenceDemand(t) + FinalDemandAdjustment - \sum_{nc \in ANC(s,t)} DCOQ(nc,t) - \sum_{c \in Candidates} HistoricalOutput(c,t)\big)$$

where:

i. ReferenceDemand(t) is the demand in Trading Interval t in the Reference Demand Profile;

ii. FinalDemandAdjustment is the Final Demand Adjustment;

iii. DCOQ(nc,t) is the Default Capacity Obligation Quantity of Non-Candidate nc in Trading Interval t;

iv. HistoricalOutput(c,t) is the Historical Output of Candidate c in Trading Interval t;

v. t ∈ ERP denotes all Trading Intervals in the Part D ELCC Reference Period;

vi. $c \in ANC(s,t)$ denotes all Non-Candidates which are available in Trading Interval t in Non-Candidate Availability Scenario s; and

vii. $c \in$ Candidates denotes all Candidates in the Part D Candidate Fleet.

D.5. Determine the effective load carrying capacity of the Part D Candidate Fleet over the Part D ELCC Period as:

$$FleetELCC = FinalDemandAdjustment - InitialDemandAdjustment$$

where:

(a) FinalDemandAdjustment is the Final Demand Adjustment determined instep D.4; and

(b) InitialDemandAdjustment is the Initial Demand Adjustment determined in step D.3.

Appendix 10: Relevant Demand Determination

This Appendix sets out the methods for determining the Relevant Demand of a Demand Side Programme and the Associated Load Baseline Energy of an Associated Load of a Demand Side Programme~~method for determining the Relevant Demand of a Demand Side Programme~~ in a Trading Interval in which one of the following applies:

- the Demand Side Programme is subject to a Dispatch Instruction issued under clause 7.6.5A with a non-zero dispatch quantity determined under clause 7.13.5; or
- the Demand Side Programme is undergoing a Reserve Capacity Test under section 4.25.

In this Appendix:

- a reference to a step is to the process step so numbered in this Appendix;
- steps are to be performed sequentially unless otherwise stated;
- an “Event Day” for a Demand Side Programme is a day in which one or more DSP Dispatch Events occur for that Demand Side Programme;
- the “Baseline Window” for a Demand Side Programme on an Event Day d is the 50 days from day d-50 to day d-1;
- “Selected Day” has the meaning given in step 1; and
- “Adjustment Window” has the meaning given in step 3.1.

AEMO must perform steps 1 to 4 to determine the Relevant Demand of a Demand Side Programme f for a Trading Interval t that occurs on Event Day d.

AEMO must perform steps 1 and 5 as required to determine the Associated Load Baseline Energy of each Associated Load l of a Demand Side Programme f for a Trading Interval t that occurs on Event Day d.

Step 1. Determine Selected Days

Determine the “Selected Days” for Demand Side Programme f for Event Day d using the following steps:

If Event Day d is a Business Day:

1.1 Subject to clause 4.26.2CD, select the ten most recent days in Demand Side Programme f’s Baseline Window for Event Day d, that are a Business Day and not a previous Event Day. If fewer than ten days are identified, then select as many days that are Business Days and not previous Event Days as possible.

1.2 If between five and ten days (inclusive) have been selected, go to step 1.4.

1.3 If fewer than five days have been selected in step 1.1, then subject to clause 4.26.2CD, keep adding the next most recent day(s) in the Baseline Window that is (or are) a Business Day and a previous Event Day until five days have been selected.

1.4 Days selected under steps 1.2 or 1.3, as applicable, are the Selected Days for Demand Side Programme f on Event Day d.

If Event Day d is a Non-Business Day:

1.5 Subject to clause 4.26.2CD, select the four most recent days in Demand Side Programme f's Baseline Window for Event Day d that are Non-Business Days and not previous Event Days. If fewer than four days are identified, then select as many days that are Non-Business Days and not previous Event Days as possible.

1.6 If four days have been selected, go to step 1.8.

1.7 If fewer than four days have been selected in step 1.5, then subject to clause 4.26.2CD, keep adding the next most recent day(s) in the Baseline Window that is (or are) a Non-Business Day and an Event Day until a total of four days has been selected.

1.8 Days selected under steps 1.6 or 1.7, as applicable, are the Selected Days for Demand Side Programme f on Event Day d.

Step 2. Determine Unadjusted Baseline Energy

2.1 Calculate UnadjustedBaselineEnergy(f,t) for Demand Side Programme f for Trading Interval t as:

$$UnadjustedBaselineEnergy(f,t) = \frac{1}{N(f,d)} \times \sum_{s \in SelectedDays(f,d)} \left(-1 \times \sum_{l \in AssocLoads(f,t)} SOMS\big(l, prevt(s,t)\big) \right)$$

where:

(a) N(f,d) is the number of Selected Days for Demand Side Programme f on Event Day d as determined in step 1.4 or 1.8 as relevant;

(b) s∈SelectedDays(f,d) denotes the Selected Days for Demand Side Programme f on Event Day d as determined in steps 1.4 or 1.8 as relevant;

(c) l∈AssocLoads(f,t) denotes the Associated Loads of Demand Side Programme f in Trading Interval t;

(d) prevt(s,t) is the Trading Interval in Selected Day s that commences at the same time of day as Trading Interval t; and

(e) SOMS(l,prevt(s,t)) is the Sent Out Metered Schedule of Associated Load l in Trading Interval prevt(s,t).

2.2 If AEMO is required to use the Unadjusted Baseline Method for Demand Side Programme f for Trading Interval t under clause 2.29.5AH, then go to step 4.

Step 3. Determine Adjusted Baseline Energy

3.1 Determine the "Adjustment Window" for Demand Side Programme f for Event Day d as the set of two Trading Intervals immediately preceding the Trading Interval in which AEMO either:

(a) issues the first Dispatch Instruction under clause 7.6.5A with a non-zero quantity to Demand Side Programme f; or

(b) notifies a Market Participant that Demand Side Programme f will be subject to a Reserve Capacity Test in accordance with clause 4.25.9(dA).

For the avoidance of doubt, AEMO must determine a single Adjustment Window for a given Event Day for a given Demand Side Programme.

3.2 Calculate AdjustmentWindowActualEnergy(f,t) for Demand Side Programme f for Trading Interval t as:

$$AdjustmentWindowActualEnergy(f,t) = \frac{1}{2} \times \sum_{awt \in AdjustmentWindow(f,d)} \left(-1 \times \sum_{l \in AssocLoads(f,t)} SOMS(l,awt) \right)$$

where:

(a) awt∈AdjustmentWindow(f,d) denotes the Trading Intervals in the Adjustment Window for Demand Side Programme f for Event Day d as determined in step 3.1;

(b) l∈AssocLoads(f,t) denotes the Associated Loads of Demand Side Programme f in Trading Interval t; and

(c) SOMS(l,awt) is the Sent Out Metered Schedule of Associated Load l in Trading Interval awt.

3.3 Calculate AdjustmentWindowBaselineEnergy(f,t) for Demand Side Programme f for Trading Interval t as:

$$AdjustmentWindowBaselineEnergy(f,t) = \frac{1}{2} \times \sum_{awt \in AdjustmentWindow(f,d)} \left(\frac{1}{N(f,d)} \times \sum_{s \in SelectedDays(f,d)} \left(-1 \times \sum_{l \in AssocLoads(f,t)} SOMS(l, prevt(s,awt)) \right) \right)$$

where:

(a) awt∈AdjustmentWindow(f,d) denotes the Trading Intervals in the Adjustment Window for Demand Side Programme f for Event Day d as determined in step 3.1;

(b) N(f,d) is the number of Selected Days for Demand Side Programme f on Event Day d as determined in steps 1.4 or 1.8 as relevant;

(c) s∈SelectedDays(f,d) denotes the Selected Days for Demand Side Programme f on Event Day d as determined in steps 1.4 or 1.8 as relevant;

(d) l∈AssocLoads(f,t) denotes the Associated Loads of Demand Side Programme f in Trading Interval t;

(e) prevt(s,awt) is the Trading Interval in Selected Day s that commences at the same time of day as Trading Interval awt; and

(f) SOMS(l,prev(s,awt) is the Sent Out Metered Schedule of Associated Load l in the Trading Interval in Selected Day s that commences at the same time of day as Trading Interval awt.

3.4 Calculate BaselineAdjustment(f,t) for Demand Side Programme f for Trading Interval t as:

$$BaselineAdjustment(f,t) = Min\left(Max\left(\begin{matrix} 0.2 \times |AdjustmentWindowBaselineEnergy(f,t)|, \\ -2 \times |AdjustmentWindowBaselineEnergy(f,t)|, \\ AdjustmentWindowActualEnergy(f,t) - AdjustmentWindowBaselineEnergy(f,t) \end{matrix} \right) \right)$$

where:

(a) AdjustmentWindowBaselineEnergy(f,t) is the quantity calculated for Demand Side Programme f for Trading Interval t in step 3.3; and

(b) AdjustmentWindowActualEnergy(f,t) is the quantity calculated for Demand Side Programme f for Trading Interval t in step 3.2.

3.5 Calculate the AdjustedBaselineEnergy(f,t) for Demand Side Programme f for Trading Interval t as:

$$AdjustedBaselineEnergy(f,t) = UnadjustedBaselineEnergy(f,t) + BaselineAdjustment(f,t)$$

where:

(a) UnadjustedBaselineEnergy(f,t) is the quantity calculated for Demand Side Programme f for Trading Interval t in step 2.1; and

(b) BaselineAdjustment(f,t) is the quantity calculated for Demand Side Programme f for Trading Interval t in step 3.4.

Step 4. Calculate Relevant Demand

4.1 Calculate the Relevant Demand of Demand Side Programme f for Trading Interval t as:

(a) the AdjustedBaselineEnergy(f,t) calculated in step 3.5 multiplied by 2 to convert it to a MW quantity, if AEMO is required to use the Adjusted Baseline Method under clause 2.29.5AH; or

(b) the UnadjustedBaselineEnergy(f,t) calculated in step 2.1 multiplied by 2 to convert it to a MW quantity, if AEMO is required to use the Unadjusted Baseline Method for Demand Side Programme f in Trading Interval t under clause 2.29.5AH.

Step 5. Determine Associated Load Baseline Energy

5.1 Calculate the Associated Load Baseline Energy of Associated Load l of Demand Side Programme f for Trading Interval t on Event Day d as:

$$AssociatedLoadBaselineEnergy(l,t) = \frac{1}{N(f,d)} \times \sum_{s \in SelectedDays(f,d)} SOMS\big(l, prevt(s,t)\big)$$

where:

(a) N(f, d) is the number of Selected Days for Demand Side Programme f on Event Day d as determined in step 1.4 or 1.8 as relevant;

(b) s∈Selected Days(f,d) denotes the Selected Days for Demand Side Programme f on Event Day d as determined in steps 1.4 or 1.8 as relevant;

(c) prevt(s,t) is the Trading Interval in Selected Day s that commences at the same time of day as Trading Interval t; and

(d) SOMS(l,prevt(s,t)) is the Sent Out Metered Schedule of Associated Load l in Trading Interval prevt(s,t).

Appendix 11: Availability Duration Gap Determination

Part A: Introduction

Interpretations and Definitions

A.1. This Appendix 11 prescribes the method for determining the Availability Duration Gap for each Capacity Year during the Long Term PASA Study Horizon and the ESR Duration Requirement Uplift for the third Capacity Year of the Long Term PASA Study Horizon.

A.2. In this Appendix 11:

(a) "Derated ESR Capacity" is the sum of Derated ESR MW Capacity for all Electric Storage Resources that were assigned Capacity Credits in the previous Reserve Capacity Cycle.

(b) "Derated ESR MW Capacity" of an Electric Storage Resource is calculated by adjusting the ESR MW Capacity of that Electric Storage Resource proportionally to last the Minimum ESRDR as follows:

$$\text{Derated ESR MW Capacity} = \text{ESR MW Capacity} \times \frac{\text{ESRDR}}{\text{Minimum ESRDR}}$$

(c) "ESRDR" of an Electric Storage Resource is the number of Trading Intervals in the Peak Electric Storage Resource Obligation Duration that was the basis of assigning Peak Capacity Credits to the Electric Storage Resource in the previous Reserve Capacity Cycle.

(d) "ESRDR Group(r)" is the group of all Electric Storage Resources with the same ESRDR that were assigned Capacity Credits in the previous Reserve Capacity Cycle.

(e) "ESR MW Capacity" of an Electric Storage Resource is the number of Peak Capacity Credits assigned to the Electric Storage Resource in the previous Reserve Capacity Cycle.

(f) "ESR MWh Capacity" of an Electric Storage Resource is calculated as follows:

$$\text{ESR MWh Capacity} = \text{ESR MW Capacity} \times \frac{\text{ESRDR}}{2}$$

(g) "Minimum ESRDR" is the ESR Duration Requirement for the previous Reserve Capacity Cycle;

(h) "Peak Trading Interval" of a Reference Day is the Trading Interval of the Reference Day Demand Profile with the largest Operational Demand Estimate;

(i) “Peak Trading Interval Demand” of a Reference Day, is the Operational Demand Estimate of the Peak Trading Interval of the Reference Day;

(j) “Reference ADG” is the reference Availability Duration Gap calculated for each Reference Day under steps B.1.3 to B.1.7;

(k) “Reference Day” of a Reference Year is the Trading Day which contains the Trading Interval with the highest demand and reflects the one in ten year peak demand scenario assuming expected demand growth. There is only one Reference Day for each Reference Year;

(l) “Reference Day Demand Profile” for a Reference Day is the demand profile, setting out the Operational Demand Estimate for each Trading Interval in each Reference Day as used by AEMO to calculate the expected energy shortfall under clause 4.5.9(b);

(m) “Reference ESROD” is the contiguous set of Trading Intervals used for the determination of the Reference ADG. The Reference ESROD is first determined under step B.1.3 and redetermined in each iteration under step B.1.6.

(n) “Reference Year” is a reference year used by AEMO for the purpose of calculating the expected energy shortfalls under clause 4.5.9(b);

(o) “Smallest ESRDR” is the number of Trading Intervals in the shortest Peak Electric Storage Resource Obligation Duration among the Electric Storage Resources which were assigned Capacity Credits in the previous Reserve Capacity Cycle.

(p) “Total Group ESR MW Capacity(r)” of ESRDR r is the sum of all ESR MW Capacity of all Electric Storage Resources with ESRDR r.

(q) “Total Group ESR MWh Capacity(r)” of ESRDR r is the sum of all ESR MWh Capacity for all Electric Storage Resources with ESRDR r.

A.3. AEMO must determine the Availability Duration Gap for each Capacity Year during the Long Term PASA Study Horizon by following each of the steps set out in Part B of this Appendix 11.

A.4. AEMO must determine the ESR Obligation Duration Uplift as the amount of additional capacity, in MW, to be added to the Peak Reserve Capacity Target under clause 4.5.9(a)(ii) for Capacity Year 3 of the Long Term PASA Study Horizon by following the steps set out in Part C of this Appendix 11.

Part B: Process Steps for Availability Duration Gap Determination

Step B.1: Determine the Reference ADG for each Reference Day

B.1.1. Identify the Reference Day of each Reference Year.

B.1.2. AEMO must determine the Reference ADG for each Reference Day d identified under step B.1.1 using steps B.1.3 to B.1.7.

B.1.3. Set the Reference ESROD as the contiguous set of Trading Intervals where:

(a) the number of Trading Intervals is equal to the Minimum ESRDR;

(b) the Trading Intervals include the Trading Interval with the highest demand of Reference Day d; and

(c) spans the consecutive Trading Intervals which have the highest average Operational Demand Estimates,

and move to step B.1.4.

B.1.4. Calculate the Residual Demand for each Reference Day d for the Reference ESROD as:

Peak Trading Interval Demand (d) – Applicable ESR_Capacity

Where:

Applicable_ESR Capacity is:

$$\text{Derated ESR Capacity} \times \frac{\text{Minimum ESRDR}}{\text{Reference_ESROD_QTY}}$$

Where:

Reference_ESROD_QTY is the number of Trading Intervals in the Reference ESROD used in this step.

B.1.5. Select the Trading Interval with the higher Operational Demand Estimate from the two Trading Intervals adjacent to the Reference ESROD used in step B.1.4. If the Operational Demand of both adjacent Trading Intervals is equal, the Trading Interval adjacent to the last Trading Interval of the Reference ESROD is to be selected.

B.1.6. If:

(a) the Residual Demand calculated under step B.1.4 is greater than or equal to the Operational Demand Estimate for the Trading Interval identified in step B.1.5, then move to step B.1.7 using the Reference ESROD used in step B.1.4; or

(b) otherwise, increase the Reference ESROD by the Trading Interval identified under step B.1.5 and repeat step B.1.4.

B.1.7. Calculate the Reference ADG for each Reference Day d as:

Reference_ESROD_QTY – Minimum ESRDR

Where:

Reference_ESROD_QTY is the number of Trading Intervals in the Reference ESROD determined in Step B1.6;

Step B.2: Determine the Availability Duration Gap

B.2.1. The Availability Duration Gap is the median of the Reference ADGs for all Reference Days calculated under step B.1.2, rounded up to the nearest whole number of Trading Intervals.

Part C: Process Steps for Determining the ESR Obligation Duration Uplift

Step C.1: Determine the basis for the ESR Obligation Duration Uplift

C.1.1. If the Smallest ESRDR is equal to the sum of the ESR Duration Requirement calculated for the previous Reserve Capacity Cycle under clause 4.5.12(d) and the Availability Duration Gap calculated under step B.2.1, set the ESR Obligation Duration Uplift to zero and do not continue with the remainder of this Part C, otherwise move to step C.1.2.

C.1.2. Identify all Reference Day Demand Profiles for the third Capacity Year of the Long Term PASA Study Horizon.

C.1.3. Identify all ESRDR Groups(r) and rank them from the lowest to the highest ESRDR.

C.1.4. For each Reference Day, determine the Total Group ESR MW Capacity and the Total Group ESR MWh Capacity for all ESRDR Groups identified under C.1.3, for which the ESRDR(r) has fewer Trading Intervals than the Reference_ESROD_QTY used in step B.1.7 for Reference Day d.

C.1.5. For each Reference Day, determine the Sub-Reference ESROD ESR Capacity as the sum of all Total Group ESR MW Capacity determined under C.1.4.

Step C.2: Determine the Reference Day ESR Obligation Duration Uplift for each Reference Day

C.2.1. Subject to step C.1.1, AEMO must determine the Reference Day ESR Obligation Duration Uplift for each Reference Day d, using steps C.2.2 to C.2.6.

C.2.2. Identify:

(a) the Derating Floor as the Reference_ESROD_QTY used in step B.1.7 for Reference Day d; and

(b) the Starting ESROD as the set of Trading Intervals that satisfies the following:

i. contains the Peak Trading Interval;

ii. the number of Trading Intervals is equal to the Smallest ESRDR; and

iii. spans the consecutive Trading Intervals which have the highest average Operational Demand Estimates.

C.2.3. For each ESRDR Group(r) identified in step C.1.3, in order from the smallest to the largest ESRDR(r), determine:

(a) all Derating Tranches, as the contiguous set of Trading Intervals over which the Total Group ESR MW Capacity of the ESRDR Group(r) must be derated, in number of Trading Intervals, that are needed for nominally derating the Total Group ESR MW Capacity of the ESRDR Group(r) in accordance with step C.2.4; and

(b) for each Derating Tranche, the Derating Tranche Depths in MW, representing the capacity needed at that Derating Tranche to service the peak of Trading Day d, in accordance with step C.2.5.

C.2.4. The Derating Tranches of ESRDR Group(r) are determined by adding Derating Tranches until the Accumulated Used ESR MWh Capacity for ESRDR Group(r), as determined under step C.2.5(b), equals the Total Group ESR MWh Capacity of ESRDR Group(r), as follows:

(a) the first Derating Tranche of the ESRDR Group(r) relating to the Smallest ESRDR, is in the Starting ESROD

(b) the first Derating Tranche of subsequent ESRDR Groups(r):

i. If the Trading Intervals in the last Derating Tranche of ESRDR Group(r-1) equal the Derating Floor as the same set of contiguous set of Trading Intervals as the last Derating Tranche of ESRDR Group (r-1),

where ESRDR Group(r-1) is the ESRDR that ranks immediately before r according to the ranking determined under step C.1.3; and

ii. otherwise, the last Derating Tranche of ESRDR Group(r-1) extended to include the Trading Interval adjacent to the last Derating Tranche of ESRDR Group(r-1) with the highest Operational Demand Estimate. If the Operational Demand of both adjacent Trading Intervals is equal, the Trading Interval adjacent to the last Trading Interval of the Reference ESROD is to be selected,

where ESRDR Group(r-1) is the ESRDR that ranks immediately before r; and

(c) any subsequent Derating Tranches of ESRDR Group(r) is the previous Derating Tranche extended to include the Trading Interval with the highest Operational Demand Estimate adjacent to the previous Derating Tranche. If the Operational Demand Estimate of both adjacent Trading Intervals is

equal, the Trading Interval adjacent to the last Trading Interval of the previous Derating Tranche is to be selected:

C.2.5. For each Derating Tranche identified under C.2.4 of each ESRDR Group(r), from the smallest to the largest ESRDR(r) and from the smallest to the largest Derating Tranche, determine the Derating Tranche Depth as:

(a) if the number of Trading Intervals in the Derating Tranche equals the Derating Floor, then:

$$\frac{\text{Total ESR MWh Capacity (r)} - \text{Accumulated Used ESR MWh Capacity (r)}}{\text{0.5 x Derating Tranche QTY}},$$

Where:

i. Accumulated ESR Capacity of ESRDR Group(r) is the total of Used ESR MWh Capacity for all previous Derating Tranches for ESRDR Group(r);

ii. Used ESR MWh Capacity of the Derating Tranche is determined as:

Derating Tranche Depth(Derating Tranche) x $\frac{\text{Derating Tranche}}{2}$; and

iii. Derating Tranche QTY is the number of Trading Intervals in the Derating Tranche, or

(b) otherwise, the smaller of:

i. the lowest MW quantity for the Derating Tranche Depth for which the Operational Demand Estimate of all Trading Intervals in the Derating Tranche, is equal to or greater than:

Peak Trading interval Demand – Accumulated Depth(r) - Derating Tranche Depth

Where the Accumulated Depth(r) is the sum of all Derating Tranche Depths for:

1. all Derating Tranches of all ESRDR Groups that rank before r; and

2. all previous Derating Tranches for r, and

ii. $$\frac{\text{Total Group ESR MWh Capacity (r)} - \text{Accumulated Used ESR MWh Capacity (r)}}{\text{0.5 x Derating Tranche QTY}}$$

Where:

1. Accumulated Used ESR MWh Capacity(r) is the total of Used ESR MWh Capacity for all previous Derating Tranches for r.

2. Used ESR MWh Capacity of a Derating Tranche is determined as:

Derating Tranche Depth(Derating Tranche) x $\frac{\text{Derating Tranche QTY}}{2}$.

3. Derating Tranche QTY is the number of Trading Intervals in the Derating Tranche.

C.2.6. Determine the Reference Day ESR Obligation Duration Uplift as:

Sub-Reference ESROD ESR Capacity – Total Accumulated Depth

Where Total Accumulated Depth is the sum of all Derating Tranche Depths for all Derating Tranches for all ESRDR Groups.

Step C.3: Determine the ESR Obligation Duration Uplift

C.3.1. Determine the ESR Obligation Duration Uplift as the median of all Reference Day ESR Obligation Uplifts rounded to the nearest multiple of 1, expressed in MW.

Appendix 12: Transmission Connected Generating System Generator Performance Standards

This Appendix lists each of the Technical Requirements for Transmission Connected Generating Systems and sets out the Ideal Generator Performance Standard, Minimum Generator Performance Standard and any applicable Common Requirements for each Technical Requirement.

Each Technical Requirement may specify Negotiation Criteria which must be met if a Market Participant responsible for a Transmission Connected Generating System submits a Proposed Negotiated Generator Performance Standard.

If a Technical Requirement specifies Common Requirements, these apply whether an Ideal Generator Performance Standard or Negotiated Generator Performance Standard is intended to apply to a Transmission Connected Generating System in respect of a Technical Requirement.

Use of defined terms in this Appendix 12

Terms defined in Part A12.1 of this Appendix 12 are defined for the purposes of this Appendix alone and must not be used to infer the meaning of those words, or other words, in these ESM Rules. Terms which are defined in these ESM Rules will apply to this Appendix unless defined in this Appendix or the context otherwise requires.

Where the terms Scheduled Generator and Non-Scheduled Generator are used in this Appendix, in relation to generating works that are proposed to be connected to a transmission system and is yet to be registered under these ESM Rules as a Facility or a Facility that is undergoing an upgrade that may impact its Facility Class, these terms are to be used as they will ultimately apply to the relevant Facility.

The measurement location for each of the following terms, where they are used in this Appendix, is as specified in the relevant clause or, where applicable, by the relevant Network Operator in consultation with AEMO and recorded in the relevant Generator Performance Standard:

(a) Rated Maximum Active Power;

(b) Rated Maximum Apparent Power;

(c) Maximum Continuous Current;

(d) Rated Minimum Active Power;

(e) Temperature Dependency Data; and

(f) Generator Performance Chart.

When producing electric power, Electricity Storage which is part of a Generating System will be considered as Generation and must meet the Technical Requirements of Appendix 12.

Where the term 'Technical Rules' is used in this Appendix then the reference to the Technical Rules is to the Technical Rules of Western Power for the SWIS.

Where terms defined in Technical Rules are used in this Appendix, then any references to 'power system' in those definitions should be read as the SWIS.

For ease of reference, a list of the Technical Requirements that apply to Transmission Connected Generating Systems contained in this Appendix is set out below.

Appendix 12 Part	Technical Requirement
A12.2.	Active Power Capability
A12.3.	Reactive Power Capability
A12.4.	Voltage and Reactive Power Control
A12.5.	Active Power Control
A12.6.	Inertia and Frequency Control
A12.7.	Disturbance Ride Through for a Frequency Disturbance
A12.8.	Disturbance Ride Through for a Voltage Disturbance
A12.9.	Disturbance Ride Through for Multiple Disturbances
A12.10.	Disturbance Ride Through for Partial Load Rejection
A12.11.	Disturbance Ride Through for Quality of Supply
A12.12.	Quality of Electricity Generated
A12.13.	Generation Protection Systems
A12.14.	Remote Monitoring Requirements
A12.15.	Remote Control Requirements
A12.16.	Communications Equipment Requirements
A12.17.	Generation System Model

A12.1. Definitions

In this Appendix 12, the following terms are defined:

Active Power: As described in the Technical Rules.

Adequately Damped: As described in the Technical Rules.

Apparent Power: As described in the Technical Rules.

Asynchronous Generating System: Means a Generating System comprised of Asynchronous Generating Units.

Asynchronous Generating Unit: Means a Generating Unit that is not a Synchronous Generating Unit.

Communication Standard: Means the requirements for the provision of information to be provided between Network Operators and AEMO as described in the WEM Procedure referred to in clause 2.36A.1 and as contemplated under section 2.36A.

Connection Point: Means the point on the Network Operator's Network where the Network Operator's Primary Equipment (excluding metering assets) is connected to the Primary Equipment of the Transmission Connected Generating System.

Continuous Uninterrupted Operation: In respect of a Generating System or operating Generating Unit within a Transmission Connected Generating System that is operating immediately prior to a power system disturbance, means:

(a) not disconnecting from the SWIS except in accordance with its Registered Generator Performance Standard;

(b) during the disturbance, contributing active and reactive current as required by its Registered Generator Performance Standard;

(c) after clearance of any electrical fault that caused the disturbance, only substantially varying its Active Power and Reactive Power as required or permitted by its Registered Generator Performance Standard; and

(d) not exacerbating or prolonging the disturbance or causing a subsequent disturbance for other connected Equipment, except as required or permitted by its Registered Generator Performance Standard,

with all essential auxiliary and reactive Equipment remaining in service.

Control Centre: Means the facilities used to direct and control the operation of a Generating System.

Control System: As described in the Technical Rules.

Credible Contingency: An unplanned disconnection of equipment, or other event, that a Generating System may reasonably be exposed to as described in the Technical Rules.

Critical Fault Clearance Time: As described in the Technical Rules.

Dispatch: Means the process of dispatch as described in these ESM Rules.

Dispatch Systems Requirements: Means the requirements described in section 2.35.

Electricity Storage: Means equipment consisting of Storage Works but does not include non-dispatchable Active Power energy storage equipment such as a synchronous compensator.

Equipment: As described in the Technical Rules.

Excitation Control System: As described in the Technical Rules.

Frequency Dead Band: The range through which power system frequency can vary without the frequency control system initiating an active power response.

Generating System: As described in the Technical Rules.

Generating Unit: As described in the Technical Rules.

Generation: As described in the Technical Rules.

Generator Performance Chart: Means a chart defining the capability of a Generating System or Generating Unit to produce Active Power while producing or consuming Reactive Power. The capability is provided for specified ambient conditions and voltage levels at the Measurement Location based on a template provided by the Network Operator. The chart shows the Reactive Power capability continuously achievable while in operation, subject to energy source availability, for a given level of Active Power output for a range of ambient temperatures, while not exceeding limits necessary to prevent damage to Equipment and ensure compliance with other Technical Requirements.

Generator Performance Standard: Means either the Ideal Generator Performance Standard or Negotiated Generator Performance Standard in respect of a Technical Requirement.

Maximum Continuous Current: Means the maximum current capable of being injected continuously in accordance with the relevant Australian Standard or ISO Standard for Synchronous Generating Units and Asynchronous Generating Units at the Measurement Location by the Generating System or Generating Units, as applicable, in order to support maintaining voltage on the SWIS during a disturbance, without causing damage to, or maloperation of, Equipment in the Transmission Connected Generating System. The details regarding which relevant Australian Standard or ISO Standard applies is documented in the guidelines published by the Network Operator under clause 3A.4.4.

Maximum Temperature: The maximum ambient temperature specified by AEMO in consultation with the Network Operator, based on an assessment of the physical location of the Generating Units, as described in the guidelines published by AEMO under clause 3A.1.5 and recorded in the temperature dependency data.

Measurement Location: The Connection Point, or another measurement location agreed by AEMO and the Network Operator, as specified for the relevant Technical Requirement.

Nameplate Rating: As described in the Technical Rules.

Nomenclature Standards: As described in the Technical Rules.

Power Factor: As described in the Technical Rules.

Power Station: As described in the Technical Rules.

Primary Equipment: As described in the Technical Rules.

Protection Scheme: As described in the Technical Rules.

Protection System: As described in the Technical Rules.

Rated Maximum Active Power: The maximum Active Power level that a Generating Unit or Generating System, as applicable, can continuously deliver at the Measurement Location, subject to energy source availability, in accordance with the requirements of Part A12.2 when the ambient temperature is at the Maximum Temperature, as specified in the Temperature Dependency Data.

Rated Maximum Apparent Power: The maximum Apparent Power level that a Generating Unit or Generating System, as applicable, can continuously deliver at the Measurement Location, subject to energy source availability, when operating at the extent of the Generator Performance Chart provided under Part A12.3 and the ambient temperature is at the Maximum Temperature.

Rated Minimum Active Power: Means

(a) in relation to a Generating Unit, the minimum amount of Active Power that the Generating Unit can continuously deliver, subject to energy source availability, while maintaining stable operation at the Measurement Location; and

(b) in relation to a Generating System, the combined minimum amount of Active Power that its in-service Generating Units can continuously deliver, subject to energy source availability, at the Measurement Location while maintaining stable operation.

Reactive Power: As described in the Technical Rules.

Reactive Power Capability: Means the required level of Reactive Power performance as specified in Part A12.3 of this Appendix 12.

Remote Control Equipment or **RCE**: As described in the Technical Rules.

Remote Monitoring Equipment or **RME**: As described in the Technical Rules.

Rise Time: In relation to a control system, means the time taken for an output quantity to rise from its initial value to 90% of the final value induced by a step change of an input quantity, including in response to a disturbance as required under section A12.9.

RoCoF: Means the rate of change of frequency, expressed in Hertz per second.

Settling Time: In relation to a control system, means the time measured from initiation of a step change in an input quantity to the time when the magnitude of error between the output quantity and its final settling value remains less than 10% of:

(a) if the sustained change in the quantity is less than half of the maximum change in that output quantity, half of the maximum change induced in that output quantity; or otherwise

(b) the sustained change induced in that output quantity.

Static Excitation System: As described in the Technical Rules.

Synchronism: As described in the Technical Rules.

Synchronous Generating System: Means a Generating System comprised of Synchronous Generating Units.

Synchronous Generating Unit: As described in the Technical Rules.

Tap-Changing Transformer: As described in the Technical Rules.

Target Setpoint: Means a value specifying a desired operating level for the Generating Unit or Generating System, as applicable, at the relevant location. For example, a desired Active Power, Reactive Power or Power Factor.

Temperature Dependency Data: Means a set of data defining the maximum achievable Active Power of a Generating System or Generating Unit at a particular temperature at the Measurement Location. The data will be provided based on a template provided by the Network Operator. The data shows the Active Power capability achievable for a range of ambient temperatures while meeting all other Technical Requirements.

Total Fault Clearance Time: As described in the Technical Rules.

Transformer: As described in the Technical Rules.

Transmission System: As described in the Technical Rules.

Turbine Control System: As described in the Technical Rules.

A12.2. Technical Requirement: Active Power Capability

A12.2.1. Common Requirements

A12.2.1.1. In relation to the application of this Technical Requirement, the requirements apply at the Connection Point unless otherwise specified in the relevant clause, or the Network Operator or AEMO determines that the Technical Requirement must be measured at a different location for the particular Generating Unit or Generating System, in which case the measurement location must be recorded as part of the relevant Generator Performance Standard.

A12.2.2. Ideal Generator Performance Standard

A12.2.2.1. The Ideal Generator Performance Standard is the same as the Minimum Generator Performance Standard for Active Power capability.

A12.2.3. Minimum Generator Performance Standard

A12.2.3.1. [Blank]

A12.2.3.2. The Generator Performance Standard for Active Power capability must include Temperature Dependency Data up to and including the Maximum Temperature, which must include the Rated Maximum Active Power, and including ambient temperatures above the Maximum Temperature after which the Active Power capability is reduced:

(a) for the Generating System measured at the Connection Point; and

(b) for each Synchronous Generating Unit measured at the Generating Unit terminal.

A12.2.3.3. [Blank]

A12.2.3.4. Subject to clause A12.2.3.5 and energy source availability, the Generating Unit or Generating System, as applicable, must be capable of maintaining Continuous Uninterrupted Operation and meeting all other Technical Requirements while achieving and maintaining the relevant Active Power output levels at the temperatures specified in clause A12.2.3.2.

A12.2.3.5. Clause A12.2.3.4 does not apply to the extent that a temporary reduction in Active Power has been agreed to by the Network Operator in order to achieve the required Reactive Power Capability under Maximum Temperature conditions as set out in Part A12.3 of this Appendix 12.

A12.2.3.6. Unless otherwise directed by AEMO or the Network Operator under these ESM Rules, Generating Systems and Generating Units, as applicable, must not exceed the relevant Active Power levels at the temperatures specified in clause A12.2.3.2.

A12.2.4. Negotiation Criteria

A12.2.4.1. There are no Negotiation Criteria for this Technical Requirement.

A12.3. Technical Requirement: Reactive Power Capability

A12.3.1. Common Requirements

A12.3.1.1. In relation to the application of this Technical Requirement, the requirements apply at the Connection Point unless otherwise specified in the relevant clause, or the Network Operator or AEMO determines that the Technical Requirement must be measured at a different location for the particular Generating Unit or Generating System, in which case the measurement location must be recorded as part of the relevant Generator Performance Standard.

A12.3.1.2. The Generator Performance Standard must include a Generator Performance Chart, including data up to and including the Maximum Temperature, and including ambient temperatures above the Maximum Temperature after which the performance is reduced.

A12.3.1.3. There must be no control system limitation, protection system or other limiting device in operation that would prevent the Generating System from providing the Reactive Power output within the area defined in the Generator Performance Chart.

A12.3.1.4. [Blank]

A12.3.1.5. Each Generating System's Connection Point must be capable of permitting the Dispatch of the full Active Power and Reactive Power Capability of the Generating System.

A12.3.2. Ideal Generator Performance Standard

A12.3.2.1. For all operating conditions including temperatures up to and including the Maximum Temperature, each Generating Unit within the Generating System must be capable of supplying or absorbing Reactive Power continuously of at least the amount equal to the product of the Rated Maximum Active Power output of the Generating Unit at nominal voltage and 0.484 while operating at any level of Active Power output between its maximum Active Power output level as specified in the Temperature Dependency Data under Part A12.2, and its Rated Minimum Active Power output level.

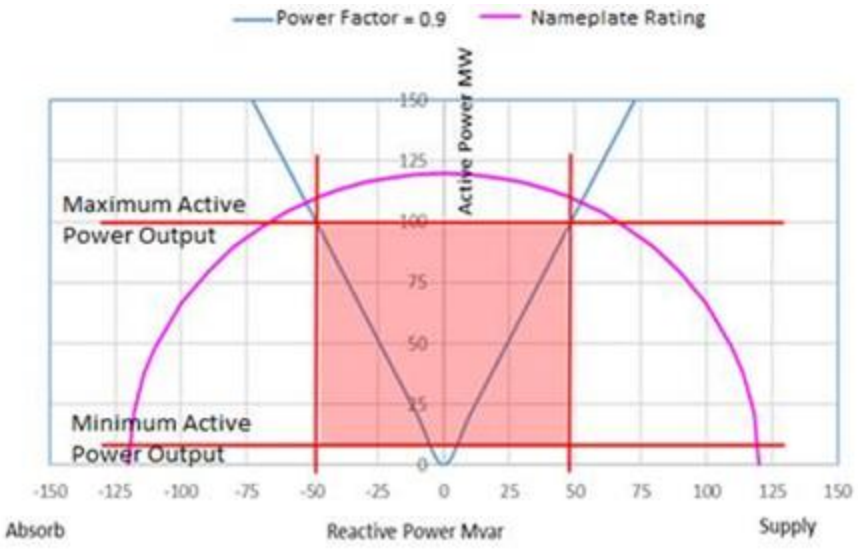

Figure A12.3.2.1: Example Reactive Power Capability required to meet Ideal Generator Performance Standard

A12.3.2.2. The required levels of Reactive Power Capability must be able to be delivered continuously for voltages at the Connection Point within the allowable steady state voltage ranges as specified in the Technical Rules.

A12.3.3. Minimum Generator Performance Standard

A12.3.3.1. Subject to clause A12.3.3.3, for all operating conditions including temperatures up to and including the Maximum Temperature, the Generating System must be capable of supplying or absorbing Reactive Power continuously of at least the amount equal to the product of the Rated Maximum Active Power output of the Generating System and 0.329 while operating at any level of Active Power output level between its maximum Active Power output level as specified in the Temperature Dependency Data under Part A12.2, and Rated Minimum Active Power output level.

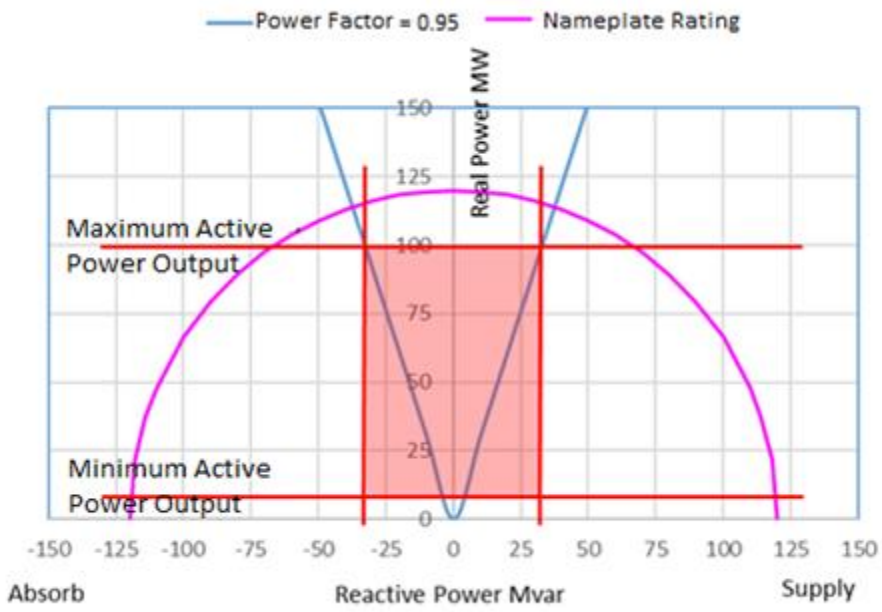

Figure A12.3.3.1: Example Reactive Power Capability required to meet the Minimum Generator Performance Standard

A12.3.3.2. The Reactive Power Capability may be varied as shown in Figure A12.3.3.2 when the voltage at the Connection Point varies between 0.9 per unit and 1.1 per unit, where the Generating System must be capable of absorbing or supplying Reactive Power continuously when operating anywhere inside the curve specified in Figure A12.3.3.2.

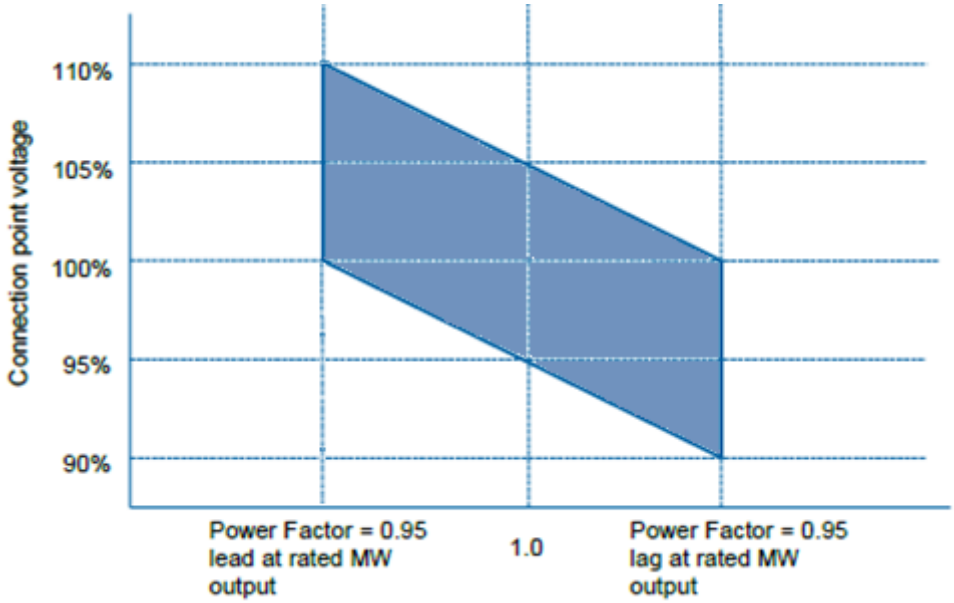

Figure A12.3.3.2: Relaxation of Reactive Power requirement with Connection Point voltage

A12.3.3.3. Transmission Connected Generating Systems containing Intermittent Generating Systems may, with the Network Operator's agreement, achieve the Reactive Power Capability specified in clause A12.3.3.1 by reducing Active Power output when the ambient temperature exceeds 25 degrees Celsius in their location, with the conditions forming part of the Generator Performance Standard.

A12.3.4. Negotiation Criteria

A12.3.4.1. There are no Negotiation Criteria for this Technical Requirement.

A12.4. Technical Requirement: Voltage And Reactive Power Control

A12.4.1. Common Requirements

A12.4.1.1. In relation to the application of this Technical Requirement, the requirements apply at the Connection Point unless otherwise specified in the relevant clause, or the Network Operator or AEMO determines that the Technical Requirement must be measured at a different location for the particular Generating Unit or Generating System, in which case the measurement location must be recorded as part of the relevant Generator Performance Standard.

A12.4.1.2. In relation to the application of this Technical Requirement, unless otherwise specified in the relevant clause, the requirements apply when operating at any Active Power and Reactive Power level as permitted or required under the other Technical Requirements in this Appendix, and at all temperatures up to and including the Maximum Temperature.

A12.4.2. Ideal Generator Performance Standard

A12.4.2.1. The Ideal Generator Performance Standard, as it applies to different Generating Systems, is specified in Table A12.4.2.1

Type of Generating System	Relevant requirement
Generating System comprised solely of Synchronous Generating Units.	Clause A12.4.2.2 to clause A12.4.2.9 and clause A12.4.2.10 to clause A12.4.2.12.
Generating System comprised solely of Asynchronous Generating Units.	Clause A12.4.2.2 to clause A12.4.2.9 and clause A12.4.2.13 to clause A12.4.2.16.
Generating System comprised of Synchronous Generating Units and Asynchronous Generating Units.	Clause A12.4.2.2 to clause A12.4.2.9 and: (a) for that part of the Generating System comprised of Synchronous Generating Units, clause A12.4.2.10 to clause A12.4.2.12; (b) for that part of the Generating System comprised of Asynchronous Generating Units, clause A12.4.2.13 to clause A12.4.2.16.

Table A12.4.2.1: Voltage and Reactive Power Control Ideal Generator Performance Standard

All Generating Systems

A12.4.2.2. The Generating System must have Equipment capabilities and Control Systems, including, if necessary, a power system stabiliser, sufficient to ensure that:

(a) power system oscillations, for the frequencies of oscillation of the Generating System against any other Generating System or device, are Adequately Damped;

(b) operation of the Generating System does not degrade the damping of any critical mode of oscillation of the power system; and

(c) operation of the Generating System does not cause instability (including hunting of Tap-Changing Transformer Control Systems) that would adversely impact other Equipment connected to the SWIS.

A12.4.2.3. Control Systems on Generating Systems that control voltage and Reactive Power must include permanently installed and operational, monitoring and recording equipment for key variables including each input and output, and equipment for testing the Control Systems sufficient to establish their dynamic operational characteristics.

A12.4.2.4. A Generating System must have Control Systems capable of regulating voltage, Reactive Power and Power Factor, with the ability to:

(a) operate in all control modes; and

(b) switch between control modes, as demonstrated to the reasonable satisfaction of the Network Operator and AEMO. Where a Generating System has been commissioned with more than one control mode, a procedure for switching between control modes must be agreed with AEMO and the Network Operator as part of the Generator Performance Standard.

A12.4.2.5. A Generating System must have a voltage Control System that:

(a) regulates voltage to within 0.5% of the Target Setpoint, where that setpoint may be adjusted to incorporate any voltage droop or reactive current compensation agreed with AEMO and the Network Operator;

(b) regulates voltage in a manner that helps to support network voltages during faults and does not prevent the requirements for voltage performance and stability in the Technical Rules from being achieved;

(c) allows the voltage to be continuously controllable in the range of at least 95% to 105% of the target voltage (as determined by the Network Operator), without reliance on a Tap-Changing Transformer and subject to the Generator Performance Standards for Reactive Power Capability with the voltage control location agreed with AEMO and the Network Operator; and

(d) has limiting devices to ensure that a voltage disturbance does not cause a Generating Unit to trip at the limits of its operating capability. The Generating System must be capable of continuous stable operation while under the control of any limiter. Limiters must not detract from the

performance of any stabilising circuits and must have settings applied which are coordinated with all Protection Systems.

A12.4.2.6. Where installed, a power system stabiliser must have:

(a) two washout filters for each input, with ability to bypass one of them if necessary;

(b) sufficient (and not less than two) lead-lag transfer function blocks (or equivalent number of complex poles and zeros) with adjustable gain and time-constants, to compensate fully for the phase lags due to the Generating Unit;

(c) monitoring and recording equipment for key variables including inputs, output and the inputs to the lead-lag transfer function blocks; and

(d) equipment to permit testing of the power system stabiliser in isolation from the power system by injection of test signals, sufficient to establish the transfer function of the power system stabiliser.

A12.4.2.7. A Reactive Power, including a Power Factor, Control System must:

(a) regulate Reactive Power or Power Factor (as applicable) to within:

i. for a Generating System operating in Reactive Power mode, 2% of the Rated Maximum Apparent Power of the Generating System from the Target Setpoint; or

ii. for a Generating System operating in Power Factor mode, a Power Factor equivalent to 2% of the Rated Maximum Apparent Power of the Generating System from the Target Setpoint; and

(b) allow the Reactive Power or Power Factor Target Setpoint to be continuously controllable across the Reactive Power Capability range specified in the relevant Generator Performance Standard.

A12.4.2.8. The structure and parameter settings of all components of the Control System, including the voltage regulator, Reactive Power regulator, power system stabiliser, power amplifiers and all associated limiters, must be approved by the Network Operator and AEMO as part of the Generator Performance Standard.

A12.4.2.9. Each Control System must be Adequately Damped.

Synchronous Generating Systems

A12.4.2.10. Each Synchronous Generating Unit must have an Excitation Control System that:

(a) is capable of operating the stator continuously at 105% of nominal voltage when operating at the maximum Active Power output specified

in the Temperature Dependency Data provided under Part A12.2 for the relevant temperature;

(b) has an excitation ceiling voltage of at least:

i. for a Static Excitation System, 2.3 times; or

ii. for other Excitation Control Systems, 1.5 times,

the excitation required to achieve generation at the rated output, rated speed and nominal voltage in accordance with the relevant Australian Standard or ISO Standard for Synchronous Generating Units. The details regarding which relevant Australian Standard or ISO Standard applies is documented in the guidelines published by the Network Operator under clause 3A.4.4;

(c) has a power system stabiliser with sufficient flexibility to enable damping performance to be maximised, with the stabilising circuit responsive and adjustable over a frequency range from 0.1 Hz to 2.5 Hz; and

(d) achieves a minimum equivalent gain of 200.[1]

A12.4.2.11. The performance characteristics required for AC exciter, rotating rectifier and Static Excitation Systems are specified in Table A12.4.2.11.

Performance Item	Units	Static Excitation	AC exciter or rotating rectifier	Notes
Generating Unit Field voltage *Rise Time:* In relation to field voltage rising from rated field voltage to excitation ceiling voltage following the application of a short duration impulse to the voltage reference.	Second	0.05 maximum	0.5 maximum	1 and 2
Settling Time with the Generating Unit unsynchronised following a disturbance equivalent to a 5% step change in the sensed Generating Unit terminal voltage.	Second	1.5 maximum	2.5 maximum	2
Settling Time with the Generating Unit	Second	2.5 maximum	5 maximum	2

[1] For both proportional and integral control actions. Note that one per unit excitation voltage is that field voltage required to produce nominal voltage on the air gap line of the Generating Unit open circuit characteristic (refer IEEE Standard 115-1983 - Test Procedures for Synchronous Machines).

synchronised following a disturbance equivalent to a 5% step change in the sensed Generating Unit terminal voltage. It must be met at all operating points within the Generating Unit capability.				
Settling Time following any disturbance which causes an excitation limiter to operate.	Second	5 maximum	5 maximum	2
Notes: 1. Rated field voltage is that voltage required to give nominal Generating Unit terminal voltage when the Generating Unit is operating at its Rated Maximum Apparent Power. 2. For rotating rectifier excitation system where the field voltage is not accessible for direct measurement, the main exciter field voltage must comply with this clause A12.4.2.11.				

Table A12.4.2.11: Synchronous Generating Unit Excitation Control System performance requirements

A12.4.2.12. Where provided, a power system stabiliser must have:

(a) measurements of rotor speed and Active Power output of the Generating Unit as inputs; and

(b) an output limiter, which is continually adjustable over the range of –10% to +10% of stator voltage.

Asynchronous Generating Systems

A12.4.2.13. A Generating System, comprised of Asynchronous Generating Units, must have a voltage and Reactive Power Control System that has a power oscillation damping capability with sufficient flexibility to enable damping performance to be maximised, with the stabilising circuit responsive and adjustable over a frequency range from 0.1 Hz to 2.5 Hz. Any power system stabiliser must have measurements of power system frequency and Active Power output of the Generating Unit as inputs.

A12.4.2.14. A Generating System, comprised of Asynchronous Generating Units, must have a control system capable of achieving a minimum equivalent gain of 200.

A12.4.2.15. The performance characteristics required for the voltage and Reactive Power Control Systems of all Asynchronous Generating Systems are specified in Table A12.4.2.15.

Performance Item	Units	Limiting Value	Notes
Rise Time: The controlled parameter (voltage or Reactive Power output) following the application of a 5% step change to the Control System reference.	Second	1.5 maximum	1 and 3
Settling Time of the controlled parameter with the Generating System connected to the Transmission System following a step change in the Control System reference such that it is not large enough to cause saturation of the controlled output parameter. It must be met at all operating points within the Generating Unit's capability.	Second	2.5 maximum	1, 2 and 3
Settling Time of the controlled parameter with the Generating System connected to the Transmission System following any disturbance that is large enough to cause the maximum value of the controlled output parameter to be just exceeded.	Second	5 maximum	2 and 3
Notes: 1. The step change is 5%, or a lesser value specified by the Network Operator such that it is the largest step change that results in the required Settling Time at the Connection Point. 2. The step change is specified by the Network Operator such that it is the largest step change that results in the required Settling Time at the Connection Point. 3. The step change is to be recorded for future assessment.			

Table A12.4.2.15: Asynchronous Generating System Control System performance requirements

A12.4.2.16. The controlled parameters used to meet the requirements specified in Table A12.4.2.15. and measurement of the parameters must be agreed with the Network Operator and AEMO as part of the Generator Performance Standard.

A12.4.3. Minimum Generator Performance Standard

A12.4.3.1. The Minimum Generator Performance Standard for Voltage and Reactive Power Control as it applies to different Generating Systems, is specified in Table A12.4.3.1:

Type of Generating System	Relevant requirement
Generating System comprised solely of Synchronous Generating Units.	Clause A12.4.3.2 to clause A12.4.3.6.
Generating System comprised solely of Asynchronous Generating Units.	Clause A12.4.3.2 to clause A12.4.3.5 and clause A12.4.3.7.

Generating System comprised of Synchronous Generating Units and Asynchronous Generating Units.	Clause A12.4.3.2 to clause A12.4.3.5 and: (a) for that part of the Generating System comprised of Synchronous Generating Units, clause A12.4.3.6; (b) for that part of the Generating System comprised of Asynchronous Generating Units, clause A12.4.3.7.

Table A12.4.3.1: Voltage and Reactive Power Control Minimum Generator Performance Standard

All Generating Systems

A12.4.3.2. A Generating System must have Equipment capabilities and Control Systems, including, if necessary, a power system stabiliser, sufficient to ensure that:

(a) power system oscillations, for the frequencies of oscillation of the Generating System against any other Generating System or device, are Adequately Damped;

(b) operation of the Generating System is Adequately Damped; and

(c) Control Systems can be sufficiently tested to establish their dynamic operational characteristics.

A12.4.3.3. A Generating System must have a Control System to regulate:

(a) voltage; or

(b) either of Reactive Power or Power Factor, with the agreement of AEMO and the Network Operator.

A12.4.3.4. A voltage Control System for a Generating System must:

(a) regulate voltage to within 2% of the Target Setpoint, where that setpoint may be adjusted to incorporate any voltage droop or reactive current compensation agreed with AEMO and the Network Operator; and

(b) allow the voltage Target Setpoint to be controllable in the range of at least 98% to 102% of the target voltage (as determined by the Network Operator), subject to the Reactive Power Capability agreed with AEMO and the Network Operator under Part A12.3 of this Appendix 12.

A12.4.3.5. A Generating System's Reactive Power or Power Factor Control System must:

(a) regulate Reactive Power or Power Factor (as applicable) to within:

i. for a Generating System operating in Reactive Power mode, 5% of the Rated Maximum Apparent Power of the Generating System from the Target Setpoint; or

ii. for a Generating System operating in Power Factor mode, a Power Factor equivalent to 5% of the Rated Maximum Apparent Power of the Generating System from the Target Setpoint;

(b) allow the Reactive Power or Power Factor Target Setpoint to be continuously controllable across the Reactive Power Capability defined in the relevant Generator Performance Standard; and

(c) have limiting devices to ensure that a voltage disturbance does not cause a Generating Unit to trip at the limits of its operating capability. The Generating System must be capable of stable operation for indefinite periods while under the control of any limiter. Limiters must not detract from the performance of any stabilising circuits and must have settings applied, which are coordinated with all Protection Systems, and must be included as part of the Generator Performance Standard.

Synchronous Generating Systems

A12.4.3.6. Each Synchronous Generating Unit within the Generating System, with an Excitation Control System required to regulate voltage must:

(a) have excitation ceiling voltage of at least 1.5 times the excitation required to achieve generation at the rated output, rated speed and nominal voltage in accordance with the relevant Australian Standard or ISO Standard for Synchronous Generating Units. The details regarding which relevant Australian Standard or ISO Standard applies is documented in the guidelines published by the Network Operator under clause 3A.4.4; and

(b) subject to the ceiling voltage requirement, have a Settling Time of less than 7.5 seconds for a 5% voltage disturbance with the Generating Unit synchronised, subject to the Generating Unit operating at a point where such a voltage disturbance would not cause any limiting device to operate.

Asynchronous Generating Systems

A12.4.3.7. A Generating System, comprised of Asynchronous Generating Units, with a voltage Control System must have a Settling Time of less than 7.5 seconds for a 5% voltage disturbance subject to the Generating Unit being electrically connected to the SWIS and operating at a point where such a voltage disturbance would not cause any limiting device to operate.

A12.4.4. Negotiation Criteria

A12.4.4.1. A Proposed Negotiated Generator Performance Standard must be the highest level that the Generating System can reasonably achieve, including by

installation of additional dynamic Reactive Power Equipment, and through optimising its Control Systems.

A12.5. Technical Requirement: Active Power Control

A12.5.1. Common Requirements

A12.5.1.1. All Generating Systems must be capable of meeting the Dispatch Systems Requirements.

A12.5.1.2. Any arrangements put in place as part of the Arrangement for Access to limit Active Power output in order to manage constraints on the Network must be included as part of the Generator Performance Standard.

A12.5.1.3. Each Control System must be Adequately Damped.

A12.5.1.4. Any relevant disconnection settings must be included as part of the Generator Performance Standard.

A12.5.1.5. Subject to energy source availability and any other agreement by the Network Operator, where dispatched by AEMO a Generating System must be capable of maintaining its Active Power output consistent with its last received dispatch level in the event RME, RCE or Communications are unavailable.

A12.5.1.6. The requirements in this Part A12.5 do not override any specific Active Power ramping requirements specified in Part A12.6 in response to frequency deviations.

A12.5.1.7. In relation to the application of this Technical Requirement, unless otherwise specified in the relevant clause, the requirements apply when operating at any Active Power and Reactive Power level as permitted or required under the other Technical Requirements in this Appendix, and at all temperatures up to and including the Maximum Temperature.

A12.5.2. Ideal Generator Performance Standard

A12.5.2.1. A Non-Intermittent Generating System within a Transmission Connected Generating System must have an Active Power Control System capable of:

(a) maintaining and changing its Active Power output in accordance with Target Setpoints;

(b) ramping its Active Power output linearly from one Target Setpoint to another; and

(c) in a thermally stable state, changing Active Power output in response to a change in Target Setpoint at a rate not less than 5% of its Rated Maximum Active Power per minute.

A12.5.2.2. Subject to energy source availability, an Intermittent Generating System within a Transmission Connected Generating System must be able to change its

Active Power output in accordance with Target Setpoints, and must not change its Active Power output at a rate greater than 10 MW per minute or 15% of the Rated Maximum Active Power per minute, whichever is the lower or as agreed with the Network Operator and AEMO.

A12.5.2.3. A Transmission Connected Generating System must be able to meet the Dispatch Systems Requirements.

A12.5.3. Minimum Generator Performance Standard

A12.5.3.1. A Non-Intermittent Generating System within a Transmission Connected Generating System must have an Active Power Control System capable of maintaining and changing its Active Power output in accordance with a Target Setpoint, and must be capable of changing Active Power generation at a rate not less than 5% of its Rated Maximum Active Power per minute.

A12.5.3.2. Subject to energy source availability, an Intermittent Generating System within a Transmission Connected Generating System must ensure that any change of Active Power output in a 5 minute period does not exceed a value agreed with AEMO and the Network Operator.

A12.5.4. Negotiation Criteria

A12.5.4.1. There are no Negotiation Criteria for this Technical Requirement.

A12.6. Technical Requirement: Inertia and Frequency Control

A12.6.1. Common Requirements

A12.6.1.1. All Control Systems must be Adequately Damped.

A12.6.1.2. The recorded maximum ramp rate for the Generating System must be expressed as the change in Active Power (measured in MW) achievable across 6 seconds.

A12.6.1.3. Any relevant disconnection settings must be provided as part of the Generator Performance Standard.

A12.6.1.4. Control Systems on Generating Systems that control Active Power must include permanently installed and operational monitoring and recording equipment for key variables including each input and output, and equipment for testing the Control System sufficient to establish its dynamic operational characteristics.

A12.6.1.5. After having met the relevant requirements for altering and holding Active Power output to arrest and correct changes in power system frequency, the Generating System, or Generating Units where relevant, must adhere to relevant requirements of Part A12.5 when returning to regular Active Power output (subject to any agreements under clause A12.6.1.6).

A12.6.1.6. Unless otherwise agreed by the relevant Network Operator and AEMO, protection or other schemes that disconnect the Generating System or elements of the Generating System, must not be used in order to meet the requirements of this Part A12.6.

A12.6.1.7. A Generating System must:

(a) have an automatic variable Active Power control characteristic; and

(b) where the Generating System contains a Generating Unit with a Turbine Control System, it must include equipment for both speed and Active Power control.

A12.6.1.8. All Generating Units, or the Generating System, as applicable, must operate in a mode in which it will automatically alter its Active Power output to arrest and correct changes in power system frequency, unless instructed otherwise or approved for testing purposes by AEMO.

A12.6.1.9. The Frequency Dead Band on each Generating Unit, or the Generating System, as applicable, must be no greater than +/-0.025 Hz around 50.0Hz.

A12.6.1.10. Unless otherwise stated in this Part A12.6, the overall required frequency response of each Generating Unit, or Generating System, as applicable, must be settable and be capable of:

(a) automatically achieving an increase in Active Power output proportional to a change in power system frequency of not less than 5% of the maximum Active Power specified in the Temperature Dependency Data provided under Part A12.2 for each 0.1 Hz reduction in power system frequency from the lower level of Frequency Dead Band, provided the output is above the Rated Minimum Active Power; and

(b) automatically achieving a reduction in Active Power output proportional to a change in power system frequency of not less than 5% of the maximum Active Power specified in the Temperature Dependency Data provided under Part A12.2 for each 0.1 Hz increase in power system frequency from the upper level of Frequency Dead Band, provided this does not require operation below the Rated Minimum Active Power.

A12.6.1.11. The frequency response capability described in clause A12.6.1.10:

(a) must not exhibit any step changes in Active Power as the power system frequency changes, unless otherwise agreed by the relevant Network Operator and AEMO under clause A12.6.1.6;

(b) must commence responding with a delay no greater than that required to ensure stable operation or to allow for control system latency, as agreed by the relevant Network Operator and AEMO;

(c) must not increase Active Power output in response to an increase in power system frequency; and

(d) must not decrease Active Power output in response to a decrease in power system frequency.

A12.6.1.12. In relation to the application of this Technical Requirement, the requirements apply at the Connection Point unless otherwise specified in the relevant clause, or the Network Operator or AEMO determines that the Technical Requirement must be measured at a different location for the particular Generating Unit or Generating System, in which case the measurement location must be recorded as part of the relevant Generator Performance Standard.

A12.6.1.13. In relation to the application of this Technical Requirement, unless otherwise specified in the relevant clause, the requirements apply when operating at any Active Power and Reactive Power level as permitted or required under the other Technical Requirements in this Appendix, and at all temperatures up to and including the Maximum Temperature.

A12.6.2. Ideal Generator Performance Standard

A12.6.2.1. The Ideal Generator Performance Standard requires that control ranges, response times and sustain times, are achieved for Generating Units, or the Generating System, as applicable, such that, subject to energy source availability:

(a) the required frequency response in clause A12.6.1.10(a) can be complied with for any initial output up to the maximum Active Power specified in the Temperature Dependency Data provided under Part A12.2 for the relevant temperature;

(b) for Synchronous Generating Systems, for any frequency disturbance where the change in power system frequency is sufficient to change the Active Power of the Generating System by at least 5% of its Rated Maximum Active Power, the Generating Unit or Generating System achieves at least 90% of the required frequency response specified in clause A12.6.1.10 within 6 seconds;

(c) for Asynchronous Generating Systems, for any frequency disturbance where the change in power system frequency is sufficient to change the Active Power of the Generating System by at least 5% of its Rated Maximum Active Power, the Generating Unit or Generating System achieves at least 90% of the required frequency response specified in clause A12.6.1.10 within 2 seconds;

(d) the required frequency response specified in clause A12.6.1.10 is sustained for not less than a further 10 seconds beyond the timeframes specified in clause A12.6.2.1(b) and clause A12.6.2.1(c), as applicable, subject to a restoration of power system frequency in which case the Active Power output must be changed in proportion to the power system frequency in accordance with the required frequency response specified in clause A12.6.1.10; and

(e) each Generating Unit's or Generating System’s, as applicable, capability to sustain response beyond the timeframe specified in clause A12.6.2.1(d) must be included as part of the relevant Generator Performance Standard.

A12.6.3. Minimum Generator Performance Standard

A12.6.3.1. [Blank]

A12.6.3.2. Subject to energy source availability, a Generating System is required to have control ranges and response times for each Generating Unit, or Generating Systems as applicable, such that:

(a) it is able to comply with the required frequency response specified in clause A12.6.1.10(a), up to 85% of Rated Maximum Active Power output;

(b) for initial outputs above 85% of Rated Maximum Active Power output, each Generating Unit's or Generating System's, as applicable, response capability must be agreed with the relevant Network Operator and AEMO, and included as part of the relevant Generator Performance Standard;

(c) for Synchronous Generating Systems, for any frequency disturbance where the change in frequency is sufficient to change the Active Power of the Generating System by at least 5% of its Rated Maximum Active Power output, the Generating Unit or Generating System achieves at least 60% of the required frequency response specified in clause A12.6.1.10 within 6 seconds, and 90% of the required frequency response specified in clause A12.6.1.10 within 15 seconds;

(d) for Asynchronous Generating Systems, for any frequency disturbance where the change in frequency is sufficient to change the Active Power of the Generating System by at least 5% of its Rated Maximum Active Power output, the Generating Unit or Generating System achieves at least 60% of the required frequency response specified in clause A12.6.1.10 within 6 seconds, and at least 90% of the required frequency response specified in clause A12.6.1.10 within 15 seconds;

(e) the required frequency response specified in clause A12.6.1.10 is sustained for not less than a further 10 seconds beyond the latest timeframe specified in clause A12.6.3.2(c) and clause A12.6.3.2(d), as applicable, subject to a restoration of power system frequency in which case the Active Power output must be changed in proportion to the power system frequency in accordance with the required frequency response specified in clause A12.6.1.10; and

(f) each Generating Unit's or Generating System's, as applicable, capability to sustain response beyond the timeframe specified in clause A12.6.3.2(e) must be included as part of the relevant Generator Performance Standard.

A12.6.4. Negotiation Criteria

A12.6.4.1. A Negotiated Generator Performance Standard must require that there is no requirement for a Generating System to operate with an Active Power output:

(a) below its Rated Minimum Active Power in response to a rise in the frequency of the SWIS as measured at the Connection Point;

(b) above the relevant maximum Active Power output specified in the Temperature Dependency Data provided under Part A12.2 for the

relevant temperature, in response to a fall in the frequency of the SWIS as measured at the Connection Point; or

(c) to deliver a rate of change in output exceeding the specified maximum ramp rate.

A12.6.4.2. An additional source of Inertia or frequency control may be included within the Generating System. The Control System for the additional source of Inertia or frequency control must be coordinated with the remainder of the Generating System and, together, must meet the performance requirements of the relevant Technical Requirements.

A12.7. Technical Requirement: Disturbance Ride Through for a Frequency Disturbance

A12.7.1. Common Requirements

A12.7.1.1. In relation to the application of this Technical Requirement, the requirements apply at the Connection Point unless otherwise specified in the relevant clause, or the Network Operator or AEMO determines that the Technical Requirement must be measured at a different location for the particular Generating Unit or Generating System, in which case the measurement location must be recorded as part of the relevant Generator Performance Standard.

A12.7.1.2. Any relevant disconnection settings must be provided as part of the Generator Performance Standard.

A12.7.1.3. Where the relevant Network Operator and AEMO have agreed to a protection, or other scheme, that will disconnect the Generating System or elements of the Generating System, in order to satisfy the requirements of Part A12.6, the operation of those schemes based on their agreed parameters will not be taken to be a breach of the requirements of this Part A12.7.

A12.7.1.4. In relation to the application of this Technical Requirement, unless otherwise specified in the relevant clause, the requirements apply when operating at any Active Power and Reactive Power level as permitted or required under the other Technical Requirements in this Appendix.

A12.7.2. Ideal Generator Performance Standard

A12.7.2.1. A Generating System must maintain Continuous Uninterrupted Operation where a power system disturbance causes the frequency to:

(a) reach 52.5 Hz for a period of up to 6 seconds;

(b) reach 52 Hz for a period of up to 2 minutes;

(c) reach 51.5 Hz for a period of up to 5 minutes;

(d) operate between 49.0 Hz to 51.0 Hz continuously;

(e) reach 47.5 Hz for a period of up to 15 minutes; or

(f) reach 47.0 Hz for a period of up to 2 minutes,

as shown in Figure A12.7.2.1.

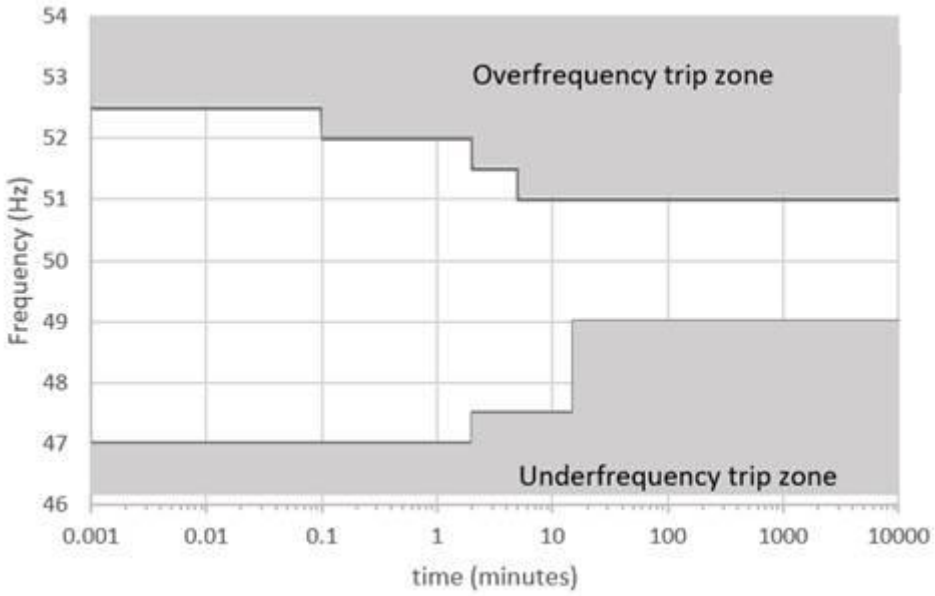

Figure A12.7.2.1 Frequency variations that a Generating System must ride through to meet the Ideal Generator Performance Standard

A12.7.2.2. A Generating System must maintain Continuous Uninterrupted Operation where a power system disturbance causes the RoCoF to:

(a) reach 4 Hz/s over 250 milliseconds during the disturbance; or

(b) reach 3 Hz/s over 1 second during the disturbance.

A12.7.3. Minimum Generator Performance Standard

A12.7.3.1. A Generating System must maintain Continuous Uninterrupted Operation where a power system disturbance causes the frequency to:

(a) reach 52.0 Hz for a period of up to 2 minutes;

(b) operate between 49.0 Hz to 51.0 Hz continuously;

(c) reach 48.0 Hz for a period of at least 15 minutes;

(d) reach 47.5 Hz for a period of at least 5 minutes; or

(e) reach 47.0 Hz for a period of at least 10 seconds,

as shown in Figure A12.7.3.1.

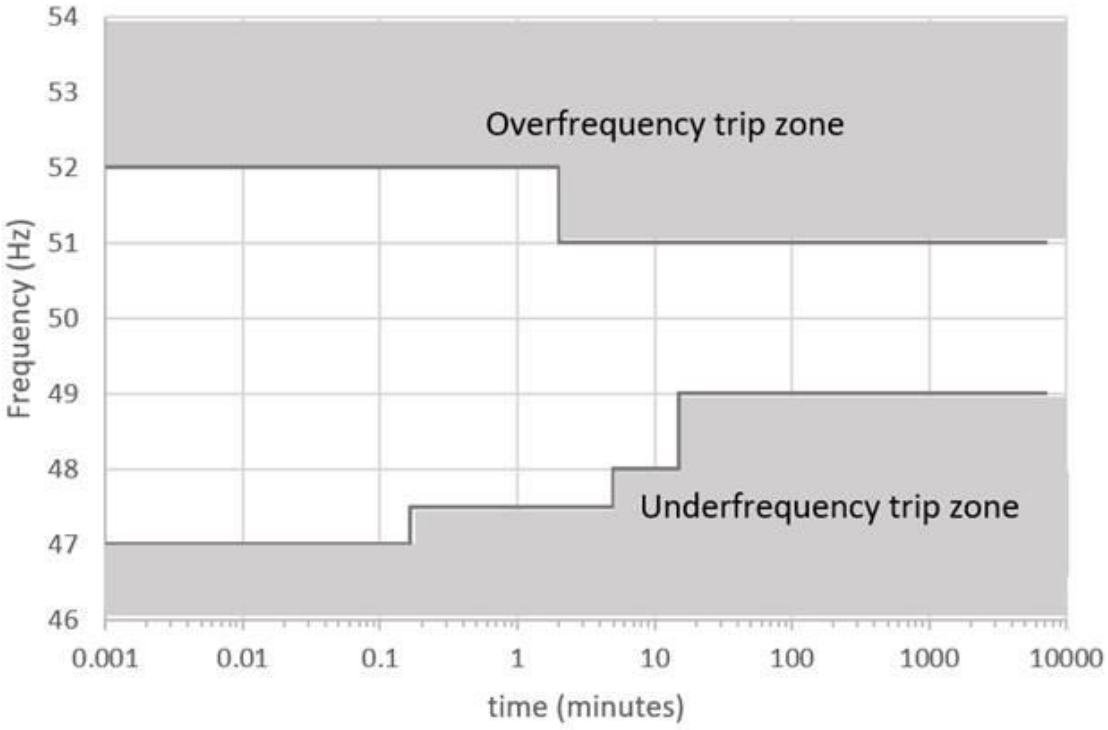

Figure A12.7.3.1: Frequency variations that a Generating System must ride through to meet the Minimum Generator Performance Standard

A12.7.3.2. A Generating System must maintain Continuous Uninterrupted Operation where a power system disturbance causes the RoCoF to:

(a) reach 2 Hz/s over 250 milliseconds during the disturbance; or

(b) reach 1 Hz/s over 1 second during the disturbance.

A12.7.4. Negotiation Criteria

A12.7.4.1. A Proposed Negotiated Generator Performance Standard for disturbance ride through for a frequency disturbance may be accepted provided the Network Operator and AEMO agree that the frequency would be unlikely to fall below the lower bound of the single contingency event band specified in the Frequency Operating Standard.

A12.8. Technical Requirement: Disturbance Ride Through for a Voltage Disturbance

A12.8.1. Common Requirements

A12.8.1.1. In relation to the application of this Technical Requirement, the requirements apply at the Connection Point unless otherwise specified in the relevant clause, or the Network Operator or AEMO determines that the Technical Requirement must be measured at a different location for the particular Generating Unit or Generating System, in which case the measurement location must be recorded as part of the relevant Generator Performance Standard.

A12.8.1.2. The Generating System and each of its operating Generating Units is required to remain in Continuous Uninterrupted Operation while the Connection Point voltage remains within 90% to 110% of nominal voltage.

A12.8.1.3. Any relevant disconnection settings must be provided as part of the Generator Performance Standard.

A12.8.1.4. In relation to the application of this Technical Requirement, unless otherwise specified in the relevant clause, the requirements apply when operating at any Active Power and Reactive Power level as permitted or required under the other Technical Requirements in this Appendix.

A12.8.2. Ideal Generator Performance Standard

A12.8.2.1. A Generating System must maintain Continuous Uninterrupted Operation where a power system disturbance causes the voltage to vary within the following ranges:

(a) voltage exceeds 130% of nominal voltage for not more than 0.02 seconds after T(ov);

(b) voltage does not exceed 120% of nominal voltage for more than 2.0 seconds after T(ov);

(c) voltage does not exceed 115% of nominal voltage for more than 20.0 seconds after T(ov);

(d) voltage does not exceed 110% of nominal voltage for more than 20.0 minutes after T(ov);

(e) voltage remains at 0% of nominal voltage for no more than 450 milliseconds after T(uv);

(f) voltage does not stay below 70% of nominal voltage for more than 450 milliseconds after T(uv);

(g) voltage does not stay below 80% of nominal voltage for more than 2.0 seconds after T(uv); and

(h) voltage does not stay below 90% of nominal voltage for more than 10.0 seconds after T(uv).

Where:

T(ov) means a point in time when the voltage first varied above 110% of nominal voltage before returning to between 90% and 110% of nominal voltage; and

T(uv) means a point in time when the voltage first varied below 90% of nominal voltage before returning to between 90% and 110% of nominal voltage.

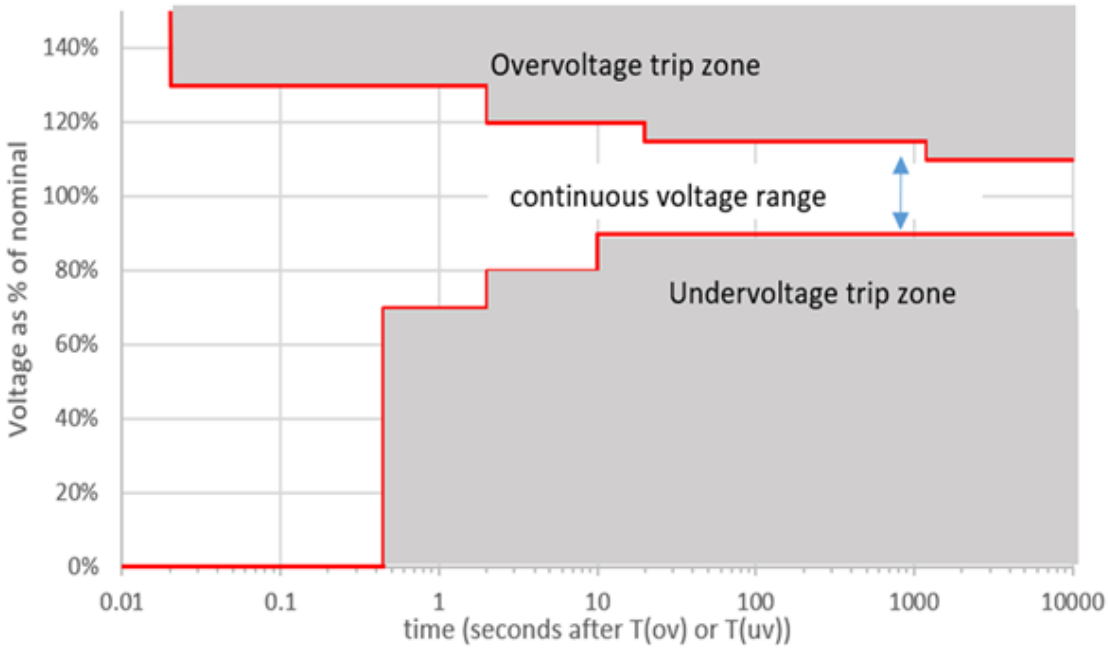

Figure A12.8.2.1: Voltage variations that a Generating System must ride through to meet the Ideal Generator Performance Standard

A12.8.3. Minimum Generator Performance Standard

A12.8.3.1. A Generating System must maintain Continuous Uninterrupted Operation where a power system disturbance causes the voltage to vary within the following ranges:

(a) voltage does not exceed 120% of nominal voltage after T(ov);

(b) voltage does not exceed 115% of nominal voltage for more than 0.1 seconds after T(ov);

(c) voltage does not exceed 110% of nominal voltage for more than 0.9 seconds after T(ov);

(d) voltage remains at 0% of nominal voltage for no more than 450 milliseconds after T(uv) subject to clause A12.8.3.2;

(e) voltage does not stay below 70% of nominal voltage for more than 450 milliseconds after T(uv);

(f) voltage does not stay below 80% of nominal voltage for more than 2.0 seconds after T(uv); and

(g) voltage does not stay below 90% of nominal voltage for more than 5.0 seconds after T(uv).

Where:

T(ov) means a point in time when the voltage first varied above 110% of nominal voltage before returning to between 90% and 110% of nominal voltage; and

T(uv) means a point in time when the voltage first varied below 90% of nominal voltage before returning to between 90% and 110% of nominal voltage.

A12.8.3.2. The duration of the zero percent voltage level may be relaxed through agreement with the Network Operator and AEMO, but shall not be lower than the maximum Total Fault Clearance Time with no circuit breaker fail as specified in the Technical Rules.

A12.8.3.3. Any operational arrangements necessary to ensure the Generating System and each of its operating Generating Units will meet its Generator Performance Standard must be provided as part of the Generator Performance Standard.

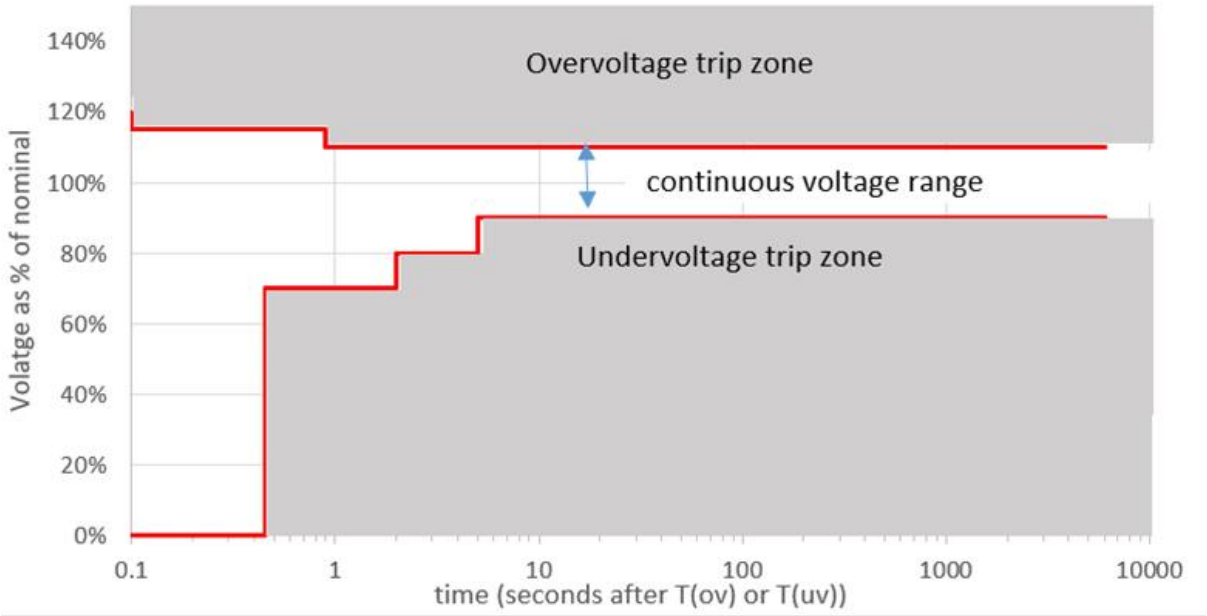

Figure A12.8.3.3: Voltage variations that a Generating System must ride through to meet the Minimum Generator Performance Standard

A12.8.4. Negotiation Criteria

A12.8.4.1. There are no Negotiation Criteria for this Technical Requirement.

A12.9. Technical Requirement: Disturbance Ride Through for Multiple Disturbances

[Note: This Technical Requirement uses the term 'fault' to include a fault of the relevant type having a metallic conducting path.]

A12.9.1. Common Requirements

A12.9.1.1. The Common Requirements for disturbance ride through for multiple disturbances as they apply to different Generating Systems, is specified in Table A12.9.1.1:

Type of Generating System	Relevant requirement
Generating System comprised solely of Synchronous Generating Units.	Clause A12.9.1.3, clause A12.9.1.2, clause A12.9.1.4, clause A12.9.1.5, clause A12.9.1.7 and clause A12.9.1.8.
Generating System comprised solely of Asynchronous Generating Units.	Clause A12.9.1.3, clause A12.9.1.2, clause A12.9.1.4, clause A12.9.1.6, clause A12.9.1.7 and clause A12.9.1.8.
Generating System comprised of Synchronous Generating Units and Asynchronous Generating Units.	Clause A12.9.1.3, clause A12.9.1.2, clause A12.9.1.4, clause A12.9.1.7, clause A12.9.1.8 and: (a) for that part of the Generating System comprised of Synchronous Generating Units, clause A12.9.1.5; (b) for that part of the Generating System comprised of Asynchronous Generating Units, clause A12.9.1.6.

Table A12.9.1.1: Common Requirements for Disturbance Ride through for Multiple Disturbances

All Generating Systems

A12.9.1.2. Any relevant disconnection settings must be provided as part of the Generator Performance Standard.

A12.9.1.3. The Generator Performance Standard must include any operational arrangements to ensure the Generating System, including all operating Generating Units, will meet their agreed performance levels under abnormal Network or Generating System conditions.

A12.9.1.4. When assessing multiple disturbances, a fault that is re-established following operation of automatic reclose Protection Scheme shall be counted as a separate disturbance.

Synchronous Generating Systems and units

A12.9.1.5. For a Generating System comprised solely of Synchronous Generating Units, the reactive current contribution must equal or exceed 250% of the Maximum Continuous Current of the Generating System. For a Synchronous Generating Unit in any other Generating System, the reactive current contribution must equal or exceed 250% of the Maximum Continuous Current of that Synchronous Generating Unit.

Asynchronous Generating Systems

A12.9.1.6. For a Generating System comprised of Asynchronous Generating Units:

(a) the reactive current contribution must equal or exceed the Maximum Continuous Current of the Generating System, including all operating Asynchronous Generating Units;

(b) [Blank]

(c) the reactive current contribution required may be calculated using phase to phase, phase to ground or sequence components of voltages. The ratio of the negative sequence to positive sequence components of the reactive current contribution must be agreed with AEMO and the Network Operator for the types of disturbances specified in this Technical Requirement; and

(d) the Generator Performance Standard must record all conditions (which may include temperature) considered relevant by AEMO and the Network Operator under which the reactive current response is required.

Measurement location and temperature limitations

A12.9.1.7. In relation to the application of this Technical Requirement, the requirements apply at the Connection Point unless otherwise specified in the relevant clause, or the Network Operator or AEMO determines that the Technical Requirement must be measured at a different location for the particular Generating Unit or Generating System, in which case the measurement location must be recorded as part of the relevant Generator Performance Standard.

A12.9.1.8. In relation to the application of this Technical Requirement, unless otherwise specified in the relevant clause, the requirements apply when operating at any Active Power and Reactive Power level as permitted or required under the other Technical Requirements in this Appendix, and the Market Participant responsible for the Transmission Connected Generating System must specify any thermal limitations that may limit the output of the Generating System or Generating Unit in relation to this Technical Requirement.

A12.9.2. Ideal Generator Performance Standard

A12.9.2.1. The Ideal Generator Performance Standard as it applies to different Generating Systems, is specified in Table A12.9.2.1:

Type of Generating System	Relevant requirement
Generating System comprised solely of Synchronous Generating Units.	Clause A12.9.2.2, clause A12.9.2.3 and clause A12.9.2.4.
Generating System comprised solely of Asynchronous Generating Units.	Clause A12.9.2.2, clause A12.9.2.3 and clause A12.9.2.5 to clause A12.9.2.8.
Generating System comprised of Synchronous Generating Units and Asynchronous Generating Units.	Clause A12.9.2.2 and clause A12.9.2.3 and: (a) for that part of the Generating System comprised of Synchronous Generating Units, clause A12.9.2.4; (b) for that part of the Generating System comprised of Asynchronous Generating Units, clause A12.9.2.5 to clause A12.9.2.8.

Table A12.9.2.1: Disturbance Ride through for Multiple Disturbances Ideal Generator Performance Standard

All Generating Systems

A12.9.2.2. A Generating System and each of its operating Generating Units must remain in Continuous Uninterrupted Operation for any disturbances caused by:

(a) a Credible Contingency;

(b) a three phase fault in a Transmission System cleared by all relevant primary Protection Systems; and

(c) a two phase to ground, phase to phase or phase to ground fault in a transmission or distribution system or a three phase fault in a distribution system cleared in:

i. the longest time expected to be taken for a relevant breaker fail Protection System to clear the fault; or

ii. if a Protection System referred to in clause A12.9.2.2.(c)(i) is not installed, the greater of 450 milliseconds and the longest time expected to be taken for all relevant primary Protection Systems to clear the fault,

provided that the event is not one that would disconnect the Generating Unit from the SWIS by removing Network elements from service or as a result of the operation of an existing inter-trip, Protection Scheme or runback scheme approved by the Network Operator and AEMO.

A12.9.2.3. A Generating System and each of its operating Generating Units must remain in Continuous Uninterrupted Operation for a series of up to 15 disturbances within any 5 minute period.

Synchronous Generating Systems

A12.9.2.4. Subject to any changed power system conditions or energy source availability beyond the operator of the Generating System's reasonable control, a Generating System comprised of Synchronous Generating Units, in respect of the faults referred to in clause A12.9.2.2, must supply to, or absorb from, the Network:

(a) to assist the maintenance of power system voltages during the fault, capacitive reactive current of at least the greater of its pre-disturbance reactive current and 4% of the Maximum Continuous Current of the Generating System including all operating Synchronous Generating Units (in the absence of a disturbance) for each 1% reduction (from the level existing just prior to the fault) of Connection Point voltage or another agreed location in the SWIS (including within the Generating System) during the fault;

(b) after clearance of the fault, Reactive Power sufficient to ensure that the Connection Point voltage or another agreed location in the SWIS (including within the Generating System) is within the range for Continuous Uninterrupted Operation; and

(c) from 100 milliseconds after clearance of the fault, Active Power of at least 95% of the level existing just prior to the fault.

Asynchronous Generating Systems

A12.9.2.5. Subject to any changed power system conditions or energy source availability beyond the operator of the Generation System's reasonable control, a Generating System comprised of Asynchronous Generating Units, for the faults referred to in clause A12.9.2.2, must have equipment capable of supplying to, or absorbing from, the Network:

(a) to assist the maintenance of power system voltages during the fault:

i. capacitive reactive current in addition to its pre-disturbance level of at least 4% of the Maximum Continuous Current of the Generating System including all operating Asynchronous Generating Units (in the absence of a disturbance) for each 1% reduction of voltage at the Connection Point below a specified threshold level within the under-voltage range of 85% to 90% of nominal voltage, except where a Generating System is directly connected to the SWIS with no step-up or connection

Transformer and voltage at the Connection Point is 5% or lower of nominal voltage; and

ii. inductive reactive current in addition to its pre-disturbance level of at least 6% of the Maximum Continuous Current of the Generating System including all operating Asynchronous Generating Units (in the absence of a disturbance) for each 1% increase of voltage at the Connection Point above a specified threshold level within the over-voltage range of 110% to 115% of nominal voltage,

during the disturbance and maintained until Connection Point voltage recovers to between 90% and 110% of nominal voltage, or such other range agreed with the Network Operator and AEMO; and

(b) from 100 milliseconds after clearance of the fault, Active Power of at least 95% of the level existing just prior to the fault.

A12.9.2.6. The under-voltage and over-voltage range referred to in clause A12.9.2.5(a)(i) and clause A12.9.2.5(a)(ii) may be varied with the agreement of the Network Operator and AEMO (provided the magnitude of the range between the upper and lower bounds remains at 5%).

A12.9.2.7. The reactive current response referred to in clause A12.9.2.5(a)(i) and clause A12.9.2.5(a)(ii) must have a Rise Time of no greater than 40 milliseconds and a Settling Time of no greater than 70 milliseconds and must be Adequately Damped.

A12.9.2.8. Subject to a Generating System's thermal limitations as specified in clause A12.9.1.8 and energy source availability, a Generating System must make available at all times:

(a) sufficient current to maintain rated output in accordance with the relevant Australian Standard or ISO Standard for Asynchronous Generating Units of the Generating System including all operating Generating Units (in the absence of a disturbance), for all Connection Point voltages above 115% (or otherwise, above the agreed over-voltage range). The details regarding which relevant Australian Standard or ISO Standard applies is documented in the guidelines published by the Network Operator under clause 3A.4.4; and

(b) the Maximum Continuous Current of the Generating System including all operating Generating Units (in the absence of a disturbance) for all Connection Point voltages below 85% (or otherwise, below the agreed under-voltage range),

despite the amount of reactive current injected or absorbed during voltage disturbances, except that AEMO and the Network Operator may agree limits on

active current injection where required to maintain Power System Security and/or the Quality of Supply to other Equipment connected to the SWIS.

A12.9.3. Minimum Generator Performance Standard

A12.9.3.1. The Minimum Generator Performance Standard as it applies to different Generating Systems, is specified in Table A12.9.3.1:

Type of Generating System	Relevant requirement
Generating System comprised solely of Synchronous Generating Units.	Clause A12.9.3.2, clause A12.9.3.3 clause A12.9.3.4.
Generating System comprised solely of Asynchronous Generating Units.	Clause A12.9.3.2, clause A12.9.3.3 and clause A12.9.3.5 to clause A12.9.3.8.
Generating System comprised of Synchronous Generating Units and Asynchronous Generating Units.	Clause A12.9.3.2 and clause A12.9.3.3 and: (a) for that part of the Generating System comprised of Synchronous Generating Units, clause A12.9.3.4; (b) for that part of the Generating System comprised of Asynchronous Generating Units, clause A12.9.3.5 to clause A12.9.3.8.

Table A12.9.3.1: Disturbance Ride through for Multiple Disturbances Minimum Generator Performance Standard

All Generating Systems

A12.9.3.2. A Generating System and each of its operating Generating Units must remain in Continuous Uninterrupted Operation for any disturbance caused by:

(a) a Credible Contingency; or

(b) a single phase to ground, phase to phase or two phase to ground fault or three phase fault in a transmission or distribution system cleared in the longest time expected to be taken for all relevant primary Protection Systems to clear the fault,

provided that the event is not one that would disconnect the Generating Unit from the SWIS by removing Network elements from service or as a result of the operation of an inter-trip, Protection Scheme or runback scheme approved by the Network Operator and AEMO.

A12.9.3.3. A Generating System and each of its operating Generating Units must remain in Continuous Uninterrupted Operation for a series of up to 6 disturbances within any 5 minute period.

Synchronous Generating Systems

A12.9.3.4. After clearance of a fault, a Generating System comprised of Synchronous Generating Units, in respect of the faults referred to in clause A12.9.3.2 must:

(a) deliver Active Power to the Network, and supply or absorb leading or lagging Reactive Power, sufficient to ensure that the Connection Point voltage or another location in the SWIS (including within the Generating System), as specified by the Network Operator, is within the range for Continuous Uninterrupted Operation agreed under the relevant Generator Performance Standard; and

(b) return to at least 95% of the pre-fault Active Power output within a period of time agreed by AEMO and the Network Operator.

Asynchronous Generating Systems

A12.9.3.5. Subject to a Generating System's thermal limitations as specified in clause A12.9.1.8 and any changed power system conditions or energy source availability beyond the operator of the Generating System's reasonable control, a Generating System comprised of Asynchronous Generating Units, for the faults referred to in clause A12.9.3.2, must have equipment capable of supplying to, or absorbing from, the Network:

(a) to assist the maintenance of power system voltages during the fault:

i. capacitive reactive current in addition to its pre-disturbance level of at least 2% of the Maximum Continuous Current of the Generating System including all operating Asynchronous Generating Units (in the absence of a disturbance) for each 1% reduction of voltage at the Connection Point below a specified threshold level agreed by the Network Operator and AEMO within the under-voltage range of 80% to 90% of nominal voltage, except where:

1. voltage at the Connection Point is 15% or lower of nominal voltage; or

2. where the Generating System is directly connected to the SWIS with no step-up or connection Transformer and voltage at the Connection Point is 20% or lower of nominal voltage; and

ii. inductive reactive current in addition to its pre-disturbance level of at least 2% of the Maximum Continuous Current of the Generating System including all operating Asynchronous Generating Units (in the absence of a disturbance) for each 1% increase of voltage at the Connection Point above a specified threshold level agreed by the Network Operator and AEMO within the over-voltage range of 110% to 120% of nominal voltage,

during the disturbance and maintained until the Connection Point voltage recovers to between 90% and 110% of nominal voltage, or such other range agreed with the Network Operator and AEMO; and

(b) returning to at least 95% of the pre-fault Active Power output, after clearance of the fault, within a period of time agreed by the operator, AEMO and the Network Operator.

A12.9.3.6. The under-voltage and over-voltage range referred to in clause A12.9.3.5(a)(i) and clause A12.9.3.5(a)(ii) may be varied with the agreement of the Network Operator and AEMO (provided the magnitude of the range between the upper and lower bounds remains at 10%).

A12.9.3.7. Where AEMO and the Network Operator require the Generating System to sustain a response duration of 2 seconds or less, the reactive current response referred to in clause A12.9.3.5(a)(i) and clause A12.9.3.5(a)(ii) must have a Rise Time of no greater than 40.0 milliseconds and a Settling Time of no greater than 70.0 milliseconds and must be Adequately Damped.

A12.9.3.8. Where AEMO and the Network Operator require the Generating System to sustain a response duration of greater than 2 seconds, the reactive current Rise Time and Settling Time must be as soon as practicable and must be Adequately Damped. The Rise Time and Settling Time must be provided as part of the Generator Performance Standard.

A12.9.4. Negotiation Criteria

A12.9.4.1. A Proposed Negotiated Generator Performance Standard may be accepted if the connection of the Generating System at the proposed performance level would not cause other Generating Systems or Loads to trip as a result of an event, when they would otherwise not have tripped for the same event.

A12.10. Technical Requirement: Disturbance Ride Through for Partial Load Rejection

A12.10.1. Common Requirements

A12.10.1.1. In relation to the application of this Technical Requirement, the requirements apply at the Connection Point unless otherwise specified in the relevant clause, or the Network Operator or AEMO determines that the Technical Requirement must be measured at a different location for the particular Generating Unit or Generating System, in which case the measurement location must be recorded as part of the relevant Generator Performance Standard.

A12.10.1.2. In relation to the application of this Technical Requirement, unless otherwise specified in the relevant clause, the requirements apply when operating at any Active Power and Reactive Power level as permitted or required under the other Technical Requirements in this Appendix, and at all temperatures up to and including the Maximum Temperature.

A12.10.2. Ideal Generator Performance Standard

A12.10.2.1. A Generating System and each of its operating Generating Units must be capable of Continuous Uninterrupted Operation during and following a sudden reduction in Active Power generation as a result of a Contingency Event, provided that the reduction is less than 30% of the Generating System's Rated Maximum Active Power and the Active Power generation remains above the Generating System's Rated Minimum Active Power output level.

A12.10.3. Minimum Generator Performance Standard

A12.10.3.1. A Generating System must be capable of Continuous Uninterrupted Operation during and following a sudden reduction in Active Power generation as a result of a Contingency Event, provided that the reduction is less than 5% of the Generating System's Rated Maximum Active Power and the Active Power generation remains above the Generating System's Rated Minimum Active Power output level.

A12.10.4. Negotiation Criteria

A12.10.4.1. There are no Negotiation Criteria for this Technical Requirement.

A12.11. Technical Requirement: Disturbance Ride Through for Quality of Supply

A12.11.1. Common Requirements

A12.11.1.1. There are no Common Requirements for this Technical Requirement.

A12.11.2. Ideal Generator Performance Standard

A12.11.2.1. The Ideal Generator Performance Standard is the same as the Minimum Generator Performance Standard for Disturbance Ride Through for Quality of Supply.

A12.11.3. Minimum Generator Performance Standard

A12.11.3.1. A Generating System including each of its operating Generating Units and reactive Equipment, must not disconnect from the SWIS as a result of voltage fluctuation, harmonic voltage distortion and voltage unbalance conditions at the Connection Point within the levels specified for flicker, harmonics and negative phase sequence voltage in the Technical Rules.

A12.11.4. Negotiation Criteria

A12.11.4.1. There are no Negotiation Criteria for this Technical Requirement.

A12.12. Technical Requirement: Quality of Electricity Generated

A12.12.1. Common Requirements

A12.12.1.1. A Generating System, when generating and when not generating, must not produce, at any of its Connection Points for generation, voltage imbalance greater than the limits determined by the Network Operator as necessary to achieve the requirements specified for negative phase sequence voltage at the Connection Point in the Technical Rules.

A12.12.2. Ideal Generator Performance Standard

A12.12.2.1. A Generating System, when generating and when not generating, must not produce at any of its Connection Points for generation:

(a) voltage fluctuation greater than the limits allocated by the Network Operator that are no more onerous than the lesser of the acceptance levels determined in accordance with either of the stage 1 or the stage 2 evaluation procedures defined in AS/NZS 61000.3.7:2001; and

(b) harmonic voltage distortion greater than emission limits allocated by the Network Operator that are no more onerous than the lesser of the acceptance levels determined in accordance with either of the stage 1 or the stage 2 evaluation procedures defined in AS/NZS 61000.3.6:2001.

A12.12.3. Minimum Generator Performance Standard

A12.12.3.1. A Generating System, when generating and when not generating, must not produce at any of its Connection Points for generation:

(a) voltage fluctuations greater than limits determined by the Network Operator through the negotiation using the stage 3 evaluation procedure defined in AS/NZS 61000.3.7:2001, with the Market Participant responsible for the Transmission Connected Generating System agreeing to fund any works necessary to mitigate adverse effects from accepting this emission level; and

(b) Harmonic voltage distortion greater than emission limits determined by the Network Operator through the negotiation using the Stage 3 evaluation procedure defined in AS/NZS 61000.3.6:2001 with the Market Participant responsible for the Transmission Connected Generating System agreeing to fund any works necessary to mitigate adverse effects from accepting this emission level.

A12.12.4. Negotiation Criteria

A12.12.4.1. A Proposed Negotiated Generator Performance Standard must not prevent the Network Operator meeting each SWIS Operating Standard or contractual obligations to existing holders of Arrangements for Access.

A12.13. Technical Requirement: Generation Protection Systems

A12.13.1. Common Requirements

A12.13.1.1. There are no Common Requirements for this Technical Requirement.

A12.13.2. Ideal Generator Performance Standard

A12.13.2.1. The Ideal Generator Performance Standard is the same as the Minimum Generator Performance Standard for Generation Protection Systems.

A12.13.3. Minimum Generator Performance Standard

A12.13.3.1. A Generating System must meet the protection requirements specified in the Technical Rules for both Generating Systems and the Transmission System (where relevant), including the requirement for faults to be cleared within maximum Total Fault Clearance Times specified in the Technical Rules or, where specified, a Critical Fault Clearance Time developed by the Network Operator.

A12.13.3.2. All Protection Schemes must have the relevant level of redundancy as specified in the Technical Rules and must operate to clear faults within the prescribed times.

A12.13.3.3. Anti-islanding protection must be installed and made available to ensure the Generating System is prevented from supplying an isolated portion of the SWIS when it is not secure to do so. The details regarding the performance requirements for anti-islanding systems for Transmission Connected Generating Systems are documented in accordance with the guidelines produced by the Network Operator under clause 3A.4.4.

A12.13.3.4. All Protection Schemes necessary to disconnect the Generating System during abnormal conditions in the power system that would threaten the stability of the Generating System, or risk damage to the Generating System, must be installed and available. The settings of these Protection Schemes must deliver the required performance for disturbance ride through specified in Part A12.7, Part A12.8 and Part A12.9 of this Appendix 12 and form part of the Generator Performance Standard.

A12.13.3.5. All Protection Scheme settings referred to in this Appendix must be made available to the Network Operator and AEMO.

A12.13.4. Negotiation Criteria

A12.13.4.1. There are no Negotiation Criteria for this Technical Requirement.

A12.14. Technical Requirement: Remote Monitoring Requirements

A12.14.1. Common Requirements

A12.14.1.1. There are no Common Requirements for this Technical Requirement.

A12.14.2. Ideal Generator Performance Standard

A12.14.2.1. The Ideal Generator Performance Standard is the same as the Minimum Generator Performance Standard for Remote Monitoring Requirements.

A12.14.3. Minimum Generator Performance Standard

A12.14.3.1. The Network Operator or AEMO may require Remote Monitoring Equipment to be installed in order to enable the Network Operator or AEMO to monitor the performance of a Generating Unit (including its dynamic performance) remotely, where this is necessary in real time for control, planning or Power System Security.

A12.14.3.2. All Remote Monitoring Equipment installed, upgraded, modified or replaced (as applicable) under clause A12.14.3.1, must conform to the Communication Standard as it applies Remote Monitoring Equipment and must be compatible with the Network Operator's and AEMO's SCADA system, including the requirements of the Nomenclature Standards.

A12.14.3.3. The Remote Monitoring Equipment must provide for the signals specified in the WEM Procedure described in clause 2.35.4 and such other information required by the Network Operator or AEMO.

A12.14.3.4. The Remote Monitoring Equipment must be kept available at all times, subject to Outages as agreed by AEMO.

A12.14.4. Negotiation Criteria

A12.14.4.1. There are no Negotiation Criteria for this Technical Requirement.

A12.15. Technical Requirement: Remote Control Requirements

A12.15.1. Common Requirements

A12.15.1.1. There are no Common Requirements for this Technical Requirement.

A12.15.2. Ideal Generator Performance Standard

A12.15.2.1. The Ideal Generator Performance Standard is the same as the Minimum Generator Performance Standard for Remote Control Requirements.

A12.15.3. Minimum Generator Performance Standard

A12.15.3.1. The Network Operator or AEMO may, for any Generating Unit which may be unattended when connected to the Transmission System, require Remote Control Equipment to be installed in order to enable the Network Operator or AEMO to disconnect a Generating Unit from the Transmission System.

A12.15.3.2. All Remote Control Equipment installed, upgraded, modified or replaced (as applicable) under clause A12.15.3.1 must conform to the Communication Standard and must be compatible with the Network Operator's SCADA system, including the requirements of Nomenclature Standards.

A12.15.3.3. The Remote Control Equipment must be kept available at all times, subject to Outages as agreed by AEMO.

A12.15.4. Negotiation Criteria

A12.15.4.1. There are no Negotiation Criteria for this Technical Requirement.

A12.16. Technical Requirement: Communications Equipment Requirements

A12.16.1. Common Requirements

A12.16.1.1. There are no Common Requirements for this Technical Requirement.

A12.16.2. Ideal Generator Performance Standard

A12.16.2.1. The Ideal Generator Performance Standard is the same as the Minimum Generator Performance Standard for Communications Equipment Requirements.

A12.16.3. Minimum Generator Performance Standard

A12.16.3.1. Communications paths must be provided and maintained (with redundancy consistent with the standard developed by AEMO to meet the Communication Standard) between the Remote Monitoring Equipment and Remote Communication Equipment installed at any of its Generating Units to a communications interface at the relevant Power Station and in a location acceptable to the Network Operator. Communications systems between this communications interface and the Network Operator's Control Centre are the responsibility of the Network Operator, unless otherwise agreed.

A12.16.3.2. A Market Participant responsible for the Transmission Connected Generating System must provide and maintain a speech communication channel (Primary Speech Communication Channel) by means of which routine and emergency control telephone calls may be established between the operator of the Generation System and AEMO or the Network Operator, whichever is applicable.

A12.16.3.3. The Primary Speech Communication Channel must meet any requirements specified in the Communication Standard.

A12.16.3.4. Where the public switched telephone network is to be used as the Primary Speech Communication Channel, a sole-purpose connection must be provided, which must be used only for operational communications.

A12.16.3.5. The communications paths to any applicable Remote Monitoring Equipment or Remote Communication Equipment must be kept available at all times, subject to Outages as agreed by AEMO.

A12.16.3.6. The Primary Speech Communication Channel must be maintained in good working order.

A12.16.4. Negotiation Criteria

A12.16.4.1. There are no Negotiation Criteria for this Technical Requirement.

A12.17. Technical Requirement: Generation System Model

A12.17.1. Common Requirements

A12.17.1.1. There are no Common Requirements for this Technical Requirement.

A12.17.2. Ideal Generator Performance Standard

A12.17.2.1. The Ideal Generator Performance Standard is the same as the Minimum Generator Performance Standard for Generation System Model.

A12.17.3. Minimum Generator Performance Standard

A12.17.3.1. All modelling data described in the WEM Procedure referred to in clause 3A.4.2 must be provided to the Network Operator within the timeframes specified in the WEM Procedure, as updated from time to time.

A12.17.3.2. The modelling data provided must be sufficient to enable the Network Operator or AEMO to predict the output of the Generation System under all power system conditions.

A12.17.3.3. The observed performance of the Generation System must match the predicted performance of the Generation System using the Generation System Model, as assessed by the Network Operator or AEMO.

A12.17.3.4. The relevant Market Participant must provide updates to the Generation System Model in order to meet the requirements of this Technical Requirement in accordance with the timeframes specified in the WEM Procedure referred to in clause 3A.4.2, as updated from time to time.

A12.17.4. Negotiation Criteria

A12.17.4.1. There are no Negotiation Criteria for this Technical Requirement.

Appendix 13: Frequency Operating Standards System Frequency Outcomes

TABLE 1 – SUMMARY OF SYSTEM FREQUENCY OUTCOMES FOR THE SOUTH WEST INTERCONNECTED SYSTEM

Condition	Contain Band (Hz)	Stabilise (Hz)	Recover (Hz)
Normal Operating Frequency Band	49.8 to 50.2 Hz (99% of the time over any rolling 30-day period)	N/A	N/A
Normal Operating Frequency Excursion Band	49.7 to 50.3 Hz	49.8 to 50.2 Hz within 5 minutes	N/A
Credible Contingency Event Frequency Band	48.75 to 51 Hz	For over-frequency events: below 50.5 Hz within 2 minutes	49.8 to 50.2 Hz within 15 minutes
Island Separation Frequency Band	48.75 to 51 Hz	For over-frequency events: below 50.5 Hz within 2 minutes	49.8 to 50.2 Hz within 15 minutes
Extreme Frequency Tolerance Band	47 to 52 Hz (reasonable endeavours)	48.0 to 50.5 Hz within 5 minutes (reasonable endeavours) and: For under-frequency events: above 47.5 Hz within 10 seconds (reasonable endeavours). For over-frequency events: below 51.5 Hz within 1 minute; and below 51 Hz within 2 minutes (reasonable endeavours)	49.8 to 50.2 Hz within 15 minutes (reasonable endeavours)
Rate of Change of Frequency Safe Limit	0.75 Hz per second (measured over any 500 millisecond period)	N/A	N/A

TABLE 2 – SUMMARY OF SYSTEM FREQUENCY OUTCOMES FOR ISLANDS WITHIN THE SOUTH WEST INTERCONNECTED SYSTEM

Condition	Contain (Hz)	Recover (Hz)
Normal Operating Frequency Band	49.5 to 50.5 Hz (reasonable endeavours)	N/A
Credible Contingency Event Frequency Band	48.75 to 51 Hz (reasonable endeavours)	49.5 to 50.5 Hz (as soon as practicable)
Island Separation Frequency Band	48.75 to 51 Hz (reasonable endeavours)	49.5 to 50.5 Hz (as soon as practicable)
Extreme Frequency Tolerance Band	47 to 52 Hz (reasonable endeavours)	49.5 to 50.5 Hz (as soon as practicable)
Rate of Change of Frequency Safe Limit	0.75 Hz per second (measured over any 500 millisecond period) (reasonable endeavours)	N/A

Version history

Date	Amendment	Rule Change Reference
15 December 2006	All rules amended and published in the Government Gazette up to 15 December 2006.	
13 March 2007	Minister amended clause 6.3B.1B(new).	*Electricity Industry (Wholesale Electricity Market) Regulations 2004* (WA), regulation 6(2).
10 May 2007	IMO amended clauses 7.9.1, 7.9.2, 7.9.4, 7.9.5, 7.9.6, 7.9.8, 7.9.11, and 7.9.12.	RC_2007_01
1 July 2007	IMO amended clause 4.26.2.	RC_2007_05
1 September 2007	IMO amended Appendix 5.	RC_2007_11
3 September 2007	Updated the Glossary.	
1 October 2007	IMO amended clauses 6.17.6, 7.7.5A and 7.7.5B.	RC_2007_02
	IMO amended clauses 3.16.9, 3.17.9, 3.18.11 and 3.19.6.	RC_2007_03
4 October 2007	IMO amended clauses 3.21.7 (new), 7.13.1 and 7.13.1A (new).	RC_2007_15
	IMO amended clauses 3.18.6, 3.21.4, 3.21.5 (new), 3.21.6 (new), 6.3A.2, 7.3.4 and 7.13.1.	RC_2007_16
15 October 2007	IMO amended clauses 2.28.16 and 2.28.16B (new).	RC_2007_04
25 October 2007	IMO amended clauses 6.4.6 (new), 6.5A.1 and 6.12.1.	RC_2007_06
1 November 2007	IMO amended clauses 4.26.1, 4.26.3 and the Glossary.	RC_2007_08
	IMO amended clauses 1.4.1 and the Glossary.	RC_2007_17
	IMO amended clauses 2.37.1, 3.19.1, 3.21.6, 4.24.13, 6.5.1, 10.5.1 and the Glossary.	RC_2007_20
20 November 2007	IMO amended clause 2.13.10.	RC_2007_07
1 December 2007	IMO amended clause 4.12.6.	RC_2007_21
	IMO amended clauses 5.2.1 and 5.2.2.	RC_2007_22
18 December 2007	IMO amended clause 4.16.5.	RC_2007_24
21 December 2007	IMO amended clause 6.20.3.	RC_2007_26
1 February 2008	IMO amended clauses 6.5.1A, 6.5.1C (new), 6.5.4, 6.17.1, 6.17.5, 6.21.2, 7.10.1, 9.8.1 and the Glossary.	RC_2007_10
	IMO amended clauses 6.17.6 and 7.13.1.	RC_2007_18
	IMO amended clause 4.28.8.	RC_2007_19
1 March 2008	IMO amended clause 10.5.1.	RC_2007_13
20 March 2008	IMO amended clauses 6.14.2, 6.14.3 and 6.14.4.	RC_2008_05
10 April 2008	IMO amended clause 4.5.9.	RC_2007_28

Date	Amendment	Rule Change Reference
20 April 2008	IMO amended clauses 2.23.12, 3.11.8, 3.11.8A (new), 3.11.8B (new), 3.11.8C (new), 3.11.8D (new) and 3.13.1.	RC_2008_12
1 May 2008	IMO amended clause 4.28.9, Appendix 5 and Appendix 5A (new).	RC_2008_09
2 May 2008	IMO amended clauses 3.4.1 and 3.5.1.	RC_2007_31
15 May 2008	IMO amended clauses 2.24.5 and 2.24.5A (new).	RC_2008_13
26 May 2008	IMO amended clause 4.25.9.	RC_2008_01
	IMO amended clause 3.17.9.	RC_2008_02
	IMO amended clauses 3.16.4 and 3.17.5.	RC_2008_03
1 June 2008	IMO amended clauses 4.26.1, 4.26.1A (new), 4.26.1B (new), 4.26.2, 4.26.3, and the Glossary.	RC_2007_36
24 June 2008	IMO amended clauses 2.13.9 and 2.34.12.	RC_2008_04
1 July 2008	IMO amended clauses 2.30.1A (new), 2.30.4, 2.30.5 and 4.23A.4 (new).	RC_2008_10
10 July 2008	IMO amended clauses 4.25.4A (new), 4.25.4B (new), 4.25.4C (new) and 4.25.4D(new).	RC_2008_06
	IMO amended clauses 6.4.7 (new), 6.14.1, 6.14.1A (new), 6.14.7 (new) and 7.13.1B (new).	RC_2008_08
1 August 2008	IMO amended clauses 2.34.14, 6.18.1, 6.18.2, 6.18.3, 6.20.1, 6.20.5, 6.20.7, 6.20.8, 10.5.1 and Appendix 1.	RC_2008_07
	IMO amended clauses 2.13.8 (b), 4.16.4 (e), 4.26.2, 6.14.4 (b), 7.7.5A (b), 9.10.1 and Appendix 5.	RC_2008_19
6 August 2008	IMO amended clauses 2.26.1, 2.26.3, 2.26.4, 4.1.19, 4.16.3, 4.16.4, 4.16.5, 4.16.7, 4.16.8, 4.16.9 (new), 4.22.3 and Appendix 4.	RC_2008_11
20 August 2008	IMO amended clauses 6.5.1 and 6.5A.1.	RC_2008_15
2 September 2008	IMO amended clauses 3.21A.7, 3.21A.7A (new), 4.1.26, 4.10.1, 4.27.10, 4.27.10A (new), 4.27.11, 4.27.11A (new), 4.27.11B (new) , 4.27.11C (new), 4.27.11D (new), 4.27.12, 6.5.1A and 6.5.1C.	RC_2008_17
1 November 2008	IMO amended clauses 4.11.5 and 10.2.2.	RC_2008_14
	IMO amended clauses 3.7.3(new), 3.7.4 (new), 3.7.5 (new) and 3.7.6 (new).	RC_2008_21
	IMO amended the Glossary.	RC_2008_23
18 November 2008	IMO amended clauses 2.1.3 and 2.2.3.	RC_2008_18
1 January 2009	IMO amended clause 4.12.1.	RC_2008_26
	IMO amended clauses 4.28.3 and 4.28.4.	RC_2008_27
1 February 2009	IMO amended clauses 4.26.1 and 4.26.1A.	RC_2008_24
	IMO amended clause 4.28A.1.	RC_2008_25
	IMO amended clauses 4.24.3 and 4.24.15.	RC_2008_28

Date	Amendment	Rule Change Reference
	IMO amended clause 2.33.4.	RC_2008_29
	IMO amended clauses 7.9.1, 7.9.1A (new) and 7.9.5.	RC_2008_40
16 February 2009	IMO amended clauses 4.13.1, 4.13.10, 4.13.10A (new), 4.13.11 , 4.13.11A (new) and 4.13.11B (new).	RC_2008_30
	IMO amended clauses 2.12, 2.14.5A (new), 2.14.6A (new), 2.14.6B (new), 2.14.7, 2.14.8(new) and 2.14.9 (new).	RC_2008_33
1 March 2009	IMO amended clauses 2.29.5, 2.29.8A (new), 2.29.9A (new), 2.29.9B (new), 2.29.9C (new), 4.8.3, 4.10.1, 4.11.1, 4.11.4, 4.11.4A (new), 4.12.8 (new), 4.14.1, 4.25.4E (new), 4.25.4F (new), 4.26.2C (new), 7.7.10 (new), 7.13.1 and the Glossary.	RC_2008_20
18 March 2009	IMO amended clause 7.10.5 and 7.10.5A (new).	RC_2009_09
17 April 2009	IMO amended the Glossary.	RC_2009_12
27 April 2009	IMO amended clauses 1.4.1, 2.5.7 and 4.11.5.	RC_2009_01
	IMO amended clause 2.8.13.	RC_2009_02
	IMO amended clauses 2.10.6, 2.10.13, 2.10.14, 2.10.15, 2.10.16 and the Glossary.	RC_2009_04
1 May 2009	IMO amended clause 8.6.1 and Appendix 5.	RC_2008_32
1 June 2009	IMO amended clauses 3.11.8E (new) and 6.17.6.	RC_2008_38
1 July 2009	IMO amended clause 7.2.5.	RC_2009_03
6 July 2009	IMO amended clauses 2.7.4, 2.7.5, 2.7.8, 2.28.4, 2.31.1, 2.31.5, 2.31.6, 2.31.12, 2.31.13, 2.31.21, 2.34.8, 2.37.8, 2.41.2, 2.41.3, 4.27.10, 5.2.1, 5.2.7, 5.4.2, 5.4.14, 5.5.3, 9.23.1, 9.23.1, 9.23.5, 9.23.6, 10.5.1 and the Glossary.	RC_2009_16
10 July 2009	IMO made minor corrections.	
1 August 2009	IMO amended clauses 7.2.3C and 7.3.6.	RC_2009_13
17 August 2009	IMO amended clauses 3.18.4 and 3.18.5D (new).	RC_2009_05
24 August 2009	IMO amended clauses 3.11.15 (new), 4.14.11 (new), 7.13.3 (new) and 10.2.7 (new).	RC_2009_26
1 October 2009	IMO amended clauses 4.26.1, 4.26.1C (new), 4.26.2, 4.26.2D (new), 4.26.2E (new), 4.26.3 and 4.26.3A (new).	RC_2008_20
	IMO amended clause 4.26.1.	RC_2009_18
	IMO amended clauses 2.10.4 and 2.10.11.	RC_2009_24
	IMO amended clause 4.26.2D.	RC_2009_29
1 November 2009	IMO amended clauses 4.2.7, 4.14.6 and Appendix 3.	RC_2009_07
	IMO amended clause 4.27.2.	RC_2009_19
	IMO amended clause 3.19.2.	RC_2009_20

Date	Amendment	Rule Change Reference
30 November 2009	IMO amended clauses 2.23.1, 2.23.2, 2.23.3, 2.23.5, 2.23.7, 2.23.12, 3.11.11, 3.11.14, 3.13.1, 3.13.3, 3.13.3A (new), 3.13.3B (new), 3.13.3C (new) and 3.22.1.	RC_2009_23
1 December 2009	IMO amended clauses 4.1.26 and 4.11.1.	RC_2009_11
18 December 2009	IMO amended clauses 1.4.1, 1.5.1, 2.1.2, 2.5.7, 2.5.14, 2.5.15, 2.7.6, 2.7.8, 2.8.9, 2.13.10, 2.14.1, 2.14.3, 2.16.2, 2.28.16B, 2.29.9, 2.30.5, 2.30B.3, 2.30B.5, 2.30B.9, 2.30B.11, 2.30C.1, 2.31.3, 2.32.4, 2.34.7, 3.10.2, 3.18.11, 3.18.11A, 3.19.6, 4.10.1, 4.11.1, 4.12.6, 6.3A.2, 6.5.1, 8.4.1, 8.4.2, 8.4.3, 8.4.4, 8.4.5, 8.5.2, 8.6.1, 8.6.2, 9.3.4, 9.9.1, 9.16.2, 9.23.4, 9.24.1, 9.24.2, 10.5.1, the Glossary, Appendix 4A and Appendix 5.	RC_2009_30
15 January 2010	IMO amended clauses 2.3.1, 2.3.1A (new), 2.3.2, 2.3.5, 2.3.10, 2.3.14, 2.3.15, 2.3.17, 2.7.4, 2.7.5, 2.7.7, 2.10.8, 2.10.9, 2.10.13 and the Glossary.	RC_2009_28
20 January 2010	IMO amended clauses 1.8.2, 1.9.7, 1.9.8, 1.9.9, 1.9.10 and Appendix 8.	RC_2009_41
1 February 2010	IMO amended clauses 4.1.1, 4.1.1A, 4.5.2, 4.9.3, 4.11.1, 4.12.6, 4.15.1, 4.15.2, 4.28C (new) the Glossary and Appendix 3.	RC_2009_10
1 February 2010	IMO amended clause 9.9.2.	RC_2009_21
1 March 2010	IMO amended clause 10.5.1.	RC_2009_17
1 April 2010	IMO amended clauses 4.26.2, 4.26.2E, 4.26.2F (new), 4.26.3. and 4.26.3A.	RC_2010_03
1 May 2010	IMO amended clause 3.9.1.	RC_2009_40
1 June 2010	IMO amended clauses 3.21A.2, 3.21A.3, 3.21A.4, 3.21A.7, 4.1.26, 4.12.6, 4.26.1A, 7.9.4. and the Glossary.	RC_2009_08
	IMO amended clauses 6.20.2, 6.20.7, 6.20.9, 6.20.9A (new) and 6.20.10.	RC_2009_35
1 July 2010	IMO amended clause 3.13.3A.	RC_2010_01
	IMO amended clauses 4.1.2, 4.1.27, 4.13.5, 4.13.8, 4.13.10, 4.13.11, 4.23A.3, 4.24.1, 4.25.3A, 4.25.4, 4.25.4B, 4.25.4F, 4.25.8, 4.25.9, 4.25.12, 4.26.2C, 4.27.5, 4.27.6, 4.27.7, 4.27.8, 4.27.9, 4.27.10A, 4.27.11, 4.27.11A, 4.27.11D, 4.28C.2, 4.28C.4, 4.28C.7, 4.28C.8, 4.28C.9 and 4.28C.12.	RC_2010_02
1 September 2010	IMO amended clauses 3.21A.7A, 4.1.26 and 4.26.1A.	RC_2010_16
	IMO amended clauses 2.8.1, 2.8.2, 2.11.1, 2.11.2, 2.13.17, 2.13.18, 2.13.22, 2.13.23, 2.13.24, 2.13.26, 2.13.28, 2.15.3, 2.16.9G, 2.16.9H, 2.17.3, 2.31.13, 2.32.1, 2.32.5, 2.32.6, 2.32.7, 10.2.2 and 10.5.1 and the Glossary.	RC_2010_18

Date	Amendment	Rule Change Reference
1 October 2010	IMO amended clauses 2.29.8B (new), 4.25.1, 4.25.2, 4.25.3B (new), 4.25.4, 4.25.9 and 4.25A (new).	RC_2008_20
	IMO amended clauses 6.16.1, 9.3.3, 9.18.3, 9.24.1, 9.24.3, 9.24.3A (new), 9.24.4, 9.24.5, 9.24.8, 9.24.8A (new), 9.24.9 and the Glossary.	RC_2010_04
	IMO amended clause 6.4.6.	RC_2010_10
1 November 2010	IMO amended clauses 2.3.5, 2.3.5A (new) and 2.3.13.	RC_2010_15
1 December 2010	IMO amended clauses 2.13.6, 2.13.6A (new), 2.13.6B (new), 2.13.6C (new), 2.13.6D (new), 2.13.6E (new), 2.13.6F (new), 2.13.6G (new), 2.13.6H (new),2.13.6I (new), 2.13.6J (new), 2.13.6K (new), 2.13.7, 2.13.8,, 7.10.5, 7.10.5B (new), 7.10.7, 10.5.1 and the Glossary.	RC_2009_22
	IMO amended clauses 2.10.7, 2.34.2A, 2.34.10, 2.37.5, 3.4.5, 3.5.6, 3.17.1, 3.17.6, 3.21.4, 3.21.7, 4.8.3, 6.2.2, 6.2.2A, 6.2A.2, 6.3A.2, 6.3A.3, 6.3B.1B, 6.3B.3, 6.3C.3, 6.3C.9, 6.4.1, 6.4.3, 6.5.1A, 6.5.2, 6.5A.2, 6.5C.2, 6.5.4, 6.5C.6, 6.6.2A, 6.6.5, 6.7.2, 6.14.1, 6.16.1, 6.18.2, 6.19.3, 6.19.4, 6.19.9, 6.20.1, 6.20.9A, 6.21.1, 6.21.2, 7.10.5, 7.11.3, 7.11.4, 7.11.6A, 7.11.9, 8.7.1, 9.4.5, 9.4.7, 9.17.3, 9.18.3, 9.19.5, 9.20.5, 9.20.7, 9.24.10, 10.5.1, 10.7.1, 10.8.2 and the Glossary.	RC_2010_26
1 January 2011	IMO amended clauses 3.21A.16 (new) and 10.6.1.	RC_2009_08
	IMO amended clause 3.21A.16	RC_2010_34
1 February 2011	IMO amended clauses 3.21AA (new), 4.11.1, 7.10.2, 7.10.5A, 7.12.1, 7.13.1 and the Glossary.	RC_2009_37
	IMO amended clauses 4.24.1 and the Glossary.	RC_2010_35
1 April 2011	IMO amended clauses 2.30.6, 2.30.7, 2.30.7A (new) and Appendix 2.	RC_2010_06
	IMO amended clauses 2.38.7 (new), 2.38.8 (new), 2.38.9 (new) and 4.13.7.	RC_2010_36
1 May 2011	IMO amended clauses 9.16.3 and 9.16.3A(new) and the Glossary.	RC_2010_19
	IMO amended clauses 2.23.9, 2.23.11, 2.24.2, 2.24.2A (new), 2.24.2B (new) and 9.16.3.	RC_2010_20
	IMO amended clauses 2.34.1, 2.34.12 and 7.7.4A.	RC_2010_21
	IMO amended clauses 3.21.2, 3.21.6, 3.21.8 (new), 3.21.9 (new), 3.21.10 (new), 3.21.11 (new), 3.21.12 (new), 6.15.1, 6.15.2 and the Glossary.	RC_2010_23
1 July 2011	IMO amended clauses 2.1.2, 2.8.13, 2.17.1, 2.22.1, 2.37.6, 2.37.7, 2.37.8, 2.38.1, 2.38.2, 2.38.3, 2.38.4, 2.38.5, 5.1.1, 5.1.2, 5.1.3, 5.1.4, 5.2.1, 5.2.2, 5.2.3, 5.2.4, 5.2.5, 5.2.6, 5.2.7, 5.2A	RC_2010_11

Date	Amendment	Rule Change Reference
	(new), 5.3.1, 5.3.2, 5.3.3, 5.3.4, 5.3.5, 5.3.6, 5.3.7, 5.3.8, 5.3.9, 5.3A (new), 5.4.1, 5.4.2, 5.4.3, 5.4.4, 5.4.5, 5.4.6, 5.4.7, 5.4.8, 5.4.9, 5.4.10, 5.4.11, 5.4.12, 5.4.13, 5.4.14, 5.5.1, 5.5.2, 5.5.3, 5.5.4, 5.6.1, 5.6.2, 5.6.3, 5.7.1, 5.7.2, 5.8.1, 5.8.2, 5.8.3, 5.8.4, 5.8.5, 5.8.6, 5.8.7, 5.8.8, 5.9.1, 5.9.2 (new), 5.9.3 (new), 6.17.6, 7.1.1, 7.6.1A (new) 7.6.6, 7.13.1, 9.12.1, 9.12.2, 9.14.1, 9.14.2, 9.18.3, 9.24.3A, 10.5.1, the Glossary and Appendix 1.	
	IMO amended clauses 4.11.3A, 7.13.1C (new), 7.7.5B and 7.7.5E (new).	RC_2010_24
	IMO amended clauses 2.29.5N (new), 2.29.5O(new), 2.31.23A (new) and Appendix 1.	RC_2010_29
8 July 2011	IMO amended clauses 2.24.1, 2.24.2, 4.1.8, 4.1.9, 4.1.10, 4.1.12, 4.1.13, 4.1.14, 4.1.15A (new), 4.1.16, 4.1.17, 4.1.18, 4.1.20, 4.1.21, 4.1.21A (new), 4.1.26, 4.2.7, 4.4.1, 4.7.1, 4.9.5, 4.9.9, 4.9.9A (new), 4.10.1, 4.10.2, 4.10.3. 4.10.4 (new), 4.11.1, 4.11.2, 4.11.3A, 4.11.5, 4.11.10 (new), 4.11.11 (new), 4.15.1, 4.20.1, 4.20.5A (new), 4.27.10, 4.27.10A, 4.27.11, 4.27.11A, 4.27.11B, 4.27.11C, 4.27.11D, 4.28C.1, 4.28C.2, 4.29.1, 10.5.1 and the Glossary.	RC_2010_14
1 October 2011	IMO amended clauses 6.17.6 and 7.7.5D.	RC_2008_20
	IMO amended clauses 2.8.13, 4.1.21, 4.1.27, 4.9.9, 4.10.3, 4.11.2A (new), 4.11.3B (new), 4.13.1, 4.13.1A (new), 4.13.1B (new), 4.13.1C (new), 4.13.2, 4.13.2A (new), 4.13.2B (new), 4.13.2C (new), 4.13.3, 4.13.5, 4.13.8, 4.13.10, 4.13.10A, 4.13.10B (new), 4.13.10C (new), 4.13.11, 4.13.11A, 4.13.11B, 4.13.12, 4.13.13 (new), 4.13.14 (new), 4.20.1, 4.25.1, 4.25.2, 4.25.3B, 4.25.4B, 4.26.1, 4.26.1A, 4.28.4, 4.28C.8, 4.28C.8A (new), 4.28C.12, 4.28C.12A (new) and the Glossary.	RC_2010_12
	IMO amended clause 4.26.1 and 4.26.1A.	RC_2010_22
	IMO amended clauses 2.27.1, 2.27.2, 2.27.4, 2.29.1, 2.29.1A (new), 2.29.5, 2.29.5A (new), 2.29.5B (new), 2.29.5C (new), 2.29.5D (new), 2.29.5E (new), 2.29.5F (new), 2.29.5G (new), 2.29.5H (new), 2.29.5I (new), 2.29.5J (new), 2.29.5K (new), 2.29.5L (new), 2.29.5M (new), 2.29.8A, 2.29.8B, 2.29.9A, 2.29.9B, 2.29.9C, 2.30.3, 2.30.5, 2.30B.2, 2.30B.5, 2.33.1, 2.33.4, 2.35.1, 3.14.1, 3.17.5, 4.8.3, 4.10.1, 4.11.1, 4.11.4, 4.11.4A, 4.12.1, 4.12.4, 4.12.8, 4.14.1, 4.18.1, 4.18.2, 4.25.1, 4.25.2, 4.25.3B, 4.25.4, 4.25.4E, 4.25.4F, 4.25.9, 4.25.10, 4.25A, 4.25A.1, 4.25A.2, 4.25A.3, 4.25A.4, 4.25A.5, 4.26.1, 4.26.1A, 4.26.1B, 4.26.1C, 4.26.2, 4.26.2C, 4.26.2CA (new), 4.26.2D, 4.26.2E, 4.26.2F, 4.26.3, 4.26.3A, 4.26.4, 6.3A.2, 6.5A.1, 6.11.1, 6.11.2, 6.11A.1, 6.12.1, 6.15.2, 6.16.1, 6.16.2	RC_2010_29

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	(new), 6.17.6, 7.1.1, 7.2.2, 7.6.10, 7.7.3, 7.7.4, 7.7.4A, 7.7.10, 7.10.4, 7.13.1, 9.3.3, 9.3.4, 9.3.7, 9.13.1, 10.5.1, the Glossary, Appendix 1 and Appendix 3.	
1 November 2011	IMO amended clauses 3.22.2, 3.22.3, 9.9.1, 9.9.1A, 9.9.2, 9.9.3, 9.9.3A (new), 9.9.3B (new), 9.9.4, 9.10A.1, 9.11.1 and the Glossary.	RC_2010_33
	IMO amended clauses 2.8.11, 2.24.1, 2.24.2A, 2.34.12, 3.19.12, 3.21.9, 4.1.13, 4.1.18, 4.5.9, 4.10.1, 4.25.4F, 5.1.1, 6.3B.1B, 6.6.3A, 6.14.4, 7.6A.5, 9.20.5, 9.24.5, the Glossary, Appendix 1 and Appendix 3.	RC_2011_06
	IMO amended clause 2.38.7.	RC_2011_04
	IMO amended clause 7.6.3.	RC_2011_05
1 December 2011	IMO amended clause 2.31.23A.	RC_2010_29
	IMO amended clauses 4.26.2, 4.26.2B and 4.26.5.	RC_2011_07
	IMO amended clauses 4.12.4, 4.12.8, 4.26.2D and 7.6.10.	RC_2011_08
1 January 2012	IMO amended clause 4.1.11.	RC_2010_14
	IMO amended clauses 4.10.1, 4.10.3, 4.10.3A (new), 4.11.2, 4.11.2A, 4.11.3A, 4.11.3B, 4.11.3C (new), 4.11.3D (new), 4.11.3E (new), 6.17.6, 7.7.5A, 7.7.5B, 7.7.5C, 7.7.5D, 7.7.5E, 7.7.9, 7.13.1, 7.13.1C, 10.5.1 ,the Glossary and Appendix 9 (new).	RC_2010_25
	IMO amended clauses 2.10.17 (new), 2.10.18 (new) and 2.10.19 (new).	RC_2011_12
	IMO amended clause 4.16.3.	RC_2011_13
1 March 2012	IMO amended clauses 2.17.1, 2.31.13, 2.32.7A (new), 2.32.7B (new), 2.32.7C (new), 2.32.7D (new), 2.32.7E (new), 2.32.7F (new) and the Glossary.	RC_2010_31
	IMO amended clauses 2.33.1, 2.33.2, 2.33.3, 2.33.4, 3.2.1, 3.11.8A, 3.11.8B, 3.13.1, 3.13.3B, 3.13.3C, 3.14.3, 3.21B.7, 4.25.2, 4.28.5, 6.5C.6, 6.18.2, 7.2.3B, 7.6.2, 7.6A.5, 10.5.1, Appendix 1 and the Glossary.	RC_2011_11
1 June 2012	IMO amended clauses 1.10, 2.37.4, 7A.1.2 and 7A.1.16.	RC_2011_10
6 June 2012	IMO amended clause 4.5.12 and Appendix 3.	RC_2011_14
1 July 2012	IMO amended clauses 2.17.1, 4.1.21B (new), 4.12.6, 4.13.1B, 4.20.8 (new), 4.20.9 (new), 4.20.10 (new), 4.20.11 (new), 4.20.12 (new), 4.20.13 (new), 4.20.14 (new), 10.5.1 and the Glossary.	RC_2010_28
	IMO amended clauses 1.10 (new), 2.1.2, 2.2.1, 2.2.2, 2.3.5, 2.10.2A (new), 2.13.6B, 2.13.6E, 2.13.6F, 2.13.6K, 2.13.9, 2.13.13A (new),	RC_2011_10

Date	Amendment	Rule Change Reference
	2.13.14, 2.16.2, 2.16.4, 2.16.7, 2.16.9, 2.16.9A, 2.16.9B, 2.16.9C, 2.16.9E, 2.16.9F, 2.16.9FB, 2.16.9G, 2.16.10, 2.16.12, 2.16.13, 2.17.1, 2.23.10, 2.34.1, 2.34.7, 2.34.7A (new), 2.34.7B (new), 2.34.7C (new), 2.34.12, 2.34.14, 2.36.1, 2.36.6, 2.36.7 (new), 2.36.8 (new), 2.36.9 (new), 2.36.10 (new), 2.37.4, 3.2.5, 3.4.4, 3.5.7, 3.9.1, 3.11.7, 3.11.7A, 3.11.8, 3.13.1, 3.13.3, 3.13.3A, 3.13.3AB (new), 3.14.1, 3.14.2, 3.21.6, 3.21A.13, 3.21A.14, 3.21AA, 3.22.1, 3.22.2, 3.22.3, 4.10.1, 4.11.1, 4.11.2, 4.11.3B, 4.11.4, 4.11.7, 4.11.10, 4.11.11, 4.11.12, 4.12.1, 4.12.4, 4.12.8, 4.14.4, 4.14.5, 4.23A.1, 4.23A.2, 4.25.3, 4.25.3A, 4.25.3B, 4.25.4, 4.25.7, 4.25.8, 4.25.9, 4.25.10, 4.25.11, 4.25.12, 4.25.14, 4.26.2, 4.26.2D, 5.7.4, 5.9.3, 6.2.4C, 6.3A.1, 6.3A.2, 6.4.6, 6.5.1, 6.5.1A, 6.5.1C, 6.5.4, 6.5A, 6.5C.1 (new), 6.5C.1A, 6.5C.2, 6.5C.7, 6.9.4, 6.11.1, 6.11.2, 6.11.3 (new), 6.11A, 6.12, 6.14, 6.15, 6.16.1A, 6.16.2, 6.16A (new), 6.16B (new), 6.17, 6.18, 6.19.1, 6.20.4, 6.20.6, 6.21.2, 7.1.1, 7.2.1, 7.2.3, 7.2.3A, 7.2.3B, 7.2.3C, 7.2.3D, 7.3.1, 7.3.2, 7.3.4, 7.5.1, 7.5.2, 7.5.3, 7.5.4, 7.5.7, 7.6.1, 7.6.1A, 7.6.1B (new), 7.6.1C (new), 7.6.1D (new), 7.6.2, 7.6.2A, 7.6.2B (new), 7.6.3, 7.6.4, 7.6.5, 7.6.5A, 7.6.6, 7.6.7, 7.6.8, 7.6.9, 7.6.10, 7.6.11, 7.6.12, 7.6.13, 7.6A.1, 7.6A.2, 7.6A.3, 7.6A.4, 7.6A.5, 7.6A.6, 7.6A.7, 7.6A.8, 7.7.1, 7.7.2, 7.7.3, 7.7.3A, 7.7.4, 7.7.4A, 7.7.5, 7.7.5A, 7.7.5B, 7.7.5C (new), 7.7.5D (new), 7.7.6, 7.7.6A (new), 7.7.6B (new), 7.7.7, 7.7.7A, 7.7.8, 7.7.9, 7.7.10, 7.8.1, 7.8.2, 7.9.1, 7.9.1A, 7.9.2, 7.9.4, 7.9.5, 7.9.6, 7.9.6A, 7.9.8, 7.10.1, 7.10.2, 7.10.3, 7.10.3A, 7.10.5, 7.10.5A, 7.10.5B, 7.10.6A, 7.10.7, 7.11.1, 7.11.5, 7.11.6, 7.11.6A (new), 7.11.6B, 7.11.7, 7.12.1, 7.13.1, 7.13.1A, 7.13.1B, 7.13.1C, 7.13.4 (new), 7A (new), 7B (new), 9.3.3, 9.3.4A, 9.7.1, 9.8.1, 9.9.1, 9.9.2, 9.9.3, 9.9.3A, 9.9.3B, 9.9.4, 9.10.1, 9.10A.1, 9.10A.2, 9.11.1, 9.18.3, 9.19.2, 9.22.6, 9.22.8, 10.2.2, 10.2.3, 10.2.5, 10.2.6, 10.5.1, 10.5.2 (new), 10.6.1, 10.7.1, 10.8.1, 10.8.2, Appendices and the Glossary.	
	IMO amended clause 9.9.2.	RC_2012_05
	IMO amended clauses 6.17.3A and 6.17.4A.	RC_2012_08
1 August 2012	IMO amended clauses 2.30B.1, 2.30B.2, 2.30B.5, 2.30B.6, 2.30B.6A, 2.30B.7, 2.30B.8 and 2.30B.11.	RC_2012_01
1 September 2012	IMO amended clauses 3.18.6, 3.21.1 and 3.21.2.	RC_2012_04
1 November 2012	IMO amended clauses 2.22.3; 2.22.4; 2.22.6; 2.22.12; 2.23.3; 2.23.4; 2.23.5; 2.23.9; 2.23.12 and the Glossary.	RC_2011_02
1 February 2013	IMO amended clauses 6.16A.2 and 6.17.3A.	RC_2012_19
1 March 2013	IMO amended clause 3.21A.7.	RC_2012_15
1 April 2013	IMO amended clauses 3.21A.1, 3.21A.2, 3.21A.3, 3.21A.4, 3.21A.5, 3.21A.7, 3.21A.7A, 3.21A.8,	RC_2012_12

Date	Amendment	Rule Change Reference
	3.21A.9, 3.21A.10, 3.21A.11, 3.21A.12, 3.21A.13, 3.21A.14, 3.21A.15, 3.21A.16, 3.21A.17, 4.12.6, 4.26.1A, 7.9.4 and the Glossary.	
1 May 2013	IMO amended clauses 4.5.9, 9.16.3, 9.16.3A and 9.19.1.	RC_2012_21 RC_2012_25
15 May 2013	IMO amended clause 7.2.3A.	RC_2013_06
20 May 2013	IMO amended clauses 2.27.1, 2.27.1A, 2.27.2, 2.27.2A, 2.27.3, 2.27.3A, 2.27.3B, 2.27.4, 2.27.5, 2.27.6, 2.27.7(new), 2.27.8(new), 2.27.9(new), 2.27.10(new), 2.27.11(new), 2.27.12(new), 2.27.13(new), 2.27.14(new), 2.27.15(new), 2.27.16(new), 2.27.17(new), 9.3.4A and the Glossary.	RC_2012_07
1 June 2013	IMO amended clauses 2.1.1, 2.1.3, 2.2.1, 2.5.6, 2.6.3A (new), 2.6.4, 2.7.7A (new), 2.7.8, 2.8.1, 2.8.3, 2.8.11, 2.10.2A, 2.11.1, 2.17.1, 2.17.2, 6.6.3A, 7A.2.19, 7B.2.17 and the Glossary.	RC_2012_06
	IMO amended clauses 9.23.4.	RC_2012_24
	IMO amended clauses 7B.1.6, 7B.2.10 and the Glossary.	RC_2013_03
1 July 2013	IMO amended clauses 2.22.8, 2.22.8A (new), 2.22.8B (new), 2.22.13, 2.22.14, 2.22.15 (new), 2.23.8, 2.23.8A (new), 2.23.8B (new), 2.23.13 (new) and 2.23.14 (new).	RC_2011_02
	IMO amended clauses 4.11.1, 4.11.2 and the Glossary.	RC_2012_20
	IMO amended clauses 2.13.9, 7.10.6, 7.10.6A and 7.10.7.	RC_2013_01
1 August 2013	IMO amended clause 6.15.2.	RC_2013_02
12 August 2013	IMO amended clauses 4.1.13, 4.13.9, 4.14.3, 4.14.10, 4.15.2, 4.20.5A, 4.20.5B, 4.20.5C and 4.20.5D.	RC_2012_03
1 September 2013	IMO amended clauses 7.9.1, 7.9.1A, 7.9.5, 7.9.13 (new), 7.9.14 (new), 7.9.15 (new), 7.9.16 (new), 7.9.17 (new), 7.9.18 (new) and 7.9.19 (new).	RC_2012_22
2 September 2013	IMO amended clauses 3.23 (new), 7A.3.7, 7A.3.7A (new) and the Glossary.	RC_2013_05
23 September 2013	IMO amended the Appendices and the Glossary.	RC_2013_11
1 October 2013	IMO amended clauses 3.18.6, 7.13.1D (new), 7.13.1E (new), 7.13.1F (new), 7.13.1G (new), 10.5.1 and 10.5.3 (new).	RC_2012_11
1 November 2013	IMO amended clauses 2.16.9F, 2.16.9FA and 2.16.9FB.	RC_2009_15
	IMO amended clause 4.5.10.	RC_2012_09
	IMO amended clauses 2.13.6L(new) and 6.17.9.	RC_2012_16
25 November 2013	IMO amended clauses 1.10.3, 2.2.2, 2.13.6B, 2.22.4, 2.22.8A, 2.22.12, 2.22.13, 2.22.14, 2.23.4, 2.23.8A, 2.23.12, 2.23.13, 2.29.4, 2.30A.2, 2.30B.3, 2.31.6, 2.31.8, 2.31.15, 2.31.16, 2.33.5, 2.34.2A, 3.3.2, 3.11.9, 3.13.3C, 3.16.9, 3.17.9, 3.18.2, 3.18.2A, 3.18.3, 3.18.11, 3.18.11A, 3.19.6, 4.1.4, 4.1.5, 4.1.6, 4.1.7, 4.1.8, 4.1.10, 4.1.11, 4.1.12, 4.1.13, 4.1.14, 4.1.15, 4.1.15A, 4.1.16,	RC_2013_07

Date	Amendment	Rule Change Reference
	4.1.17, 4.1.18, 4.1.20, 4.1.21, 4.1.21A, 4.1.21B, 4.1.23, 4.1.24, 4.5.10, 4.9.4, 4.9.5, 4.13.11, 4.13.11A, 4.14.1, 4.14.7, 4.14.11, 4.19.3, 4.20.1, 4.21.1, 4.23A.2, 4.23A.3, 4.23A.4, 4.24.2, 4.25.4E, 4.25.5, 4.25A.1, 4.25A.2, 4.25A.3, 4.25A.4, 4.25A.5, 4.27.10, 4.28.1, 4.28C.2, 6.3A.4, 6.6.10, 7.10.2, 7A.3.10, 7B.1.5, 9.5.2, 9.10, 9.10A, 9.16.1, 9.16.2, 9.16.4, 9.19.3, 9.20.5, 9.23.3, 9.23.6, 9.23.7, 10.5.1 and the Glossary.	
30 December 2013	IMO amended clauses 1.11 (new) and 6.12.1.	RC_2013_18
1 January 2014	IMO amended clauses 2.25.1A (new), 2.25.1B (new), 2.25.4, 9.1.2, 9.16.3, 9.16.3A, 9.19.1 and the Glossary.	RC_2013_08
	IMO amended clauses 1.10.2, 1.10.3, 2.2.2, 2.3.5, 2.16.7, 3.11.7A, 3.11.8, 3.13.3A, 3.13.3AB, 4.12.1, 4.14.4, 4.14.5, 4.23A.2, 4.26.2, 6.5.1, 6.5.1A, 6.5.4, 6.5C.1, 6.11.1, 6.11.3, 6.15.1, 6.15.2, 6.16B.1, 6.16B.2, 6.17.1, 6.17.5, 6.17.5A, 6.17.5B, 6.17.9, 6.17.10, 6.21.2, 7.5.4, 7.6.2, 7.6.2A, 7.6.12, 7.6A.1, 7.6A.2, 7.6A.3, 7.6A.4, 7.6A.5, 7.6A.6, 7.6A.7, 7.6A.8, 7.7.1, 7.10.7, 7.11.5, 7.12.1, 7.13.1, 7.13.1A, 7.13.1C, 7A.1.14, 7A.2.1, 7A.2.2, 7A.2.3, 7A.2.9, 7A.2.10, 7A.2.12, 7A.3.1, 7A.3.5, 7A.4.1, 7A.4.2, 7A.4.4, 7A.4.5, 7A.4.6, 7A.4.8, 7A.4.9, 7B.2.1, 7B.2.2, 7B.2.3, 7B.2.4, 7B.2.5, 7B.2.6, 7B.3.7, 7B.4.1, 7B.4.2, 9.8.1, 9.9.1, 9.9.2, 9.18.3, 10.5.1 and 10.8.2, the Glossary and Appendices 1, 2 and 9.	RC_2013_18
1 May 2014	IMO amended clauses 2.37.1, 2.37.2, 2.37.3, 2.37.4, 2.37.5, 2.37.6, 2.37.7, 2.37.8, 2.37.9, 2.38.1, 2.38.2, 2.38.3, 2.38.4, 2.38.7, 2.40.1, 2.41.2, 2.41.3, 2.41.5 (new), 2.42.1, 2.42.2, 2.42.3, 2.42.4, 2.42.7, 2.43.1, 4.13.1, 4.13.2C, 4.13.3, 4.13.4, 4.13.5 and the Glossary.	RC_2012_23
	IMO amended clauses 6.15.2, 7.7.5A, 7.7.5B and Appendix 9.	RC_2013_17
1 November 2014	IMO amended clauses 1.12.1 (new) and 1.12.2 (new).	RC_2014_04
1 May 2015	IMO amended clause 1.12.1.	RC_2015_04
1 September 2015	IMO amended clauses 1.13.1 (new) and 1.13.2 (new).	RC_2015_05
30 November 2015	Minister amended clauses 1.4.1, 1.4.2, 1.5.1, 1.5.2, 1.6.2 (new), 1.7.1, 1.7.2 (new), 1.9.5, 1.9.6, section 1.14 (new), clause 2.1.2, section 2.1A (new), clauses 2.2.2, 2.3.1, 2.3.5, 2.3.17, 2.5.1, 2.9.2A (new), 2.9.4, 2.9.5, 2.9.7A (new), 2.10.1, 2.10.2, 2.10.2A, 2.10.3, 2.10.4, 2.10.5A (new), 2.10.7, 2.10.8, 2.10.9, 2.10.10, 2.10.11, 2.10.12A (new), 2.10.13, 2.10.14, 2.10.15, 2.10.16, 2.10.17, 2.10.18, 2.11.1, 2.11.2, 2.11.4, 2.13.2, 2.13.3A, 2.13.4, 2.13.6A, 2.13.6D, 2.13.6E, 2.13.6H, 2.13.6I, 2.13.6J, 2.13.6L, 2.13.9, 2.13.9A (new), 2.13.9B (new), 2.13.9C (new), 2.13.9D (new), 2.14.1, 2.14.1A (new), 2.14.2, 2.14.3, 2.14.4, 2.14.5, 2.14.5A, 2.14.5B (new), 2.14.5C (new), 2.14.5D (new), 2.15.5, 2.15.6, 2.15.6A (new), 2.15.6B (new), 2.15.6C (new), 2.15.7,	*Wholesale Electricity Market Rules Amending Rules 2015.*

Date	Amendment	Rule Change Reference
	2.15.9 (new), 2.16.1, 2.16.2, 2.16.2A (new), 2.16.3, 2.16.4, 2.16.5, 2.16.6, 2.16.8, 2.16.8A (new), 2.16.9, 2.16.12, 2.16.14, 2.17.1, 2.17.2, 2.18.1, 2.18.2, 2.19.5, 2.21.5 (new), 2.21.6 (new), 2.22.1, 2.22.13, 2.22.14, section 2.22A (new), clauses 2.23.9, 2.23.11, 2.24.1, 2.24.2, 2.24.2A, 2.24.3, 2.24.4, 2.24.6, 2.25.1, 2.25.1A, 2.25.1B, 2.25.3, 2.25.4, 2.26.1, 2.26.2, 2.27.1, 2.27.2, 2.27.4, 2.27.5, 2.27.6, 2.27.7, 2.27.8, 2.27.9, 2.27.10, 2.27.11, 2.27.12, 2.27.13, 2.27.14, 2.27.15, 2.27.16, 2.27.17, 2.27.18, 2.27.19, 2.28.1, 2.28.3, 2.28.13, 2.28.15A (new), 2.28.16, 2.28.16A, 2.28.16B, 2.29.5B, 2.29.5C, 2.29.5D, 2.29.5E, 2.29.5F, 2.29.5G, 2.29.5H, 2.29.5I, 2.29.5J, 2.29.5K, 2.29.5L, 2.29.5M, 2.29.9, 2.29.9A, 2.29.10, 2.30.1, 2.30.1A, 2.30.4, 2.30.5, 2.30.7, 2.30.7A, 2.30.8, 2.30.9, 2.30.10, 2.30.11, 2.30A.1, 2.30A.2, 2.30A.3, 2.30A.4, 2.30A.5, 2.30A.6, 2.30B.2, 2.30B.3, 2.30B.4, 2.30B.6, 2.30B.7, 2.30B.8, 2.30B.11, 2.30C.1, 2.30C.3, 2.30C.4, 2.31.1, 2.31.2, 2.31.3, 2.31.4, 2.31.5, 2.31.6, 2.31.7, 2.31.10, 2.31.11, 2.31.12, 2.31.13, 2.31.15, 2.31.16, 2.31.17, 2.31.18, 2.31.19, 2.31.20, 2.31.21, 2.31.22, 2.31.23, 2.32.1, 2.32.2, 2.32.3, 2.32.4, 2.32.5, 2.32.6, 2.32.7, 2.32.7A, 2.32.7B, 2.32.7C, 2.32.7D, 2.32.7E, 2.32.7F, 2.32.9, 2.33.1, 2.33.2, 2.33.3, 2.33.4, 2.33.5, 2.34.1, 2.34.2, 2.34.3, 2.34.4, 2.34.5, 2.34.6, 2.34.7, 2.34.7A, 2.34.7B, 2.34.7C, 2.34.8, 2.34.9, 2.34.10, 2.34.11, 2.34.12, 2.34.13, 2.34.14, 2.34.15, 2.36.1, 2.36.3, 2.36.5, 2.36.6, 2.36.7, 2.36.8, 2.36.9, 2.36.10, 2.37.1, 2.37.2, 2.37.3, 2.37.4, 2.37.5, 2.37.6, 2.37.7, 2.37.8, 2.38.1, 2.38.2, 2.38.3, 2.38.4, 2.38.5, 2.38.7, 2.38.8, 2.38.9, 2.40.1, 2.40.2, 2.41.2, 2.41.3, 2.41.4, 2.41.5, 2.42.1, 2.42.4, 2.42.5, 2.42.7, 2.43.1, 2.44.1, 2.44.2, 2.44.3, 2.44.4, 3.2.1, 3.6.3, 3.6.5, 3.8.1, 3.8.2, 3.8.2A (new), 3.8.3, 3.8.4, 3.8.5, 3.8.5A (new), 3.11.6, 3.11.10, 3.11.11, 3.11.12, 3.11.13, 3.13.1, 3.13.1A, 3.13.2, 3.13.3A, 3.13.3AB, 3.15.1, 3.16.9, 3.17.1, 3.17.2, 3.17.9, 3.18.2, 3.18.3, 3.18.15, 3.18.16, 3.18.17, 3.18.21, 3.19.12, 3.19.13, 3.21.6, 3.21.10, 3.21.11, 3.21A.16, 3.22.1, 3.22.2, 3.22.3, 3.23.1, 3.23.2, 3.23.3, 4.1.4, 4.1.5, 4.1.6, 4.1.7, 4.1.8, 4.1.10, 4.1.11, 4.1.12, 4.1.13, 4.1.14, 4.1.15, 4.1.15A, 4.1.16, 4.1.17, 4.1.18, 4.1.19, 4.1.20, 4.1.21, 4.1.21A, 4.1.21B, 4.1.23, 4.1.24, 4.1.28, 4.1.32, 4.2.1, 4.2.2, 4.2.3, 4.2.4, 4.2.5, 4.2.6, 4.2.7, 4.3.1, 4.5.1, 4.5.2A, 4.5.3, 4.5.3A, 4.5.4, 4.5.5, 4.5.6, 4.5.7, 4.5.8, 4.5.9, 4.5.10, 4.5.11, 4.5.12, 4.5.13, 4.5.14, 4.5.15, 4.5.16, 4.5.19, 4.7.2, 4.9.1, 4.9.3, 4.9.4, 4.9.5, 4.9.6, 4.9.7, 4.9.8, 4.9.9, 4.9.9A, 4.9.10, 4.10.1, 4.10.3, 4.10.4, 4.11.1, 4.11.2, 4.11.2A, 4.11.3B, 4.11.4, 4.11.5, 4.11.6, 4.11.8, 4.11.9, 4.11.10, 4.11.11, 4.11.12, 4.12.1, 4.12.2, 4.12.3, 4.12.4, 4.12.6, 4.13.1, 4.13.1B, 4.13.2A, 4.13.2B, 4.13.2C, 4.13.3, 4.13.4, 4.13.5, 4.13.6,	

Date	Amendment	Rule Change Reference
	4.13.8, 4.13.10, 4.13.10A, 4.13.10B, 4.13.10C, 4.13.11, 4.13.11A, 4.14.1, 4.14.6, 4.14.7, 4.14.8, 4.14.9, 4.14.10, 4.14.11, 4.15.1, 4.15.2, 4.16.1, 4.16.3, 4.16.5, 4.16.6, 4.16.7, 4.16.8, 4.17.1, 4.17.2, 4.17.3, 4.17.4, 4.17.5, 4.17.6, 4.17.7, 4.17.8, 4.17.9, 4.18.2, 4.19.1, 4.19.3, 4.19.5, 4.20.1, 4.20.2, 4.20.3, 4.20.4, 4.20.5, 4.20.5A, 4.20.5B, 4.20.5C, 4.20.5D, 4.20.8, 4.20.9, 4.20.10, 4.20.11, 4.20.12, 4.20.13, 4.20.14, 4.20.15, 4.21.1, 4.22.1, 4.22.2, 4.23A.3, 4.23A.4, 4.24.1, 4.24.2, 4.24.3, 4.24.4, 4.24.5, 4.24.6, 4.24.7, 4.24.8, 4.24.9, 4.24.10, 4.24.11, 4.24.12, 4.24.13, 4.24.14, 4.24.15, 4.24.16, 4.24.17, 4.24.18, 4.24.19, 4.25.1, 4.25.2, 4.25.3, 4.25.3A, 4.25.4, 4.25.4A, 4.25.4B, 4.25.4C, 4.25.4D, 4.25.4E, 4.25.5, 4.25.6, 4.25.7, 4.25.8, 4.25.9, 4.25.11, 4.25.12, 4.25.13, 4.25.14, 4.25A.1, 4.25A.2, 4.25A.3, 4.25A.4, 4.26.1, 4.26.1A, 4.26.1B, 4.26.2, 4.26.2A, 4.26.2B, 4.26.2C, 4.26.2CA, 4.26.2D, 4.26.2E, 4.26.4, 4.26.5, 4.27.1, 4.27.2, 4.27.3, 4.27.5, 4.27.6, 4.27.7, 4.27.8, 4.27.9, 4.27.10, 4.27.11A, 4.27.11B, 4.27.11C, 4.27.11D, 4.27.12, 4.28.1, 4.28.2, 4.28.3, 4.28.4, 4.28.7, 4.28.7A, 4.28.8, 4.28.8A, 4.28.8B, 4.28.9, 4.28.10, 4.28.11, 4.28.11A, 4.28.12, 4.28A.1, 4.28A.2, 4.28A.3, 4.28B.2, 4.28B.4, 4.28B.5, 4.28B.6, 4.28B.7, 4.28B.8, 4.28B.9, 4.28C.1, 4.28C.2, 4.28C.3, 4.28C.6, 4.28C.7, 4.28C.8, 4.28C.10, 4.28C.11, 4.28C.12, 4.28C.13, 4.28C.14, 4.28C.15, 4.29.1, 4.29.3, 4.29.4, 5.2A.2, 5.3A.1, 5.3A.2, 5.9.1, 5.9.2, 5.9.3, 6.2.1, 6.2.2, 6.2.2A, 6.2.3, 6.2.4B, 6.2.8, 6.2A.1, 6.2A.2, 6.2A.4, 6.2A.5, 6.3A.1, 6.3A.2, 6.3A.3, 6.3A.4, 6.3B.1, 6.3B.1A, 6.3B.1B, 6.3B.3, 6.3B.7A, 6.3B.7B, 6.3B.8, 6.3C.1, 6.3C.3, 6.3C.6B, 6.3C.6C, 6.3C.9, 6.4.1, 6.4.2, 6.4.3, 6.4.5, 6.4.6, 6.5.1, 6.5.1A, 6.5.1B, 6.5.2, 6.5.3, 6.5.4, 6.5C.1A, 6.5C.2, 6.5C.4, 6.5C.5, 6.5C.6, 6.6.2A, 6.6.9, 6.6.10, 6.6.11, 6.6.12, 6.9.1, 6.9.3, 6.9.4, 6.9.5, 6.9.6, 6.9.7, 6.9.8, 6.9.9, 6.9.10, 6.9.11, 6.9.12, 6.9.13, 6.10.1, 6.10.2, 6.11.1, 6.11.2, 6.12.1, 6.13.1, 6.15.3, 6.15.4, 6.16.1, 6.16.1A, 6.16.2, 6.16A.1, 6.16A.2, 6.16B.1, 6.16B.2, 6.17.1, 6.17.3, 6.17.3A, 6.17.4, 6.17.4A, 6.17.5, 6.17.5A, 6.17.5C, 6.17.6, 6.17.6A, 6.17.9, 6.19.1, 6.19.2, 6.19.3, 6.19.4, 6.19.6, 6.19.7, 6.19.9, 6.19.10, 6.20.3, 6.20.6, 6.20.7, 6.20.9, 6.20.9A, 6.20.10, 6.20.11, 6.21.1, 6.21.2, 7.1.1, 7.2.3B, 7.3.4, 7.3.6, 7.3.7, 7.4.1, 7.4.2, 7.4.3, 7.4.4, 7.5.1, 7.5.2, 7.5.3, 7.6.2B, 7.6.10, 7.6.11, 7.6A.2, 7.6A.5, 7.6A.9, 7.6A.10, 7.10.7, 7.10.8 (new), 7.11.1, 7.11.4, 7.11.6A, 7.11.9, 7.12.1, 7.12.2, 7.13.1, 7.13.1A, 7.13.1B, 7.13.1C, 7.13.1D, 7.13.1E, 7.13.1F, 7.13.1G, 7.13.3, 7.13.4, 7A.1.1, 7A.1.6, 7A.1.7, 7A.1.9, 7A.1.10, 7A.1.11, 7A.1.12, 7A.1.13, 7A.1.15, 7A.1.16, 7A.1.17, 7A.2.4, 7A.2.5, 7A.2.8, 7A.2.9, 7A.2.11, 7A.2.12, 7A.2.18, 7A.3.1, 7A.3.2, 7A.3.3, 7A.3.6,	

Date	Amendment	Rule Change Reference
	7A.3.7, 7A.3.7A, 7A.3.8, 7A.3.9, 7A.3.10, 7A.3.11, 7A.3.12, 7A.3.13, 7A.3.14, 7A.3.15, 7A.3.16, 7A.3.17, 7A.3.18, 7A.3.19, 7A.3.20, 7A.3.21, 7A.4.1, 7A.4.2, 7A.4.4, 7A.4.5, 7A.4.6, 7A.4.7, 7A.4.8, 7A.4.9, 7B.1.1, 7B.1.4, 7B.2.3, 7B.2.4, 7B.2.7, 7B.2.8, 7B.2.16, 7B.2.18, 7B.2.19, 7B.3.1, 7B.3.2, 7B.3.3, 7B.3.4, 7B.3.5, 7B.3.7, 7B.3.9, 7B.3.10, 7B.3.11, 7B.3.12, 7B.3.13, 7B.3.14, 7B.3.15, 7B.3.16, 7B.4.2, 8.2.1, 8.3.2, 8.3.3, 8.3.4, 8.3.5, 8.3.6, 8.3.7, 8.4.1, 8.4.4, 8.4.5, 8.5.1, 8.5.2, 8.6.2, 8.8.1, 9.1.1, 9.1.2, 9.1.4, 9.2.1, 9.3.1, 9.3.3, 9.3.4, 9.3.4A, 9.3.6, 9.3.7, 9.4.1, 9.4.2, 9.4.3, 9.4.4, 9.4.5, 9.4.6, 9.4.7, 9.4.8, 9.4.9, 9.4.10, 9.4.12, 9.4.13, 9.5.3, 9.6.1, 9.7.1, 9.7.2, 9.9.1, 9.9.2, 9.9.3A, 9.9.3B, 9.10.1, 9.11.1, 9.13.1, 9.14.1, 9.15.1, 9.16.1, 9.16.2, 9.16.3, 9.16.3A, 9.16.4, 9.17.1, 9.18.1, 9.18.2, 9.18.3, 9.18.4, 9.19.1, 9.19.2, 9.19.4, 9.20.1, 9.20.2, 9.20.3, 9.20.5, 9.20.6, 9.20.7, 9.20.8, 9.21.1, 9.22.1, 9.22.2, 9.22.3, 9.22.4, 9.22.5, 9.22.6, 9.22.8, 9.22.9, 9.22.10, 9.22.11, 9.23.1, 9.23.2, 9.23.3, 9.23.4, 9.23.5, 9.23.6, 9.23.7, 9.24.1, 9.24.2, 9.24.3, 9.24.3A, 9.24.4, 9.24.5, 9.24.6, 9.24.7, 9.24.8, 9.24.8A, 9.24.9, 9.24.10, 10.1.1, 10.1.2, 10.2.1, 10.2.2, 10.2.3, 10.2.5, 10.2.6, 10.2.7, 10.3.1, 10.3.2, 10.3.3, 10.3.4, 10.3.5, 10.4.1, 10.4.2, 10.5.1, 10.5.2, 10.5.3, 10.7.1, 10.8.2, the Glossary and Appendices 1, 3, 4A, 5, 5A, 6 and 9.	
1 June 2016	Minister amended clause 1.4.1, section 1.15 (new), clauses 2.13.9, 2.26.1, 2.26.2, 2.26.3, 2.33.5, 4.1.13, 4.1.14, 4.1.15, 4.1.19, 4.1.20, 4.1.32, 4.1.33 (new), 4.2.7, 4.3.1, 4.5.12, 4.5.13, 4.5.14, 4.5.14A (new), 4.5.14B (new), 4.5.14C (new), 4.5.14D (new), 4.5.14E (new), 4.5.14F (new), 4.5.16, 4.5.17, 4.5.20, 4.6.4 (new), 4.6.5 (new), 4.7.3, 4.9.3, 4.9.9, 4.9.9A, 4.9.10, 4.10.1, 4.10.2, 4.11.1, 4.11.1A (new), 4.11.1B (new), 4.11.1C (new), 4.11.1D (new), 4.11.1E (new), 4.11.4, 4.12.2, 4.12.6, 4.12.7, 4.13.2, 4.13.9, 4.13.10C, 4.14.1, 4.14.1A (new), 4.14.6, 4.14.7, 4.14.9, 4.14.10, 4.14.11, 4.15.2, 4.16.1, 4.16.2, 4.16.3, 4.16.5, 4.16.6, 4.16.7, 4.16.8, 4.17.2, 4.17.4, 4.17.9, 4.17.10 (new), 4.18.1, 4.18.2, 4.20.1, 4.20.5A, 4.20.5B, 4.21.1, 4.22.1, 4.22.2, 4.22.3, 4.22.4, 4.22.5, 4.22.6, 4.24.18, 4.25.14, 4.25A.1, 4.25A.5, 4.27.12, 4.28.2, 4.28.12, 4.28A.3, 4.28B.8, 4.28B.9 4.28C.4, 4.28C.9, 4.28C.14, 4.28C.15, 4.29.1, 10.5.1, Glossary, Appendix 1, and Appendix 3.	*Wholesale Electricity Market Rules Amending Rules 2016, Schedule B, Part 1.*
1 July 2016	Minister amended clause 1.14.6, section 1.16 (new), clauses 2.2.1, 2.2.2, 2.2.3, 2.2.4 (new), 2.2.5 (new), 2.2.6 (new), 2.2.7 (new), 2.2.8 (new), 2.8.13, 2.10.4, 2.10.5A, 2.10.11, 2.10.12A, 2.10.13, 2.10.14, 2.10.15, 2.10.16, 2.10.17, 2.10.18, 2.11.1, 2.11.3, 2.13.6A, 2.13.6D, 2.13.6E, 2.13.6H, 2.13.6I, 2.13.6J, 2.13.6L, 2.13.8, 2.14.1A, 2.14.3, 2.14.6, 2.14.6A, 2.14.6B, 2.14.7, 2.14.8, 2.14.9, 2.15.3, 2.15.4, 2.15.5,	*Wholesale Electricity Market Rules Amending Rules 2016, Schedule A.*

Date	Amendment	Rule Change Reference
	2.15.6, 2.15.6B, 2.15.6C, 2.15.7, 2.16.2, 2.16.7, 2.17.1, 2.17.2, 2.22A.1, 2.22A.2A (new), 2.22A.4, 2.22A.5, 2.22A.12, 2.23, 2.24.1, 2.24.2, 2.24.2A, 2.24.2B, 2.24.3, 2.24.4, 2.25.1, 2.25.1A, 2.25.1B, 2.25.2, 2.25.3, 2.25.4, 2.28.1, 2.28.3, 2.28.3A (new), 2.28.14A (new), 2.28.16B, 2.29.5F, 2.30.4, 2.30.5, 2.30.8, 2.30.11, 2.30A.3, 2.30A.5, 2.30A.6, 2.30B.3, 2.30B.8, 2.31.5, 2.31.22, 2.31.23, 2.34.1, 2.34.7A, 2.34.7B, 2.34.7C, 2.34.10, 2.34.12, 2.34.15, 2.36.7, 2.36.8, 2.36.9, 2.36.10, 2.36A (new), 3.2.1, 3.2.7, 3.2.8, 3.3.2, 3.4.1, 3.4.2, 3.4.4, 3.4.5, 3.4.6, 3.5.1, 3.5.3, 3.5.5, 3.5.6, 3.5.7, 3.5.8, 3.6.3, 3.6.5, 3.7.2, 3.8.1, 3.8.2, 3.10.5, 3.11.6, 3.11.10, 3.11.11, 3.11.12, 3.11.13, 3.12.1, 3.13.1, 3.13.1A, 3.13.2, 3.13.3A, 3.13.3AB, 3.15.1, 3.16.9, 3.17.1, 3.17.2, 3.17.9, 3.18.2, 3.18.11, 3.18.17, 3.18.21, 3.19.6, 3.19.13, 3.21.6, 3.21.11, 3.21A.16, 3.22.1, 3.22.2, 3.22.3, 3.23.1, 3.23.2, 3.23.3, 4.1.26, 4.10.1, 4.12.6, 4.18.1, 4.23A.3, 4.24.3, 4.24.13, 4.24.16, 4.24.17, 4.24.18, 4.25.2, 4.25.4, 4.25.5, 4.25.6, 4.25.7, 4.25.8, 4.25.9, 4.25.11, 4.25.14, 4.26.2, 4.26.2D, 4.26.5, 4.27.6, 4.27.11A, 4.27.11B, 4.27.11C, 4.27.12, 4.28A.2, 6.3A.1, 6.3A.2, 6.3A.3, 6.4.2, 6.4.6, 6.13.1, 6.15.3, 6.16A.2, 6.17.6, 6.17.6A, 6.17.9, 6.19.1, 6.19.4, 6.19.9, 6.19.10, 7.1.1, 7.2.3B, 7.3.4, 7.3.6, 7.3.7, 7.4.1, 7.4.2, 7.4.3, 7.4.4, 7.5.1, 7.5.2, 7.5.3, 7.6.1D, 7.6.2B, 7.6.11, 7.6A.2, 7.6A.5, 7.6A.9, 7.10.7, 7.10.8, 7.11.1, 7.11.4, 7.11.6A, 7.11.9, 7.12.1, 7.13.1, 7.13.1A, 7.13.1B, 7.13.1C, 7.13.1D, 7.13.1E, 7.13.1F, 7.13.1G, 7.13.3, 7.13.4, 7A.1.7, 7A.2.18, 7A.3.2, 7A.3.3, 7A.3.6, 7A.3.7, 7A.3.7A, 7A.3.8, 7A.3.9, 7A.3.11, 7A.3.12, 7A.3.13, 7A.3.15, 7A.3.17, 7A.3.21, 7A.4.2, 7A.4.6, 7A.4.7, 7B.1.4, 7B.1.5, 7B.2.7, 7B.2.18, 7B.2.19, 7B.3.4, 7B.3.5, 7B.3.7, 7B.3.8, 7B.3.15, 7B.3.16, 7B.4.2, 9.1.2, 9.3.4, 9.9.2, 9.9.4, 9.13.1, 9.15.1, 9.16.3, 9.19.1, 9.20.5, 9.20.7, 9.24.3A, 10.2.2, 10.2.3, 10.3.3, 10.3.4, 10.3.5, 10.5.1, the Glossary, Appendix 1 and Appendix 9.	
1 July 2016	Minister amended clauses 1.4.1, 1.4.2, 1.5.1, 1.5.2, 1.7.2, 1.7.3 (new), 1.9.12, 1.10.3, 1.14.3, 1.145.5, 1.16.1, 1.16.5, section 1.17 (new), clauses 2.1.2, 2.1.3, section 2.3A (new), clauses 2.3.1, 2.8.13, 2.9.2B (new), 2.9.5, 2.9.7B (new), 2.10.1, 2.10.2, 2.10.2A, 2.10.3, 2.10.5B (new), 2.10.7, 2.10.9, 2.10.10, 2.10.12B (new), 2.10.13, 2.10.17, 2.10.18, 2.11.1, 2.11.2, 2.11.4, 2.13.1, 2.13.2, 2.13.3, 2.13.3A, 2.13.4, 2.13.5, 2.13.6A, 2.13.6B, 2.13.6C, 2.13.6D, 2.13.6H, 2.13.6I, 2.13.8, 2.13.9A, 2.13.9B, 2.13.9C, 2.13.9D, 2.13.10, 2.13.11, 2.13.12, 2.13,13, 2.13.14, 2.13.15, 2.13.16, 2.13.17, 2.13.18, 2.13.19, 2.13.20, 2.13.21, 2.13.22, 2.13.24, 2.13.25, 2.13.26, 2.13.27, 2.13.28, 2.13.29, 2.13.31, 2.14.5A, 2.14.5B, 2.14.5C, 2.14.5D, 2.15.1, 2.15.2, 2.15.3, 2.15.6A, 2.15.6B, 2.15.6C, 2.15.7,	*Wholesale Electricity Market Rules Amending Rules 2016 (No. 2).*

Date	Amendment	Rule Change Reference
	2.15.8, 2.15.9, 2.16.2A, 2.16.4, 2.16.5, 2.16.6, 2.16.8, 2.16.8A, 2.16.9, 2.16.9A, 2.16.9B, 2.16.9D, 2.16.9E, 2.16.9F, 2.16.9FA, 2.16.9G, 2.16.9H, 2.16.10, 2.16.12, 2.16.14, 2.17.1, 2.17.2, 2.18.1, 2.18.2, 2.19.5, 2.21.1, 2.21.2, 2.22.1, 2.22A.1, 2.24.2, 2.24.3, 2.25.1A, 2.29.5N, 2.29.5O, 2.30C.2, 2.32.1, 2.32.2, 2.32.6, 2.32.7, 2.32.7A, 2.32.7B, 2.44.1, 2.44.2, 2.44.3, 2.44.4, 3.8.2, 3.8.2A, 3.8.5A, 3.8.6, 3.11.6, 3.11.10, 3.11.11, 3.11.12, 3.15.1, 3.15.2, 3.15.3, 3.18.3, 3.18.15, 3.18.16, 3.18.18, 3.18.19, 3.18.20, 3.19.10, 4.1.22, 4.5.14, 4.5.15, 4.5.16, 4.5.17, 4.5.18, 4.5.19, 4.5.20, 4.11.3C, 4.11.3D, 4.11.3E, 4.14.5, 4.16.3, 4.16.9, 4.23A.1, 4.23A.2, 4.25.13, 4.28.6, 6.16A.1, 6.16A.2, 6.16B.1, 6.16B.2, 6.17.6, 7.6.10, 7.6A.5, 7.10.8, 7.11.1, 7.11.4, 7.11.6A, 7.11.9, 7.12.1, 7.12.2, 7A.1.2, 7A.2.18, 7B.2.16, 9.13.1, 9.22.11, 9.23.1, 10.2.3, 10.3.2, 10.5.1 and the Glossary.	
1 October 2016	Minister amended clauses 2.29.5B, 2.29.5E, 2.29.5G, 2.29.5LA (new), 2.29.5LB (new), 2.29.5LC (new), 2.29.9A (deleted), and Appendix 1.	*Wholesale Electricity Market Rules Amending Rules 2016, Schedule B, Part 2*.
26 November 2016	Minister amended clauses 1.4.1, 1.4.2, 1.5.1, 1.5.2, 1.6.1, 1.7.3, sections 1.18 (new), 1.19 (new), clauses 2.1.2, 2.1A.2, section 2.2B (new), heading to section 2.3A, clauses 2.3A.1, 2.3.1, 2.3.2, 2.3.4, 2.3.5, 2.3.5A, 2.3.8, 2.3.9, 2.3.10, 2.3.11, 2.3.12, 2.3.13, 2.3.14, 2.3.15, 2.3.16, 2.3.17, heading to section 2.4, clauses 2.4.1, 2.4.1A (new), 2.4.2, 2.4.3, 2.4.3A (new), 2.4.4, section 2.4A (new), clauses 2.5.1, 2.5.2, 2.5.3, 2.5.4, 2.5.5, 2.5.6, 2.5.7, 2.5.8, 2.5.9, 2.5.10, 2.5.11, 2.5.12, 2.5.14, 2.5.15, 2.6.1, 2.6.2, 2.6.3, 2.6.3A, 2.6.4, 2.7.1, 2.7.2, 2.7.3, 2.7.4, 2.7.5, 2.7.6, 2.7.7, 2.7.7A, 2.7.8, heading to section 2.8, clauses 2.8.1, 2.8.2, 2.8.3, 2.8.5, 2.8.6, 2.8.7, 2.8.9, 2.8.10, 2.8.11, 2.8.12, 2.8.13, 2.9.2C (new), 2.9.5, 2.9.7C (new), 2.10.1, 2.10.2, 2.10.2A, 2.10.3, 2.10.5C (new), 2.10.7, 2.10.9, 2.10.10, 2.10.12C (new), 2.10.13, 2.10.17, 2.10.18, 2.11.1, 2.11.2, 2.11.3, 2.11.4, 2.16.2, 2.16.6, 2.17.1, 2.17.2, 2.21.7 (new), 2.21.8 (new), 2.22.1, 2.24.3, 2.24.5, 2.24.5B (new), 2.24.6, 2.25.4, 2.25.4A (new), 2.29.5E, 3.8.4, 4.1.33, 9.13.1, 10.2.2, 10.2.3, 10.2.3A (new), 10.2.3B (new), 10.2.3C (new), 10.3.2, 10.5.1, the Glossary and Appendix 1.	*Wholesale Electricity Market Rules Amending Rules 2016 (No. 3)*.
10 December 2016	Minister amended section 1.20 (new) and the Glossary.	*Wholesale Electricity Market Rules Amending Rules 2016 (No. 4)*.
31 May 2017	Rule Change Panel amended clause 4.20.5B.	RC_2017_01
	Rule Change Panel amended Appendix 9.	RC_2017_03

Date	Amendment	Rule Change Reference
24 June 2017	Minister amended clauses 3.21.2A (new), 4.1.34 (new), 4.1.35 (new), 4.1.36 (new), 4.1.37 (new), 4.1.38 (new), 4.10.1, 4.10.4, 4.10A.1 (new), 4.10A.2 (new), 4.10A.3 (new), 4.10A.4 (new), 4.10A.5 (new), 4.10A.6 (new), 4.11.1, 4.11.5, 4.11.10, 4.11.10A (new), 4.11.11, 5.2A.3 (new), 10.2.2, the Glossary and Appendix 11 (new).	*Wholesale Electricity Market Rules Amending Rules 2017*.
30 June 2017	Minister amended sections 1.21 (new), 1.22 (new), 1.23 (new) and the Glossary.	*Wholesale Electricity Market Rules Amending Rules 2017 (No. 2)*.
1 July 2017	Minister amended clauses 2.4A.1, 2.28.3B(new), 2.28.3C(new), 3.21.1, 10.9 (new), 10.9.1 (new).	*Wholesale Electricity Market Rules Amendng Rules 2017 (No. 3)*.
1 September 2017	Rule Change Panel amended section 1.24 (new) and the Glossary.	RC_2017_07
1 October 2017	Minister amended clauses 2.34.3, 2.34.7, 2.34.8, 2.34.14,3.2.5, 3.19.3A, 4.5.13, 4.5.14A, 4.5.14B, 4.12.4, 4.12.8, 4.25.1, 4.25.4B, 4.25.4E, 4.25.13, 4.25A.1, 4.26.1, 4.26.1A, 4.26.1C (new), 4.26.1D (new), 4.26.2, 4.26.2B, 4.26.2C, 4.26.2CA, 4.26.2D, 4.26.2E, 4.26.2F, 4.26.3, 4.26.3A, 4.26.4, 4.26.6 (new), 4.27.1, 4.27.2, 4.27.3, 4.27.3A (new), 4.27.4, 4.27.4A (new), 4.27.5, 4.27.6, 4.27.7, 4.27.8, 4.27.9, 4.28.1, 4.28.2, 4.28.4, 4.28.11A, 4.28A.1, 4.29.1, 4.29.3, section 6.11A (new), clauses 6.12.1, 6.17.6, 6.17.6B (new), 6.17.6C (new), 6.17.6D (new), 6.17.6E (new), 6.17.6F (new), 6.21.2, 7.6.1C, 7.6.1D, 7.6.1E (new), 7.6.1F (new), 7.6.1G (new), 7.6.1H (new), 7.6.10, 7.6.10A (new), 7.7.2, 7.7.3, 7.7.3B (new), 7.7.3C (new), 7.7.4A, 7.7.5, 7.7.6C (new), 7.7.10, 7.10.2, 7.10.4, 7.10.4A (new), 7.10.5, 7.11.1, 7.11.3, 7.11.5, 7.11.6, 7.11.6A, 7.13.1, 7.13.5 (new), 9.4.1, 9.4.1A (new), 9.4.4, 9.4.8, 9.5.1, 9.7.1, 9.7.1A (new), 9.7.1B (new), 9.8.1, 9.19.1, 9.19.1A (new), 10.5.1, the Glossary, Appendix 1, Appendix 5 and Appendix 10 (new)	*Wholesale Electricity Market Rules Amending Rules 2016, Schedule B, Part 3*.
1 October 2017	Rule Change Panel amended clauses 4.26.1, 4.26.1C and 4.26.6.	RC_2017_01
1 October 2017	Rule Change Panel amended clauses 4.5.14C, 4.26.3, 4.28.4, 6.11A.2, 6.17.6, 6.17.6C, 7.6.10, 7.13.5, 9.7.1, 9.7.1A, 9.7.1B and the Glossary.	RC_2017_04
13 October 2017	Rule Change Panel amended clauses 4.1.16, 4.1.16A (new), 4.1.21A, 4.1.26, 4.20.5A and 4.28C.13.	RC_2013_21
20 March 2018	Rule Change Panel amended clauses 2.11.1, 2.11.2, 2.13.6D, 2.24.2, 4.26.1, 4.26.1B, 4.26.5, 6.16B.1, 6.16B.2, 7.6.1D, 7.7.2, 7.10.8, 7.11.3, 10.2.2, 10.3.2, 10.5.1.	RC_2017_10
23 March 2018	Rule Change Panel amended clauses 2.1A.2, 2.3.1, 2.5.1A (new), 2.5.1B (new) and 2.22A.1.	RC_2017_05

Date	Amendment	Rule Change Reference
27 March 2018	Rule Change Panel amended clause 1.17.5 and Appendix 9.	RC_2018_02
24 April 2018	Rule Change Panel amended clauses 1.4.2, 1.7.2, 1.7.3, 1.14.1, 1.14.2, 1.14.3, 1.14.4, 1.14.7, heading to 1.15, 1.15.1, 1.15.2, 1.15.3, 1.16.1, 1.16.2, 1.16.3, 1.16.4, 1.16.5, 1.16.6, 1.17.1, 1.17.2, 1.17.4, 1.17.5, 1.17.6, 1.18.1, 1.18.2, 1.18.3, heading to 1.19, 1.19.1, 1.19.3, 1.20.1, 1.20.2, 2.1A.2, 2.1A.3, 2.2.3, 2.2.4, 2.2B.2, 2.5.2, 2.7.8, 2.8.13, 2.10.8, 2.11.4, 2.13.18, 2.15.6C, 2.15.7, 2.16.5, 2.16.9B, 2.16.9E, 2.16.9FA, 2.16.12, 2.17.2, 2.21.6, 2.21.8, 2.22.1, 2.22A.1, 2.22A.2, 2.22A.11, 2.22A.12, 2.22A.14, 2.24.3, 2.24.6, 2.26.3, 2.28.3A, 2.28.3B, 2.29.5E, 2.29.5F, 2.29.5LA, heading to 2.30A, 2.30A.2, 2.30A.3, 2.30A.4, 2.30A.5, 2.30A.6, heading to 2.30B, 2.30B.1, 2.32.7B, 2.34.7A, 2.36A.1, 2.36A.2, 2.36A.3, 2.36A.4, 3.8.2A, 3.8.4, 3.11.15, 3.18.3, 3.18.15, 3.18.16, 3.18.19, 4.1.34, 4.1.37, 4.2.7, 4.3.1, 4.5.14, 4.5.14B, 4.5.14D, 4.5.14E, 4.10A.6, 4.11.1D, 4.11.10A, 4.13.5, 4.13.10, 4.13.10A, 4.13.10C, 4.16.3, 4.28B.8, 5.2A.3, 6.16B.1, 6.16B.2, 7.6A.5, 7A.3.7A, the Glossary and Appendix 11.	Notice of Corrigenda dated 24 April 2018
28 April 2018	Minister amended clauses 1.4.1, 1.4.2, 1.5.1, 1.5.2, 1.7.2, 1.9.1, 1.9.2, 1.9.3, 1.9.4, 1.9.5, 1.9.6, 1.9.7, 1.9.8, 1.9.9, 1.9.10, 1.9.11, 1.9.12, 1.10.1, 1.10.2, 1.10.3, 1.10.4, 1.11.1, 1.14.1, 1.14.2, 1.14.5, 1.14.6, 1.14.7, 1.17.2, 1.17.4, 1.17.6, section 1.25 (new), clauses 2.1.1, 2.1.2, 2.1.3, heading to section 2.2A, clauses 2.2A.1, 2.3.1, 2.3.1A, 2.3.17, 2.9.1, 2.9.5, 2.9.6, 2.9.8, 2.10.1, 2.10.2, 2.10.2A, 2.10.3, 2.10.5, 2.10.7, 2.10.9, 2.10.10, 2.10.12, 2.10.13, 2.10.17, 2.10.18, 2.11.1, 2.11.2, 2.11.3, 2.11.4, 2.16.2, 2.17.1, 2.17.2, 2.22.1, 2.22.2, 2.22.3, 2.22.4, 2.22.5, 2.22.6, 2.22.7, 2.22.8, 2.22.9, 2.22.10, 2.22.11, 2.22.12, 2.22.13, 2.22.14, 2.22.15, 2.24.2, 2.24.2A, 2.24.3, 2.25.1A, 2.25.1B, 2.25.3, 2.25.4, 2.26.5 (new), 2.28.1, 2.28.15, 4.1.33, 4.11.1E, 4.11.1F (new), 4.16.3, 4.16.10 (new), 4.26.1D, 4.26.1E (new), 4.29.1, 8.1.4, 9.13.1, 9.15.1, 10.2.2, 10.2.3, 10.2.3C, 10.3.2, 10.5.1 and the Glossary.	*Wholesale Electricity Market Rules Amending Rules 2018*.
29 June 2018 (8:00 AM)	Minister amended section 1.27 (new) and the Glossary.	*Wholesale Electricity Market Rules Amending Rules 2018 (No. 2).*
29 June 2018 (1:00 PM)	Minister amended section 1.20 (new) and the Glossary.	*Wholesale Electricity Market Rules Amending Rules 2018 (No. 3).*
1 August 2018	Rule Change Panel amended section 1.26 (new).	RC_2017_06
1 September 2018	Rule Change Panel amended Appendix 5.	RC_2018_01
18 October 2018	Rule Change Panel amended clause 1.27.1.	RC_2018_04

Date	Amendment	Rule Change Reference
11 January 2019	Rule Change Panel amended clauses 2.12.1, 2.12.2, 2.12.3, 2.12.4, 2.12.5, 2.13.15, 2.13.16, 2.16.9FA, 2.30A.6, 2.31.23, 2.33.2, 2.33.5, 2.34.14, 2.38.4, 3.2.5, 3.5.1, 3.11.8A, 3.16.4, 3.16.9, 3.21B.8, 3.22.1, 4.5.1, 4.5.2, 4.7.1, 4.13.11B, 4.27.2, 4.27.10, 4.27.10A, heading to 5.1, 5.1.1, 5.1.2, 5.1.3, 5.1.4, 5.2.1, 5.2.2, 5.2.3, 5.2.4, 5.2.5, 5.2.6, 5.2.7, 5.3.1, 5.3.2, 5.3.3, 5.3.4, 5.3.5, 5.3.6, 5.3.7, 5.3.8, 5.3.9, 5.4.1, 5.4.2, 5.4.3, 5.4.4, 5.4.5, 5.4.6, 5.4.7, 5.4.8, 5.4.9, 5.4.10, 5.4.11, 5.4.12, 5.4.13, 5.4.14, 5.5.1, 5.5.2, 5.5.3, 5.5.4, 5.6.1, 5.6.2, 5.6.3, 5.8.1, 5.8.2, 5.8.3, 5.8.4, 5.8.5, 5.8.6, 5.8.7, 5.8.8, 6.2.4C, 8.4.5, 8.6.1, 9.3.2, 9.4.7, 9.9.3A, 9.12.1, 9.12.2, 9.14.2, 9.20.1, the Glossary and Appendix 1.	RC_2014_07
1 June 2019	Rule Change Panel amended clauses 2.31.13, 2.33.5, 4.1.23A(new), 4.1.23B(new), 4.1.23C(new), 4.1.24, 4.1.25, 4.1.28, 4.14.1, 4.14.1A, 4.14.5, 4.15.1, 4.20.5B, heading to 4.21, 4.21.1, 4.25.4C, 4.25.4CA(new), 4.26.2CA, 4.28.1, 4.28.2, 4.28.3, 4.28.6, 4.28.7, 4.28.7A, 4.28.8, 4.28.8A, 4.28.8B, 4.28.8C(new), 4.28.9, 4.28.10, 4.28.11, 4.28.11A, 4.28.12, 4.28A.1, 4.28B.8, 4.28C.14, 4.29.3, 9.3.6, 9.4.1, 9.4.1A, 9.4.2, 9.4.3, 9.4.4, 9.4.5, 9.4.6, 9.4.7, 9.4.8, 9.4.9, 9.4.10, 9.4.11, 9.4.12, 9.4.13, 9.4.14(new), 9.4.15(new), 9.4.16(new), 9.4.17(new), 9.4.18(new), 9.5.1, 9.5.3, 9.7.1A, 9.7.1B, 9.16.2, 9.18.3, 10.5.1, the Glossary, Appendix 1, Appendix 4A, Appendix 5 and Appendix 5A.	RC_2017_06
1 July 2019	Rule Change Panel amended clauses 2.13.9, 2.16.2, 2.16.4, 2.16.12, 2.22A.1, 2.26.3, 2.27.1, 2.27.5, 2.27.15, 2.29.1A, 2.29.5, 2.29.8, 2.29.8A, 2.30B.2, 2.30B.13, 2.34.3, 2.34.8, 2.34.14, 2.35.1, 2.36.1, 2.37.5, 3.9.2, 3.9.6, 3.13.2, 3.13.3A, 3.13.3AB, 4.1.26, 4.10.1, 4.11.4, 4.12.1, 4.12.4, 4.18.1, 4.18.2, 4.25.2, 4.25.4, 4.26.2, 4.26.2B, 4.26.5, 6.3A.2, 6.3A.4, 6.3B.1, 6.4.1, 6.4.2, 6.4.3, 6.4.4, 6.4.5, 6.4.6, 6.4.6A (new), 6.4.6B (new), heading to 6.5, 6.5.1, 6.5.1A, 6.5.1B, 6.5.2, 6.5.3, 6.5.3A, 6.5.4, heading to 6.5A, heading to 6.5B, heading to 6.5C, 6.5C.1, 6.5C.1A, 6.5C.2, 6.5C.3, 6.5C.4, 6.5C.5, 6.5C.6, 6.5C.7, 6.6.9, heading to 6.11, 6.11.1, 6.11.2, 6.11.3, 6.11A.1, 6.12.1, heading to 6.13, 6.15.1, 6.15.2, 6.16A.1, 6.16A.2, 6.16B.1, 6.16B.2, 6.17.1, 6.17.3, 6.17.4, 6.17.5, 6.17.5A, 6.17.6, 6.17.6A, 6.17.6C, 6.17.7, 6.17.9, 6.21.2, 7.1.1, 7.2.2, heading to 7.4, 7.4.1, 7.4.2, 7.4.3, 7.4.4, heading to 7.5, 7.5.1, 7.5.2, 7.5.3, 7.5.4, 7.5.5, 7.5.6, 7.6.1C, 7.6.2B, heading to 7.6A, 7.6A.1, 7.6A.2, 7.6A.3, 7.6A.5, 7.7.4A, 7.7.5, 7.9.4, 7.9.8, 7.11.5, 7.13.1, 7A.1.3, 7A.1.6, 7A.2.1, 7A.2.3, 7A.2.4, 7A.2.4A (new), 7A.2.4B (new), 7A.2.4C (new), 7A.2.8, 7A.2.9, 7A.2.10, 7A.2.10A (new), 7A.2.12, 7A.2.13, heading to 7A.3, 7A.3.1, 7A.3.2, 7A.3.3, 7A.3.4, 7A.3.5, 7A.3.6, 7A.3.8, 7A.3.9A (new), 7A.3.10, 7A.3.13,	RC_2014_06

Date	Amendment	Rule Change Reference
	7A.3.16, 7A.3.17, 7A.3.18, 7A.3.19, 7A.3.20, 7A.3.21, 7B.1.4, 7B.1.5, 7B.2.1, 7B.2.2, 7B.2.3, 7B.2.4, 7B.2.5, 7B.2.6, 7B.2.10, 7B.2.18, 7B.2.19, heading of 7B.3, 7B.3.1, 7B.3.2, 7B.3.3, 7B.3.4, 7B.3.5, 7B.3.6, 7B.3.7, 7B.3.8, 7B.3.9, 7B.3.10, 7B.3.11, 7B.3.12, 7B.3.14, 7B.3.15, 7B.3.16, heading to 7B.4, 7B.4.1, 9.3.3, 9.3.4, 9.3.7, 9.8.1, 9.9.2, 9.11.1, 9.13.1, 9.18.3, 9.24.2, 10.5.1, 10.7.1, the Glossary, Appendix 1, and Appendix 9.	
1 July 2019	Rule Change Panel amended clauses 7.7.3A, 7.7.6, 7.7.7B (new), 7.7.11 (new), and the Glossary.	RC_2018_07
1 July 2019	Rule Change Panel amended clause 2.34.14.	RC_2014_07
1 August 2019	Rule Change Panel amended clauses 1.14.1, 1.16.1, 1.17.1, 1.18.2, 2.2.2, 2.9.2D (new), 2.9.2E (new), 2.9.5, 2.11.1, 2.11.2, 2.13.2, 2.13.3, 2.13.6A, 2.13.6K, 2.13.9C, heading to section 2.15, 2.15.1, 2.15.2, 2.15.3, 2.15.6A, 2.15.6B, 2.15.6C, 2.15.7, 2.27.6, 2.27.10, 2.27.15, 2.27.17, 2.30.11, 2.30A.6, 2.31.23, 2.35.4, 2.36.5, 2.36A.1, 2.36A.2, 2.36A.5, 2.37.8, heading to section 2.43, 2.43.1, 3.2.2, 3.2.4, 3.2.6, 3.2.8, 3.3.3, 3.4.9, 3.5.11, 3.11.14, 3.11.15, 3.16.4, 3.16.7, 3.16.8A, 3.16.10, 3.17.10, 3.18.3, 3.18.15, 3.18.21, 3.19.10, 3.19.14, 3.21.12, 3.21A.15, 3.21B.5, 3.21B.8, 4.5.14, 4.5.14B, 4.5.15, 4.5.16, 4.5.17, 4.9.10, 4.13.8, 4.14.11, 4.17.9, 4.24.18, 4.25.14, 4.25A.1, 4.27.12, 4.28A.3, 4.28B.9, 4.28C.15, 6.17.6F, 6.19.6, 6.19.10, 7.2.5, 7.6.13, 7.6A.7, 7.6A.8, 7.6A.10, 7.7.4A, 7.7.5A, 7.7.5B, 7.7.6, 7.9.19, 7.10.4, 7.13.1, 7.13.3, 7A.1.6, 7A.3.1, 7A.3.2, 7A.3.3, 7A.3.4, 7A.3.7, 7A.3.7A, 7A.3.15, 7B.1.2, 7B.1.4, 7B.3.2, 8.6.2, heading to section 9.2, 9.2.1, 9.4.18, 9.20.1, 10.2.7, the Glossary and Appendix 9.	RC_2015_01
1 September 2019	Rule Change Panel amended clause 2.30.7A and Appendix 2.	RC_2018_06
1 October 2019	Rule Change Panel amended clauses 2.24.1, 4.26.2CB (new), 4.26.2CC (new), 4.26.2CD (new), 4.26.2CE (new), 4.26.2CF(new), 4.26.2CG (new), 4.26.2CH (new), 4.28.8, 4.28.8C, 4.28.9A (new), 4.28.9B (new), 4.28.9C (new), 4.28.9D (new), 4.28.9E (new), 4.28.9F (new), the Glossary, Appendix 5A and Appendix 10.	RC_2015_03
1 November 2019	Minister amended section 1.28 (new) and the Glossary.	*Wholesale Electricity Market Amendment (AEMO to provide information to the Minister) Rule 2019*.
1 February 2020	Rule Change Panel amended clauses 2.34.4, 3.18.1, 3.18.1A (new), 3.18.1B (new), 3.18.2, 3.18.2A, 3.18.3, 3.18.4, 3.18.4A, 3.18.5, 3.18.5C, 3.18.5D, 3.18.5E (new), 3.18.6, 3.18.6A (new),	RC_2013_15

Date	Amendment	Rule Change Reference
	3.18.7, 3.18.8, 3.18.9, 3.18.9A (new), 3.18.9B (new), 3.18.10, 3.18.10A (new), 3.18.10B (new), 3.18.10C (new), 3.18.11, 3.18.14, 3.18.15, 3.18.16, 3.18.17, 3.18.20, 3.19.1, 3.19.2, 3.19.2A (new), 3.19.2B (new), 3.19.2C (new), 3.19.2D (new), 3.19.2E (new), 3.19.2F (new), 3.19.2G (new), 3.19.2H (new), 3.19.3, 3.19.3A, 3.19.3B (new), 3.19.3C (new), 3.19.4, 3.19.4A (new), 3.19.6, 3.19.11, 3.19.12, 3.19.13, 3.20.1, 3.21A.14, 7.1.1, 7A.2.4C, 7A.2.6, 7A.2.8A (new), 7A.2.9, 7A.2.9A (new), 7A.2.9B (new), 7A.2.9C (new), heading to section 7A.2A (new), 7A.2A.1 (new), 7A.2A.2 (new), 7A.2A.3 (new), 7A.2A.4 (new) and the Glossary.	
22 February 2020	Minister amended heading to section 1.28, sections 1.29 (new), 1.30 (new), 1.31 (new), 1.32 (new), clauses 2.4A.1, 2.4A.2, 2.8.13, 2.17.1, 2.26.3, 2.26.3A (new), 2.26.4, 2.29.5E, 2.30.1, 2.30.5, 2.38.3, 2.38.4, 2.43.1, 3.16.4, 4.1.1, 4.1.1A, 4.1.1B (new), 4.1.1C (new), 4.1.13, 4.1.15, 4.1.16A, 4.1.18A (new), 4.1.21, 4.1.21A, 4.1.26, 4.1.29, 4.1.31, 4.1.32, 4.2.7, 4.3.1, section 4.4A (new), clauses 4.6.4, 4.6.5, 4.7.3, 4.9.5, 4.9.9, heading before section 4.13, heading to section 4.13, 4.13.1, 4.13.2, 4.13.4, 4.13.5, 4.13.7, 4.13.8, 4.13.9, 4.13.12, 4.13.14, section 4.13A (new), heading before section 4.14 (new), clauses 4.14.1, 4.14.1A, 4.14.1B (new), 4.14.1C (new), 4.14.2, 4.14.6, 4.14.9, 4.14.10, 4.14.11, 4.15.2, 4.17.10, 4.18.1, 4.18.2, 4.20.1, 4.20.5A, 4.20.5AA (new), 4.20.5B, 4.25.1, 4.25.4B, 4.25.4E, 4.26.1, 4.28.2, 4.28.3, 4.28.4, 4.28A.1, 4.28B.8, 4.28C.13, 4.28C.14, 4.29.1, 4.29.1A (new), 4.29.1B (new), 4.29.1C (new), 4.29.1D (new), 4.29.2, 4.29.2A (new), 4.29.2B (new), 4.29.3, heading to section 6.11A, clauses 6.11A.2, 6.17.6D, 7.6.1C, 7.6.1H, 7.7.4A, 9.4.9, 9.4.10, 9.5.1, 9.7.1A, 9.9.2, 10.5.1, the Glossary, Appendix 1 and Appendix 3.	*Wholesale Electricity Market Amendment (Reserve Capacity Pricing Reforms) Rules 2019 (Part 1)*.
30 March 2020	Rule Change Panel amended clause 9.13.1.	RC_2020_01
24 June 2020	Rule Change Panel amended clause 7.7.5A and Appendix 9.	RC_2020_03
1 July 2020	Minister amended clauses 1.4.1, 1.5.1, 1.7.4 (new), sections 1.33 (new), 1.34 (new), heading to section 2.1A, clause 2.1A.2, section 2.2C (new), clauses 2.3.1, 2.9.2CA (new), 2.10.1, 2.10.2, 2.10.2A, 2.10.3, 2.10.5D (new), 2.10.7, 2.10.9, 2.10.12D (new), 2.10.13, 2.10.17, 2.10.18, 2.11.1, 2.11.2, 2.11.3, 2.11.4, 2.17.1, 2.17.2, 2.21.9 (new), 2.21.10 (new), 2.22A.1, heading before sections 2.27A (new), 2.27A (new), 2.27B (new), 2.27C (new), clauses 10.3.2, 10.5.2 and the Glossary.	*Wholesale Electricity Market Amendment (Constraints Framework and Governance) Rules 2020*.

Date	Amendment	Rule Change Reference
1 July 2020	Minister amended section 1.20A (new), clause 2.1A.2, heading before section 3.24 (new), section 3.24 (new) and the Glossary.	*Wholesale Electricity Market Amendment (Distributed Energy Resources Register and Roadmap Implementation – Costs) Rules 2020.*
2 July 2020	Rule Change Panel amended clauses 6.15.4, 9.2.1, 9.16.2, 9.16.3, 9.16.3A, 9.16.4, 9.17.3, 9.18.1, 9.18.2, 9.18.3, 9.18.4, 9.19.1, 9.19.1A, 9.19.1B (new), 9.19.3, 9.19.5, 9.19.6, 9.19.7, 9.20.3, 9.20.4, 9.20.4A (new), 9.20.5, 9.20.6, 9.20.7, 9.20.7A (new), 9.20.7B (new), 9.20.8, 9.21.1, 9.22.2, 9.22.4, 9.22.6, 9.22.7, 9.22.8, 9.23.1, 9.23.4, 9.23.5, 9.23.6, 9.23.7, 9.24.1, 9.24.2, 9.24.4, 9.24.5, 9.24.6, 9.24.7, 9.24.8, 9.24.8A, 9.24.9, 9.24.10 and the Glossary.	RC_2019_04
21 July 2020	Rule Change Panel amended clauses 2.13.3A, 2.13.3B, 2.13.9A, 2.13.9B, 2.15.4, 2.16.9G and 2.16.14.	RC_2018_05
7 August 2020	Rule Change Panel amended section 1.35 (new), clauses 2.26.1, 6.20.9, 6.20.9A, 6.20.10, 6.20.11, 6.20.12 (new), 6.20.13 (new), 6.20.14 (new), 6.20.15 (new), 6.20.16 (new), 6.20.17 (new), 6.20.18 (new), 6.20.19 (new), 6.20.20 (new), 6.20.21 (new), 6.20.22 (new), 6.20.23 (new), 6.20.24 (new), 6.20.25 (new), 6.20.26 (new), 6.20.27 (new), 6.20.28 (new), 6.20.29 (new), 6.20.30 (new), 10.5.1,10.7.2 (new) and the Glossary.	RC_2019_05
25 November 2020	Minister amended section 1.36 (new) and the Glossary.	*Wholesale Electricity Market Amendment (Tranche 1 Amendments) Rules 2020, Schedule A.*
1 December 2020	Rule Change Panel amended clauses 7A.1.16, 7A.1.17, 7A.2.6, 7A.2.9, 7A.2.12, 7A.2A.4, 7A.3.5, 7B.2.4 and the Glossary.	RC_2017_02
1 January 2021	Minister amended clauses 2.1A.2, 2.22A.1 and the Glossary.	*Wholesale Electricity Market Amendment (Technical Rules Change Management) Rules 2020.*
1 January 2021	Minister amended clause 2.1A.2.	*Wholesale Electricity Market Amendment (Tranche 1 Amendments) Rules 2020, Schedule B, Part 1.*
1 January 2021	Minister amended sections 1.36A (new), 1.36B (new) and 1.36C (new).	*Wholesale Electricity Market Amendment (Tranches 2 and 3 Amendments) Rules 2020, Schedule A.*
1 February 2021	Minister amended heading above section 1.1, heading to section 1.1, clauses 1.1.2, 1.3.1, 1.4.1, 1.4.2, 1.4.3, 1.5.1, 1.5.2, 1.6.1, 1.6.2, 1.7.1, 1.7.3,	*Wholesale Electricity Market Amendment (Tranche 1 Amendments)*

Date	Amendment	Rule Change Reference
	1.7.4, 1.7.5 (new), heading to section 1.8, clauses 1.8.1, 1.8.2, 1.8.3, 1.8.5, 1.8.6, heading to section 1.12, 1.12.1, 1.12.2, heading to section 1.13, clauses 1.13.1, 1.13.2, heading to section 1.14, clauses 1.14.1, 1.14.2, 1.14.3, 1.14.4, heading to section 1.15, clauses 1.15.1, 1.15.2, 1.15.3, heading to section 1.16, clauses 1.16.1, 1.16.2, 1.16.3, 1.16.4, 1.16.5, 1.16.6, heading to section 1.17, clauses 1.17.1, 1.17.2, 1.17.3, 1.17.4, 1.17.5, heading to section 1.18, clauses 1.18.1, 1.18.2, 1.18.3, 1.18.4, heading to section 1.19, clauses 1.19.1, 1.19.2, 1.19.3, 1.20.1, 1.20.2, 1.20.5, section 1.21, section 1.22, clauses 1.24.1, heading to section 1.25, clauses 1.25.1, 1.25.2, 1.25.3, 1.25.4, 1.26.1, 1.27.1, 1.28.1, 1.28.3, 1.29.2, 1.30.1, 1.33.2, 1.34.1, 1.36.1, 1.36.7, section 1.37 (new), 1.38 (new), 1.39 (new), 1.40 (new), 1.41 (new), 1.42(new), clauses 2.1A.1A (new), 2.1A.2, 2.1A.3, 2.1A.4 (new), 2.1A.5 (new), 2.1A.6 (new), 2.1A.7 (new), 2.1A.8 (new), heading to section 2.2, clauses 2.2.1, 2.2.2, 2.2.3, 2.2.4, 2.2.5, 2.2.6, 2.2.7, 2.2.8, 2.2A.1, 2.2B.2, 2.2B.3, 2.2C.1, section 2.2D (new), clauses 2.3.1, 2.3.3, 2.3.5, 2.3.15, 2.3.17, heading to section 2.4, clauses 2.4.1, 2.4.1A, 2.4.2, 2.4.4, heading to section 2.4A, clauses 2.4A.2, 2.5.4, 2.5.7, 2.8.4, 2.8.5, 2.8.7, 2.8.13, heading to section 2.9, clauses 2.9.2, 2.9.2A, 2.9.2B, 2.9.2C, 2.9.2CA, 2.9.2CB (new), 2.9.2D, 2.9.3, 2.9.4, 2.9.5, 2.9.7, 2.9.7A, 2.9.7B, 2.9.7C, 2.9.8, 2.10.1, 2.10.2, 2.10.2A, 2.10.3, 2.10.5A, 2.10.5E (new), 2.10.6, 2.10.7, 2.10.9, 2.10.10, 2.10.12A, 2.10.12E (new), 2.10.13, 2.10.17, 2.10.18, 2.11.1, 2.11.2, 2.11.3, 2.11.4, heading to section 2.13, clauses 2.13.2, 2.13.3, 2.13.3A, 2.13.4, 2.13.6, 2.13.6A, 2.13.6B, 2.13.6C, 2.13.6D, 2.13.6E, 2.13.6F, 2.13.6G, 2.13.6H, 2.13.6K, 2.13.7, 2.13.8, 2.13.9, 2.13.9A, 2.13.9C, 2.13.9D, 2.13.10, 2.13.11, 2.13.12, 2.13.13, 2.13.15, 2.13.16, 2.13.18, 2.13.23, 2.14.3, 2.14.5A, 2.14.5B, 2.14.5C, 2.15.1, 2.15.2, 2.15.3, 2.15.4, 2.15.6A, 2.15.6B, 2.15.6C, 2.16.2, 2.16.7, 2.16.9, 2.16.9D, 2.16.9FA, 2.16.10, 2.16.12, 2.16.14, 2.17.1, 2.17.2, 2.18.1, 2.18.2, 2.18.4, 2.21.1, 2.21.3, 2.21.4, 2.21.5, 2.21.7, 2.21.9, 2.21.11 (new), 2.21.12 (new), heading to section 2.22A, clauses 2.22A.1, 2.22A.2, 2.22A.2A, 2.22A.4, 2.22A.5, 2.22A.7, 2.22A.11, 2.22A.12, 2.22A.14, 2.24.1, 2.24.2, 2.24.2A, 2.24.2B, 2.24.3, 2.24.4, 2.24.5, 2.24.5B, 2.24.6, 2.25.1, 2.25.2, 2.25.4, 2.26.3, 2.27.6, 2.27.10, 2.27.14, 2.27.15, 2.27.17, 2.27A.2, 2.27A.3, 2.27A.4, 2.27A.6, 2.27A.7, 2.27A.10, 2.27A.11, 2.27B.2, 2.27B.3, 2.27B.4, 2.27B.6, 2.27B.8, 2.27C.2, 2.28.1, 2.28.3, 2.28.3A, 2.28.3B, 2.28.3C, 2.28.11A, 2.28.11B, 2.28.13, 2.28.14, 2.28.14A, 2.28.16A, 2.28.16B, 2.28.17, 2.28.19, 2.29.1, 2.29.6, 2.29.7, 2.29.10, 2.30.5, 2.30.7, 2.30.10, 2.30.11, 2.30A.6, 2.30B.3, 2.30B.10,	*Rules 2020, Schedule B, Part 2.*

Date	Amendment	Rule Change Reference
	2.30C.1, 2.30C.2, 2.30C.3, 2.30C.4, 2.31.1, 2.31.6, 2.31.7, 2.31.8, 2.31.9, 2.31.13, 2.31.17, 2.31.22, 2.31.23, 2.32.8, 2.33.1, 2.34.2, 2.34.2A, 2.34.7, 2.35.1, 2.35.2, 2.35.4, 2.36.1, 2.36.5, 2.36A.1, 2.36A.2, 2.36A.3, 2.36A.4, 2.37.4, 2.37.7, 2.37.8, 2.38.3, 2.38.4, 2.38.7, 2.40.1, 2.41.5, 2.42.4, 2.43.1, 2.44.1, 3.2.2, 3.2.4, 3.2.5, 3.2.6, 3.2.7, 3.2.8, 3.3.1, 3.3.2, 3.3.3, 3.4.1, 3.4.2, 3.4.3, 3.4.4, 3.4.5, 3.4.6, 3.4.7, 3.4.8, 3.4.9, 3.5.1, 3.5.2, 3.5.3, 3.5.4, 3.5.5, 3.5.6, 3.5.7, 3.5.8, 3.5.9, 3.5.10, 3.5.11, 3.6.1, 3.6.2, 3.6.4, 3.6.5, 3.6.6, 3.6.6A, 3.6.6B, 3.7.1, 3.7.2, 3.7.3, 3.7.5, 3.7.6, 3.8.3, 3.8.4, 3.8.5, 3.8.5A, section 3.8A (new), clauses 3.10.2, 3.10.4, 3.10.5, 3.10.6, 3.11.1, 3.11.2, 3.11.3, 3.11.4, 3.11.6, 3.11.7, 3.11.7A, 3.11.8, 3.11.8A, 3.11.8B, 3.11.8E, 3.11.9, 3.11.10, 3.11.11, 3.11.12, 3.11.13, 3.11.14, 3.11.15, 3.12.1, 3.13.3, 3.13.3A, 3.13.3C, 3.16.1, 3.16.3, 3.16.4, 3.16.5, 3.16.6, 3.16.7, 3.16.8, 3.16.8A, 3.16.9, 3.16.10, 3.17.1, 3.17.4, 3.17.5, 3.17.6, 3.17.7, 3.17.8, 3.17.9, 3.17.10, 3.18.1B, 3.18.2, 3.18.2A, 3.18.3, 3.18.4, 3.18.4A, 3.18.5, 3.18.5A, 3.18.5B, 3.18.5C, 3.18.5D, 3.18.5E, 3.18.7A, 3.18.8, 3.18.9, 3.18.9A, 3.18.9B, 3.18.10, 3.18.10A, 3.18.10B, 3.18.10C, 3.18.11, 3.18.11A, 3.18.12, 3.18.13, 3.18.14, 3.18.15, 3.18.16, 3.18.17, 3.18.18, 3.18.19, 3.18.21, 3.19.1, 3.19.2, 3.19.2A, 3.19.2B, 3.19.2C, 3.19.2D, 3.19.2F, 3.19.2G, 3.19.2H, 3.19.3, 3.19.3A, 3.19.3B, 3.19.3C, 3.19.4, 3.19.4A, 3.19.5, 3.19.6, 3.19.7, 3.19.8, 3.19.9, 3.19.10, 3.19.11, 3.19.12, 3.19.13, 3.19.14, 3.20.1, 3.20.2, 3.20.3, 3.21.1, 3.21.2, 3.21.2A, 3.21.3, 3.21.4, 3.21.5, 3.21.6, 3.21.7, 3.21.8, 3.21.9, 3.21.10, 3.21.11, 3.21.12, 3.21A.2, 3.21A.3, 3.21A.4, 3.21A.6, 3.21A.7, 3.21A.8, 3.21A.9, 3.21A.10, 3.21A.11, 3.21A.12, 3.21A.13, 3.21A.15, 3.21A.17, 3.21B.1, 3.21B.2, 3.21B.3, 3.21B.4, 3.21B.5, 3.21B.6, 3.21B.7, 3.21B.8, 3.23.1, 3.24.1, 3.24.2, 3.24.3, 3.24.5, 3.24.6, 3.24.7, 3.24.8, 3.24.9, 3.24.10, 3.24.11, 3.24.12, 3.24.14, 3.24.15, 3.24.16, Chapter 3A (new), Chapter 3B (new), 4.1.1C, 4.1.10, 4.1.34, 4.1.36, 4.1.37, 4.3.1, 4.4A.2, 4.4A.4, 4.4A.7, 4.5.7, 4.5.14, 4.5.14B, 4.5.14C, 4.5.14D, 4.5.14E, 4.5.14F, 4.5.15, 4.5.16, 4.5.17, 4.5.20, 4.7.2, 4.7.3, 4.9.3, 4.9.10, 4.10.1, 4.10A.6, 4.11.1, 4.11.1A, 4.11.1B, 4.11.6, 4.12.1, 4.12.6, 4.13.4, 4.13.5, 4.13.8, 4.13.9, 4.13.10A, 4.13.10C, 4.13A.6, 4.13A.12, 4.13A.14, 4.13A.23, 4.13A.25, 4.14.2, 4.14.8, 4.14.11, 4.16.3, 4.16.5, 4.16.6, 4.16.7, 4.16.8, 4.16.9, 4.17.1, 4.17.4, 4.17.9, 4.20.3, 4.20.7, 4.20.13, 4.24.6, 4.24.13, 4.24.18, 4.24.19, 4.25.2, 4.25.3A, 4.25.3B, 4.25.4, 4.25.4CA, 4.25.5, 4.25.6, 4.25.9, 4.25.14, 4.25A.1, 4.26.1C, 4.26.2, 4.26.2CB, 4.26.2CD, 4.26.2CE, 4.26.2D, 4.27.3A, 4.27.5, 4.27.12, 4.28.9A, 4.28.9C, 4.28.9D, 4.28.9E, 4.28.12, 4.28A.3, 4.28B.9, 4.28C.15,	

Date	Amendment	Rule Change Reference
	5.2A.3, 5.3A.3, 5.3A.4, 5.7.2, 5.7.4, 5.9.3, 6.3A.2, 6.3A.3, 6.12.1, 6.13.1, 6.15.2, 6.16A.1, 6.16A.2, 6.16B.1, 6.16B.2, 6.17.3, 6.17.4, 6.17.5, 6.17.5A, 6.17.6B, 6.17.6D, 6.17.6E, 6.17.6F, 6.17.9, 6.19.5, 6.19.6, 6.19.10, 6.20.2, 6.20.9, 6.20.9A, 6.20.11, 6.20.24, 7.1.1, 7.1.2, 7.1.3, 7.2.1, 7.2.3A, 7.2.4, 7.2.5, 7.2.6, 7.3.4, 7.6.1, 7.6.1A, 7.6.1B, 7.6.1C, 7.6.1D, 7.6.1E, 7.6.1F, 7.6.1H, 7.6.2A, 7.6.10, 7.6.10A, 7.6.11, 7.6.12, 7.6.13, 7.6A.1, 7.6A.2, 7.6A.3, 7.6A.4, 7.6A.5, 7.6A.6, 7.6A.7, 7.6A.8, 7.6A.10, 7.7.1, 7.7.2, 7.7.4A, 7.7.5, 7.7.5A, 7.7.5B, 7.7.5C, 7.7.5D, 7.7.6, 7.7.6A, 7.7.6B, 7.7.6C, 7.7.7, 7.7.7A, 7.7.7B, 7.7.8, 7.7.9, 7.7.10, 7.7.11, heading to section 7.8, clauses 7.8.1, 7.8.2, 7.8.3, 7.9.1, 7.9.1A, 7.9.2, 7.9.3, 7.9.4, 7.9.5, 7.9.6, 7.9.6A, 7.9.7, 7.9.8, 7.9.9, 7.9.10, 7.9.12, 7.9.13, 7.9.14, 7.9.15, 7.9.16, 7.9.17, 7.9.18, 7.9.19, 7.10.2, 7.10.3, 7.10.3A, 7.10.4, 7.10.4A, 7.10.5, 7.10.6A, 7.10.7, 7.10.8, 7.11.2, 7.11.3, 7.11.3A, 7.11.4, 7.11.5, 7.11.6, 7.11.6A, 7.11.6B, 7.11.7, 7.11.9, 7.12.1, 7.12.2, 7.13.1, 7.13.1A, 7.13.1B, 7.13.1C, 7.13.1D, 7.13.1E, 7.13.1F, 7.13.1G, 7.13.2, 7.13.3, 7.13.4, 7.13.5, 7A.1.6, 7A.1.11, 7A.1.12, 7A.1.15, 7A.1.16, 7A.2.9, 7A.2.9B, 7A.2.9C, 7A.2.18, 7A.2A.1, 7A.2A.2, 7A.2A.3, 7A.2A.4, 7A.3.1, 7A.3.2, 7A.3.3, 7A.3.4, 7A.3.7, 7A.3.7A, 7A.3.8, 7A.3.9, 7A.3.15, 7A.4.2, 7A.4.7, 7B.1.2, 7B.1.4, 7B.1.5, 7B.2.18, 7B.2.19, 7B.3.1, 7B.3.2, 7B.3.6, 7B.3.7, 7B.3.8, 7B.4.1, 7B.4.2, 8.6.2, 8.7.1, 8.8.1, 9.1.1, 9.1.2, 9.1.3, 9.2.1, 9.3.4, 9.4.5, 9.4.10, 9.4.15, 9.4.17, 9.4.18, 9.7.2, 9.9.2, 9.13.1, 9.15.1, 9.16.2, 9.16.3, 9.16.3A, 9.19.1, 9.20.1, 9.20.4, 9.20.5, 9.20.6, 9.22.4, 9.22.5, 9.22.9, 9.22.11, 9.23.1, 9.23.4, 9.24.1, 9.24.2, 9.24.3, 9.24.3A, 10.2.1, 10.2.2, 10.2.3, 10.2.3A, 10.2.3B, 10.2.7, heading to section 10.3, clauses 10.3.1, 10.3.2, 10.4.2, heading above section 10.5, clauses 10.5.1, 10.5.3, 10.7.1, heading to section 10.9, clause 10.9.1, the Glossary, Appendix 1, Appendix 5A, Appendix 9, Appendix 11, Appendix 12 (new) and Appendix 13 (new).	
1 February 2021	Minister amended clauses 1.4.1, 1.36A.2, 1.36A.3, 1.36A.6, 1.36A.7, 1.36B.2, 1.36B.3, 1.36B.6, 1.36B.7, 2.9.2D, 2.10.10, 2.10.13, 2.36A.2, 2.36A.5, 3.13.3B, 4.16.3 and 7.6A.5.	*Wholesale Electricity Market Amendment (Tranches 2 and 3 Amendments) Rules 2020, Schedule B.*
1 February 2021	Minister amended Appendix 12.	*Wholesale Electricity Market Amendment (Governance) Rules 2021, Schedule A.*
1 February 2021	Minister amended section 1.45 (new), section 4.2 (replaced), section 4.3 (replaced), heading to section 4.4, clauses 4.4.1, 4.8.2, 4.8.3, heading above section 4.8A (new), section 4.8A (new), clauses 4.9.1, 4.9.3, 4.9.5, 4.9.7A (new), 4.9.8,	*Wholesale Electricity Market Amendment (Tranches 2 and 3 Amendments) Rules 2020, Schedule C (in*

Date	Amendment	Rule Change Reference
	4.9.9, 4.10.1, 4.10.2, 4.10.3, 4.10.3A and the Glossary.	*accordance with notice in Gazette 2021/20)*.
29 June 2021	Rule Change Panel amended clauses 3.18.1A, 3.18.2A, 3.18.4A, 3.18.9A, 3.19.2E, 3.21.1, 3.21.2, 3.21.2B (new), 3.21.3, 3.21.4, 3.21.4A (new), 3.21.4B (new), 3.21.5, 3.21.5A (new), 3.21.6, 3.21.6A (new), 3.21.6B (new), 3.21.7, 3.21.8, 3.21.9, 3.21.10, 3.21.11, 3.21.12, 3.21.13 (new), 3.21.14 (new), 3.21.15 (new), 3.21.16 (new), 3.21.17 (new), 4.11.1, 4.12.6, 4.25.3A, 4.25.9, 4.26.1, 4.26.1A, 4.26.1C, 4.26.2, 4.26.6, 6.3A.2, 6.3A.3, 6.15.2, 6.15.3, 6.17.5A, 6.17.9, 6.17.10, 7.3.4, 7.3.5, 7.10.2, 7.13.1A, 7.13.1D, 7.13.1E, 7.13.1F, 7.13.1G, 7A.2.4A, 7A.2.8A, 7A.2.8B (new), 7A.2.10, 7A.2A.1, 7A.2A.2, the Glossary and Appendix 9.	RC_2014_03
1 July 2021	Minister amended clauses 1.4.1, 1.4.2, 1.5.1, 1.5.2, 1.6.1, 1.7.3, 1.7.3A (new), 1.7.5, sections 1.17A (new), 1.18A (new), 1.19A (new), clauses 2.1A.2, 2.2A.1, heading to section 2.2B, clauses 2.2B.1, 2.2B.2, 2.2D.1, 2.3.1, 2.3.1B (new), 2.3.1C (new), 2.3.2, 2.3.4, 2.3.5, 2.3.5A, 2.3.5B (new), 2.3.5C (new), 2.3.7A (new), 2.3.8, 2.3.8A (new), 2.3.8B (new), 2.3.8C (new), 2.3.8D (new), 2.3.8E (new), 2.3.9, 2.3.10, 2.3.11, 2.3.12, 2.3.13, 2.3.15, 2.3.16, 2.3.17, heading to section 2.4, clauses 2.4.1, 2.4.2, 2.4.3, 2.4.3A, 2.5.1, 2.5.1C (new), 2.5.2, 2.5.3, 2.5.3A (new), 2.5.3B (new), 2.5.4, 2.5.5, 2.5.6, 2.5.7, 2.5.8, 2.5.8A (new), 2.5.9, 2.5.10, 2.5.11, 2.5.12, 2.5.14, 2.5.15, 2.6.1, 2.6.2, 2.6.3, 2.6.3A, 2.6.4, 2.7.1, 2.7.2, 2.7.3, 2.7.4, 2.7.5, 2.7.6, 2.7.7, 2.7.7A, 2.7.8, heading to section 2.8, clauses 2.8.1, 2.8.2, 2.8.3, 2.8.5, 2.8.6, 2.8.7, 2.8.9, 2.8.10, 2.8.11, 2.8.12, 2.8.13, 2.9.2C, 2.9.5, 2.9.7C, 2.10.1, 2.10.2, 2.10.2A, 2.10.3, 2.10.5C, 2.10.7, 2.10.9, 2.10.10, 2.10.12C, 2.10.13, 2.10.17, 2.10.18, 2.11.1, 2.11.2, 2.11.4, 2.16.1, 2.16.2, 2.16.4, 2.16.5, 2.16.6, 2.16.7, 2.16.9, 2.16.9A, 2.16.10, 2.16.11, 2.16.12, 2.16.13, 2.16.13A (new), 2.16.13B (new), 2.16.13C (new), 2.16.13D (new), 2.16.13E (new), 2.16.13F (new), 2.16.14, 2.16.15A (new), 2.16.16, 2.17.1, 2.17.2, 2.21.7, 2.21.8, 2.22A.1, 2.24.2, 2.24.2A, 2.24.2B, 2.24.3, 2.24.4, 2.24.5B, 2.24.5C (new), 2.24.5D (new), 2.24.5E (new), 2.24.6, 2.24.6A (new), 2.25.1, 2.25.1A, 2.25.1C (new), 2.25.2, 2.25.3, 2.25.4, 2.25.4A, heading to section 2.26, clauses 2.26.1, 2.26.2, 2.26.3, 2.32.7A, 4.5.14, 4.5.15, 4.5.16, 4.5.17, 4.5.18, 4.5.19, 4.5.20, 4.11.1E, 4.11.1F, 4.16.1, 4.16.3, 4.16.5, 4.16.6, 4.16.7, 4.16.8, 4.24.19, 4.26.1D, 4.26.1E, 6.20.6, 6.20.7, 6.20.9, 6.20.9A, 6.20.10, 6.20.11, 9.1.2, 9.13.1, 10.2.2, 10.2.3, 10.2.3B, 10.2.3BA (new), 10.3.2, 10.5.1 and the Glossary.	*Wholesale Electricity Market Amendment (Governance) Rules 2021, Schedule B*.
1 July 2021	Minister amended clauses 2.29.5B, 2.29.12 (new), 2.29.13 (new), 2.29.14 (new), 2.29.15 (new), section 4.5A (new), clauses 4.8A.7 (new),	*Wholesale Electricity Market Amendment (Tranches 2 and 3*

Date	Amendment	Rule Change Reference
	4.11.1, 4.11.1C, 4.11.1D, 4.11.2, 4.11.3, 4.11.3A, 4.11.3B, 4.11.3BA (new), 4.11.4, 4.11.5, 4.11.6, 4.11.7, 4.11.8, 4.11.9, 4.11.10A, the Glossary and Appendix 9 (replaced).	*Amendments) Rules 2020, Schedule C (in accordance with notice in Gazette 2021/20).*
1 July 2021	Minister amended section 1.43 (new), clause 1.45.6 (new), section 2.34A (new), section 2.36A (replaced), clauses 4.4A.1, 4.4A.2, 4.16.2, 4.28C.7 and 4.28C.11.	*Wholesale Electricity Market Amendment (Tranches 2 and 3 Amendments) Rules 2020, Schedule C (in accordance with notice in Gazette 2021/96).*
1 July 2021	Minister amended section 1.36D (new), clauses 1.43.1, 1.45.1, 1.45.4, 1.45.5, 1.45.6, 1.45.6A (new), 1.45.8, 1.45.9, 1.45.10, 1.45.11 (new), sections 1.49 (new), 1.50 (new), clauses 2.9.4, 2.11.3, 2.29.5B, 2.29.12, 2.29.13, 2.29.14, 2.29.15, heading before clause 2.34A.1 (new), clauses 2.34A.2, 2.34A.4, 2.34A.4C (new), 2.34A.6, 2.34A.9, 2.34A.12, 2.34A.12A (new), 2.34A.12B (new), 2.34A.12C (new), 2.34A.12D (new), 2.34A.12E (new), 2.34A.12F (new), 2.34A.12G (new), 2.34A.12H (new), 2.34A.14 (new), 2.36A.1, section 3.1A (new), clauses 3.8.5A, 4.2.1, 4.2.7, 4.8A.1, 4.8A.3, 4.8A.5, 4.8A.6, 4.8A.7, 4.10.1, 4.11.1, 4.13.10B, 6.20.7, 9.15.1, 9.24.3A, the Glossary and Appendix 9 (replaced).	*Wholesale Electricity Market Amendment (Miscellaneous Amendments No. 1) Rules 2021, Schedule A.*
1 August 2021	Minister amended clause 4.8A.7 (new).	*Wholesale Electricity Market Amendment (Miscellaneous Amendments No. 1) Rules 2021, Schedule B.*
1 October 2021	Minister amended clauses 2.31.13, 2.34.7, 2.34.14, 4.5.13, 4.5.14A, 4.5.14B, 4.5.14C, 4.5.14D, 4.5.14E, 4.5.14F, 4.25.1, 4.25.2, 4.25.3B, 4.25.4, 4.25.4B, 4.25.4CA, 4.25.4E, 4.25.4G (new), 4.25.4H (new), 4.25.4I (new), 4.25.9, 4.25A.5, 4.26.1, 4.28.1, 4.28.2, 4.28.4, 4.29.3, heading to section 6.11A, clauses 6.11A.1, 6.11A.2, 6.11A.4, 6.12.1, 6.17.6, 6.17.6B, 6.17.6C, 6.17.6D, 6.17.6E, 6.17.6F, 6.17.7, 6.21.2, 7.6.1C, 7.6.1E, 7.6.1H, 7.6.10, 7.7.4A, 9.4.1, 9.4.2, 9.4.4, 9.4.5, 9.4.9, 9.4.10, 9.4.12, 9.4.13, 9.4.14, 9.4.15, 9.4.16, 9.4.17, 9.5.1, 9.5.2, 9.7.1A, 9.7.1B, 9.8.1, 10.5.1, the Glossary, Appendix 1 and Appendix 5.	*Wholesale Electricity Market Amendment (Reserve Capacity Pricing Reforms) Rules 2019 (Part 2).*
1 October 2021	Minister amended clauses 2.31.13, 4.25.2, 4.25.4CA, 9.4.10, 9.4.15 and 9.4.17.	*Wholesale Electricity Market Amendment (Tranche 1 Amendments) Rules 2020, Schedule C.*
1 October 2021	Minister amended clauses 2.35.4 and 2.36A.5.	*Wholesale Electricity Market Amendment (Tranches 2 and 3 Amendments) Rules 2020, Schedule C (in*

Date	Amendment	Rule Change Reference
		accordance with notice in Gazette 2021/96).
1 October 2021	Minister amended heading before clause 2.34A.12I (new), clauses 2.34A.12I (new), 2.34A.12J (new), heading before clause 2.34A.13 (new), clause 2.34A.13 (new), heading before section 7.13A (new), section 7.13A (new) and the Glossary.	*Wholesale Electricity Market Amendment (Miscellaneous Amendments No. 1) Rules 2021, Schedule C.*
1 October 2021	Minister amended clauses 2.36.7, 2.36A.6 (new), section 4.1 (replaced) and clause 4.4A.2.	*Wholesale Electricity Market Amendment (Tranches 2 and 3 Amendments) Rules 2020, Schedule C (in accordance with notice in Gazette 2021/166).*
1 October 2021	Minister amended clause 1.7.3A, heading to section 1.17A, clauses 1.17A.1, 1.19A.2, 1.36B.2A (new), 1.36B.6, sections 1.51 (new), 1.52 (new), clauses 2.3.2, 2.4.3, 2.4.3B (new), 2.4.3C (new), 2.4.3D (new), 2.4.3E (new), 2.4.4, 2.5.1D (new), 2.5.7, 2.5.11, 2.6.1, 2.7.2, 2.7.7, 2.7.8, 2.8.14 (new), 2.9.2D, 2.10.2A, 2.10.9, 2.10.10, 2.10.13, 2.11.2, 2.16.5, 2.16.9D, 2.16.9FA, 2.16.14, 2.24.1, 2.25.1A, 2.25.4, 2.32.7A, 2.34A.6, 2.34A.8, 2.34A.11, 3.13.3A, 3.13.3B, 3.13.3C, 4.4.1, 4.4A.1, 4.8.3, 4.9.3, 4.9.5, 4.9.9, 4.10.2, 4.11.1, 4.11.3, 4.11.3BA, 4.11.6, 4.16.6, 4.16.7, 4.16.8, 6.20.9, 6.20.9A, 10.2.2, 10.2.3, the Glossary, Appendix 9 and Appendix 12.	*Wholesale Electricity Market Amendment (Miscellaneous Amendments No. 2) Rules 2021, Schedule A.*
30 October 2021	Minister amended clause 2.22A.2B (new).	*Wholesale Electricity Market Amendment (Transitional Provisions) Rules 2021.*
1 November 2021	Minister amended clause 4.9.10 and section 4.13B (new).	*Wholesale Electricity Market Amendment (Tranches 2 and 3 Amendments) Rules 2020, Schedule C (in accordance with notice in Gazette 2021/96).*
1 November 2021	Minister amended clauses 4.3.1, 4.4.1, section 4.4B (new), clauses 4.5.2, 4.5.3A, 4.5.9, 4.5.10, 4.5.13, 4.6.1, 4.6.2, 4.6.3, 4.27.2, 4.27.3, 4.27.4, 4.27.4A, 4.27.10, 4.27.11C, section 4.28C (replaced),	*Wholesale Electricity Market Amendment (Tranches 2 and 3 Amendments) Rules 2020, Schedule C (in accordance with notice in Gazette 2021/166).*
1 November 2021	Minister amended section 1.53 (new), clauses 4.5.2, 4.9.10 and 4.28C.8.	*Wholesale Electricity Market Amendment (Miscellaneous Amendments No. 2) Rules 2021, Schedule B.*

Date	Amendment	Rule Change Reference
1 December 2021	Minister amended clauses 2.29.12 and 4.8A.3.	*Wholesale Electricity Market Amendment (Miscellaneous Amendments No. 2) Rules 2021, Schedule C.*
18 December 2021	Minister amended clause 2.1A.2 and the Glossary.	*Wholesale Electricity Market Amendment (Tranches 2 and 3 Amendments) Rules 2020, Schedule C (in accordance with notice in Gazette published on 17 December 2021.*
18 December 2021	Minister amended section 1.20 (deleted), 1.20A (deleted), clauses 1.33.1, 1.36.6, 1.36.7 (new), 1.43.6, 1.43.7 (new), section 1.43A (new), 1.48A (new), clauses 2.1A.2, 2.2A.1, 2.9.2F (new), 2.22A.1, 2.22A.2, 2.22A.2A, 2.22A.2B, 2.22A.3, 2.22A.4, 2.22A.5, 2.22A.6, 2.22A.7, 2.22A.8, 2.22A.9, 2.22A.10, 2.22A.11, 2.22A.12, 2.22A.13, 2,22A,13A (new), 2.22A.14, 2.22A.15 (new), 2.22A.16 (new), 2.22A.17 (new), 2.24.2, 2.24.3, 2.33.1, 3A.13.2A (new), 4.1.23A, 4.1.23B, 4.1.24, 4.2.7, 4.10.3, 4.10.3A, 4.11.3B, 4.11.3BA and the Glossary.	*Wholesale Electricity Market Amendment (Tranche 5 Amendments) Rules 2021, Schedule A.*
1 February 2022	Minister amended clauses 2.1A.2, 2.2C.1, 2.2D.1, 2.28.11A, 2.28.11B, 2.30.5, 3.9.9, 3.11.4, 3.11.8A, 3.11.8B, 3.11.8C, 3.11.8D, section 3.11A (new), 3.11B (new), heading to section 3.13, clauses 3.13.1, 3.13.2, 3.13.3B, 3.13.3C, heading to section 3.14, clauses 3.18.1B, 3.18.2, 4.4B.2, 4.4B.3, 4.4B.4, section 4.5B (new), clauses 4.8.3, 4.29.3, heading to Chapter 5, heading above section 5.1, clauses 5.2A.1, 5.2A.2, 5.2A.3, section 5.3 (replaced), clauses 5.3A.1, 5.3A.3, 5.7.2, 5.9.1, 5.9.2, 5.9.3, 5.9.4 (new), 6.17.6D, 6.20.14, 7.6.1B, 7.6.12A (new), 7.7.3A, 7.7.7A, 7.10.7, 9.3.1, 9.9.3A, 9.9.3B, 9.9.4, 9.24.3A and the Glossary.	*Wholesale Electricity Market Amendment (Tranche 5 Amendments) Rules 2021, Schedule B.*
1 March 2022	Minister amended clauses 4.13.1A, 4.13.1C, 4.13.2, 4.13.9, 4.13.10, 4.13.10C, 4.13.11, 4.13.11A, 4.13A.14, 4.14.1, 4.14.1A, 4.14.1C, 4.14.4, 4.14.5, 4.14.7, 4.14.10, 4.14.11, sections 4.17, 4.18, 4.19, clauses 4.20.1, 4.20.2, 4.20.3, 4.20.4, 4.20.5, 4.20.5A, 4.20.5AA, 4.20.6, 4.20.16 (new), 4.20.17 (new), section 4.21, clauses 4.24.1, 4.24.3, 4.24.6, 4.24.6A (new), 4.24.7, 4.24.8, 4.24.10, 4.24.13 and 4.24.15, and section 4.28B.	*Wholesale Electricity Market Amendment (Tranches 2 and 3 Amendments) Rules 2020, Schedule C (in accordance with notice in Gazette 2021/96).*
1 March 2022	Minister amended clauses 4.20.5B, 4.20.5C and Appendix 3.	*Wholesale Electricity Market Amendment (Miscellaneous Amendments No. 1) Rules 2021, Schedule D.*

Date	Amendment	Rule Change Reference
1 March 2022	Minister amended section 2.27A (replaced), clause 4.10.1, section 4.10A (replaced) and clause 4.14.1C.	*Wholesale Electricity Market Amendment (Tranches 2 and 3 Amendments) Rules 2020, Schedule C (in accordance with notice in Gazette 2021/166).*
1 March 2022	Minister amended clauses 4.1.22, 4.14.1, 4.14.1A, section 4.15, clauses 4.20.5A and 4.20.17.	*Wholesale Electricity Market Amendment (Miscellaneous Amendments No. 2) Rules 2021, Schedule D.*
1 March 2022	Minister amended clause 4.10.1.	*Wholesale Electricity Market Amendment (Miscellaneous Amendments No. 1) Rules 2021, Schedule E (in accordance with notice in Gazette 2021/166).*
1 March 2022	Minister amended heading to section 1.45, clauses 1.45.2, 1.45.3, 1.45.8, 1.45.10, 1.45.11, 1.49.7A (new), 2.27A.2, 4.4.1, 4.8A.3, 4.10.1, 4.10A.2, 4.10A.5, 4.10A.9, section 4.10AB (new), clauses 4.13.10, 4.13.10C, the Glossary and Appendix 11.	*Wholesale Electricity Market Amendment (Tranche 5 Amendments) Rules 2021, Schedule C.*
1 March 2022	Minister amended the Glossary.	*Wholesale Electricity Market Amendment (Tranches 2 and 3 Amendments) Rules 2020, Schedule C (in accordance with notice in Gazette 2021/212).*
12 April 2022	Minister amended the Glosary and Appendix 11.	*Wholesale Electricity Market Amendment (Tranches 2 and 3 Amendments) Rules 2020, Schedule C (in accordance with notice in Gazette 2021/212).*
12 April 2022	Minister amended section 4.10AB.	*Wholesale Electricity Market Amendment (Tranche 5 Amendments) Rules 2021, Schedule D.*
1 June 2022	Minister amended sections 1.54 (new), 3.6 (replaced), 3.7 (replaced), clause 3.10.6 and the Glossary.	*Wholesale Electricity Market Amendment (Miscellaneous Amendments No. 2) Rules 2021, Schedule E.*
1 July 2022	Minister amended clause 4.11.1.	*Wholesale Electricity Market Amendment (Miscellaneous Amendments No. 1) Rules 2021, Schedule E (in*

Date	Amendment	Rule Change Reference
		accordance with notice in Gazette 2021/166).
1 July 2022	Minister amended clause 4.11.1	*Wholesale Electricity Market Amendment (Miscellaneous Amendments No. 2) Rules 2021, Schedule F.*
1 July 2022	Minister amended clause 3A.4.4.	*Wholesale Electricity Market Amendment (Miscellaneous Amendments No. 2) Rules 2021, Schedule G (in accordance with notice in Gazette 2021/212).*
1 July 2022	Minister amended clauses 4.11.1, 4.14.1C and 4.14.3.	*Wholesale Electricity Market Amendment (Tranche 5 Amendments) Rules 2021, Schedule E.*
1 September 2022	Minister amended section 4.1A (new), clauses 4.14.1C, 4.14.1D (new), 4.14.8, heading above section 4.15, section 4.15 (replaced), clauses 4.20.5A, 4.23A.3, 4.23A.4 and Appendix 3 (replaced).	*Wholesale Electricity Market Amendment (Tranches 2 and 3 Amendments) Rules 2020, Schedule C (in accordance with notice in Gazette 2021/166).*
1 September 2022	Minister amended section 1.46 (new), clause 4.14.9 and the Glossary.	*Wholesale Electricity Market Amendment (Tranches 2 and 3 Amendments) Rules 2020, Schedule C (in accordance with notice in Gazette 2021/212).*
1 September 2022	Minister amended clauses 1.46.1, 4.1A.2, 4.15.3, 4.15.5, 4.15.15, 4.20.5B, 4.20.5C, the Glossary and Appendix 3.	*Wholesale Electricity Market Amendment (Tranche 5 Amendments) Rules 2021, Schedule F.*
1 September 2022	Minister amended clauses 1.53.2 and 4.15.17.	*Wholesale Electricity Market Amendment (Network Access Quantities Procedure) Rules 2022, Schedule A.*
1 December 2022	Minister amended clause 4.4A.2.	*Wholesale Electricity Market Amendment (Tranches 2 and 3 Amendments) Rules 2020, Schedule C (in accordance with notice in Gazette 2021/166).*
1 January 2023	Minister amended clauses 2.16.1, 2.16.2A, 2.16.2B (new), 2.16.2D (new), 2.16.2E (new), 2.16.2F (new), 2.16.4 and 2.16.5.	*Wholesale Electricity Market Amendment (Tranche 5 Amendments) Rules 2020, Schedule G).*

Date	Amendment	Rule Change Reference
1 January 2023	Minister amended clauses 2.9.7D (new), 2.9.8, 2.17.3, 4.7.3, heading above section 4.14, heading to section 4.14, clause 4.16.3 and the Glossary.	*Wholesale Electricity Market Amendment (Tranches 2 and 3 Amendments) Rules 2020, Schedule C (in accordance with notice in Gazette 2022/184).*
1 January 2023	Minister amended sections 1.47 (new), 1.48 (new), 1.54A (new) and clause 4.11.3C.	*Wholesale Electricity Market Amendment (Tranche 5 Amendments) Rules 2021, Schedule I (in accordance with notice in Gazette 2022/184)*
1 January 2023	Minister amended clause 1.19A.1, heading to section 1.36C, clauses 1.36C.1, 1.36C.2, 1.36C.3, 1.36C.4, 1.36C.5, 1.36C.6, 1.36C.7, 1.36C.8, 1.41.2, 1.41.12, 1.41.14, 1.45.6A, 1.47.2, 1.47.3, 1.47.7, 1.47.8, 1.47.8A (new), 1.47.12, 1.48.3, 1.48.5, 1.49.8, 1.49.9, 1.52.1, 1.54A.1, 1.54A.2, sections 1.55 (new), 1.56 (new), 1.57 (new), 1.58 (new), 1.59 (new), clauses 2.1A.2, 2.2C.1, 2.10.8, 2.10.9, 2.16.2A, 2.16.2AA (new), 2.16.2B, 2.16.2E, 2.16.2F, 2.16.4 (new), 2.16.5 (new), 2.16.9, 2.16.9H, 2.16.13D, 2.16.15A, 2.19.7, 2.20.1, 2.20.2, 2.22A.3, 2.22A.6, 2.22A.17, section 2.23, clauses 2.24.3, 2.24.5E, 2.26.3, 2.27A.6, 2.27A.10, 2.28.19, 2.36.3, 2.36.4, 2.38.6, 3.11A.2, 3.11A.2A, 3.11A.3, 3.11B.5, 3.11B.7, 3.21.2A, heading above section 3.24, clauses 3A.1.5 (new), 3A.4.4, 3A.6.1, 3A.6.2, 3A.6.4, 3A.6.5, 3A.6.6, 3A.6.9, 3A.13.1, 3A.13.2, 3A.13.3, 3A.13.4, 3A.13.8, 4.2.2 (new), 4.2.7, 4.4.1, 4.4.2 (new), 4.4.3 (new), 4.4B.3, 4.4B.4, 4.4B.4A (new), 4.5.9, 4.5.10, 4.5A.1, 4.9.8, 4.10.1, 4.10.3, 4.10.4, 4.11.4, 4.13.9, 4.14.1C, heading above section 4.15, clauses 4.15.5, 4.15.16, heading above section 4.16 (new), clauses 4.20.16, 4.23A.4, heading above section 4.28B, clauses 4.29.1B, 5.2A.2, 5.2A.3, 9.9.3A, 9.9.3B, 9.24.3A, the Glossary, Appendix 3 and Appendix 12.	*Wholesale Electricity Market Amendment (Tranche 6 Amendments) Rules 2022, Schedule A.*
1 February 2023	Minister amended clause 3A.1.6 (new).	*Wholesale Electricity Market Amendment (Tranche 6 Amendments) Rules 2022, Schedule B.*
1 March 2023	Minister amended clause 4.15.17 (new).	*Wholesale Electricity Market Amendment (Network Access Quantities Procedure) Rules 2022, Schedule B.*
1 March 2023	Minister amended clause 4.10.1.	*Wholesale Electricity Market Amendment (Tranche 6 Amendments) Rules 2022, Schedule C.*

Date	Amendment	Rule Change Reference
17 April 2023	Minister amended clauses 4.11.1 and 4.11.3A.	*Wholesale Electricity Market Amendment (Tranche 6 Amendments) Rules 2022, Schedule D.*
17 April 2023	Minister amended sections 1.43B (new), 1.60 (new) and clause 4.1.19.	*Wholesale Electricity Market Amendment (Tranche 6A Amendments) Rules 2023, Schedule A.*
29 April 2023	Minister amended heading to section 4.24, clauses 4.24.1, 4.24.1A (new), 4.24.1B (new), 4.24.1C (new), 4.24.3, 4.24.4, 4.24.6, 4.24.7, 4.24.11, 4.24.11A (new), 4.24.12, 4.24.13, 4.24.14, 4.24.14A (new), 4.24.19 and Appendix 3.	*Wholesale Electricity Market Amendment (Supplementary Capacity) Rules 2023, Schedule A.*
1 July 2023	Minister amended clauses 4.24.18, 4.24.18A (new) and 4.24.18B (new).	*Wholesale Electricity Market Amendment (Supplementary Capacity) Rules 2023, Schedule B.*
22 July 2023	Minister amended clauses 4.24.1, 4.24.1A, 4.24.1B, 4.24.1C, 4.24.3, 4.24.7, 4.24.8, 4.24.10, 4.24.11, 4.24.11B (new), 4.24.14, 4.24.16, 4.24.18, 4.24.18B and the Glossary.	*Wholesale Electricity Market Amendment (Supplementary Capacity No. 2) Rules 2023, Schedule A.*
1 October 2023	Minister amended clauses 2.16.2, 2.16.2C (new), and 2.16.3.	*Wholesale Electricity Market Amendment (Tranche 5 Amendments) Rules 2020, Schedule H).*
1 October 2023	Minister amended clause 1.1.2, section 1.44 (new), clause 2.1A.2, section 2.13 (replaced), heading to section 2.14, clauses 2.14.1A, 2.14.5, 2.14.5A, 2.14.5D, 2.14.6, 2.14.6A, 2.14.6B, 2.14.7, 2.14.8, 2.14.9, 2.14.10 (new), heading to section 2.15, clauses 2.15.2, 2.15.3, 2.15.4, 2.15.5, 2.15.6, 2.15.6A, 2.15.6B, 2.15.6C, 2.16.9, 2.17.1, 2.24.1, 2.24.2, 2.24.2A, 2.24.2B, 2.24.3, 2.24.4, 2.24.5, 2.24.5A, 2.24.5B, heading to section 2.25, clauses 2.25.1, 2.25.1A, 2.25.1B, 2.25.1C, 2.25.2, 2.25.3, 2.25.4, 2.27.17, 2.27B.3, 2.27B.6, 2.28.1, 2.28.3, 2.28.3A, 2.28.3B, 2.28.3C, 2.28.5, 2.28.6, 2.28.7, 2.28.8, 2.28.9, 2.28.10, 2.28.11, 2.28.11A, 2.28.11B, 2.28.12, 2.28.13, 2.28.16, 2.28.16A, 2.28.16B, 2.28.18, 2.29.1, 2.29.1A, 2.29.2, 2.29.4, 2.29.5, 2.29.5A, 2.29.5B, 2.29.5E, 2.29.5F, 2.29.5G, 2.29.5H, 2.29.5I, 2.29.5LA, 2.29.5LB, 2.29.5LC, 2.29.5N, 2.29.5O, 2.29.6, 2.29.7, 2.29.8, 2.29.8A, 2.29.9, 2.30.5, section 2.30A, clauses 2.30B.1, 2.30B.2, 2.30B.3, 2.30B.5, 2.33.5, 2.35.1, 2.35.2, heading to section 2.36, clauses 2.36.1, 2.36.8, 2.36.9, 2.36.10, 2.37.1, 2.37.2, 2.37.3, 2.37.4, 2.37.5, 2.37.7, 2.37.8, 2.38.A1 (new), 2.38.1, 2.38.2, 2.38.3, 2.38.4, 2.38.5, 2.38.7, 2.39.A1 (new), 2.39.1, 2.40.A1 (new), 2.40.1, 2.41.A1 (new), 2.41.1, 2.41.4, 2.41.5, 2.42.A1 (new), 2.42.1, 2.42.3, 2.42.4, 2.42.6, 2.42.7, 2.43.A1 (new),	*Wholesale Electricity Market Amendment (Tranches 2 and 3 Amendments) Rules 2020, Schedule C (in accordance with notice in Gazette 2023/125).*

Date	Amendment	Rule Change Reference
	2.43.1, 3.1.1, 3.2.1, 3.2.3, 3.2.4, 3.2.5, 3.2.6, 3.2.7, section 3.2A (new), heading to section 3.3, clauses 3.3.1, 3.3.2, 3.3.3, heading to section 3.4, 3.5.1, 3.5.1A (new), 3.5.3, 3.5.4, 3.5.5, 3.5.6, 3.5.7, 3.5.8, 3.5.9, 3.5.10, 3.5.11, 3.8.1, 3.8.2, 3.8.5, 3.8.5A, 3.8.6, 3.8.7 (new), heading above section 3.9, heading to section 3.9, clauses 3.9.1, 3.9.2, 3.9.3, 3.9.4, 3.9.5, 3.9.6, 3.9.7, 3.9.8, 3.9.9, heading to section 3.10, clauses 3.10.1, 3.10.2, 3.10.3, 3.10.4, 3.10.5, sections 3.11 (replaced), 3.12 (replaced), 3.13.(replaced), 3.14 (replaced), heading to section 3.15, clauses 3.15.1, 3.15.1A (new), 3.15.1B (new), 3.15.1C (new), 3.15.2, 3.15.3, 3.15.4 (new), 3.15.5 (new), sections 3.15A (new), 3.15B (new), 3.16 (replaced), 3.17 (replaced), 3.18 (replaced), 3.18A (new), 3.18B (new), 3.18C (new), 3.18D (new), 3.18E (new), 3.18F (new), 3.18G (new), 3.18H (new), 3.19 (replaced), clauses 3.20.1, 3.20.2, 3.20.3, 3.20.4 (new), sections 3.21 (replaced), 3.21A (replaced), heading above section 3.21B, sections 3.21B, 3.22 (replaced), 3.23, clauses 4.4A.2, 4.4A.5, 4.5.12, 4.10.1, 4.11.12, 4.12.1A (new), 4.12.3, 4.12.4, 4.12.4A (new), 4.12.5, 4.13A.16, 4.14.1B, 4.14.2, 4.14.6, 4.25.1, 4.25.2, 4.25.3, 4.25.3A, 4.25.4, 4.25.4C, 4.25.4CA, 4.25.4E, 4.25.5, 4.25.6, 4.25.9, 4.25A.1, 4.25A.2, 4.25A.5, 4.26.1, 4.26.1A, 4.26.1C, 4.26.1CA (new), 4.26.2, 4.26.2A, 4.26.2B, 4.26.2CB, 4.26.2CE, 4.26.2CG, 4.26.2CH, 4.26.2D, 4.26.2E, 4.26.2F, 4.26.3, 4.26.4, 4.26.5, 4.26.6, 4.28.1, 4.28.2, 4.28.3, 4.28.4, 4.28.6, 4.28.7, 4.28.8, 4.28.8A, 4.28.8B, 4.28.8C, 4.28.9A, 4.28.9E, 4.28.10, 4.28.11, 4.28.11A, 4.28A.1, 4.28A.2, 4.29.1, 4.29.1A, 4.29.2, 4.29.2A, 4.29.2B, 4.29.3, 4.29.4, sections 4.30 (new), 4.31 (new), 4.32 (new), heading to Chapter 6, clauses 6.2.1, 6.2.2, 6.2.2A, 6.2.3, 6.2.4B, 6.2.5, 6.2.8, 6.2A.1, 6.2A.2, 6.2A.2A (new), 6.2A.4, 6.2A.5, 6.3A.1, 6.3A.2, 6.3A.3, 6.3A.4, 6.3B.3, 6.3B.4, 6.3B.5, 6.3B.6, 6.3B.7, 6.3B.7A, 6.3B.7B, 6.3B.8, 6.3C.6B, 6.3C.9, 6.4.6, 6.4.6A, 6.4.6B, 6.6.1, 6.6.2A, 6.6.3, 6.6.3A, 6.6.7, 6.6.8, 6.6.9, 6.7.1, 6.7.3, 6.7.4, 6.9.4, 6.10.1, sections 6.11A, 6.12, heading above section 6.13, sections 6.13 (replaced), 6.15 (replaced), 6.16 (replaced), 6.16A (replaced), 6.16B (replaced), 6.17 (replaced), heading above section 6.19, section 6.19 (replaced), clause 6.21.2, heading to Chapter 7, heading above section 7.1, sections 7.1 (replaced), 7.2 (replaced), 7.3 (replaced), 7.4 (replaced), 7.5 (replaced), 7.6 (replaced), 7.7 (replaced), 7.8 (replaced), 7.9 (replaced), 7.10 (replaced), 7.11 (replaced), heading above section 7.11A (new), sections 7.11A (new), 7.11B (new), 7.11C (new), 7.12 (replaced), clauses 7.13.1, 7.13.1A, 7.13.1B, 7.13.1C, 7.13.1D, 7.13.1E, 7.13.1F, 7.13.1G, 7.13.1H (new), 7.13.2, 7.13.4, 7.13.5, 7.13.F (new), section 7.14 (new),	

Date	Amendment	Rule Change Reference
	Chapters 7A, 7B, clauses 8.4.1, 8.4.3, 8.4.4, 8.4.5, 8.6.1, 8.6.2, section 8.6A (new), Chapter 9 (replaced), clauses 10.5.1, 10.5.3, 10.7.1, the Glossary, Appendix 1, Appendix 2 (replaced), Appendix 2A (new), Appendix 2B (new), Appendix 2C (new), Appendix 5 (replaced) and Appendix 6.	
1 October 2023	Minister amended clauses 3.15.1, 3.15.1A, 3.15.1B, 3.15.2, 3.15.3, 3.15.4, 3.15.5, heading to section 3.18G, clauses 3.18G.1, 3.18G.2, 3.18G.3, section 3.18GA (new).	*Wholesale Electricity Market Amendment (Governance) Rules 2021, Schedule C*.
1 October 2023	Minister amended clause 7.5.14, section 7.13A, clauses 9.18.12 (new), 9.20.4, the Glossary and Appendix 2B.	*Wholesale Electricity Market Amendment (Miscellaneous Amendments No. 1) Rules 2021, Schedule E (in accordance with notice in Gazette 2023/125)*.
1 October 2023	Minister amended clauses 3.8.7, 3.21.7C (new), 3.21.10, 4.9.10, 4.25.4E, 4.26.1A, 4.26.1B, 4.26.1D, 4.26.1E, 4.26.1F (new), 4.26.1G (new), 4.26.1H (new), 4.26.1I (new), 4.26.1J (new), 4.26.2AA (new), 4.26.AB (new), 4.26.2AC (new), 4.26.2AE (new), 4.26.2AF (new), 4.26.3, 4.26.6, 7.4.40, 7.8.5, 7.8.5A, 7.13.1B, section 7.13A (new), the Glossary, Appendix 2A and Appendix 2C.	*Wholesale Electricity Market Amendment (Miscellaneous Amendments No. 2) Rules 2021, Schedule G (in accordance with notice in Gazette 2023/125)*.
1 October 2023	Minister amended clauses 2.22A.2A, 2.24.1, 2.27.1, 2.27.5, 2.27.5A (new), 2.28.1, 2.28.3A, 2.28.3B, 2.28.6, 2.28.7, 2.28.7A (new), 2.28.8, 2.28.8A (new), 2.28.8B (new), 2.28.9, 2.28.9A (new), 2.28.9B (new), 2.28.9BA (new), 2.28.9C (new), 2.28.13, 2.28.16, 2.28.16A, 2.28.16C (new), 2.28.19, 2.28.20 (new), 2.28.21 (new), 2.29.1, 2.29.1B (new), 2.29.1C (new), 2.29.2, 2.29.2A (new), 2.29.3, 2.29.4, 2.29.4A (new), 2.29.4B (new), 2.29.4C (new), 2.29.4D (new), 2.29.4E (new), 2.29.4F (new), 2.29.4G (new), 2.29.4H (new), 2.29.4I (new), 2.29.4J (new), 2.29.4K (new), 4.29.4L (new), 4.29.4M (new), 4.29.4N (new), heading above clause 2.29.5 (new), 2.29.5AA (new), 2.29.5B, 2.29.5CA (new), 2.29.5E, 2.29.5F, 2.29.5G, 2.29.5H, 2.29.5I, 2.29.5K, 2.29.5L, 2.29.5LB, 2.29.5N, 2.29.6, 2.29.7, 2.29.7A (new), 2.29.8, 2.29.9, 2.29.10, 2.29.11, 2.30.1, 2.30.2, 2.30.5, 2.30.5A (new), 2.30.5B (new), 2.30.5C (new), 2.30.5D (new), 2.30.6, 2.30.7, 2.30.7A, 2.30.8, 2.30.8A (new), 2.30.9, 2.30.10, 2.30B.2, 2.30B.3, 2.30B.4, 2.30B.5, 2.30B.6, 2.30B.6A, 2.30B.7, 2.30B.8, 2.30B.8A (new), 2.30B.8B (new), 2.30B.8C (new), 2.30B.8D (new), 2.30B.8E (new), 2.30B.8EA (new), 2.30B.8F (new), 2.30B.9, 2.30B.10, 2.30B.11, 2.30B.12, 2.30B.13, 2.30C.1, 2.31.1, 2.31.2, 2.31.5, 2.31.6, 2.31.7, 2.31.8, 2.31.9, 2.31.10, 2.31.11, 2.31.13, 2.31.14, 2.31.15, 2.31.16, 2.31.17, 2.31.18, 2.31.19, 2.31.21,	*Wholesale Electricity Market Amendment (Tranche 5 Amendments) Rules 2021, Schedule I (in accordance with notice in Gazette 2023/125).*

Date	Amendment	Rule Change Reference
	2.31.22, 2.31.23, 2.31.24, 2.31.25 (new), 2.31.26 (new), 2.31.27 (new), 2.32.2, 2.32.2A (new), 2.32.5, 2.32.7, 2.32.7A, 2.32.7AA (new), 2.32.7B, 2.32.7BA (new), 2.32.7BB (new), heading to section 2.33, clauses 2.33.1, 2.33.2, 2.33.3, 2.33.4, 2.33.5, 2.33.6 (new), 2.33.7 (new), 2.33.8 (new), 2.34.2B, 2.34.3, 2.34.4, 2.34.7, 2.34.7A, 2.34.7B, 2.34.7C, 2.34.8, 2.34.11, 2.34.12, 2.34.12A (new), 2.34.12B (new), 2.34.14, 2.34A.14, 3.9.9, sections 3.11A (replaced), 3.11B (replaced), clauses 3.18.3, 3.18.4, 3.18A.3, 3.18A.8, 3.21.8A, 3.21.10, 3.22.2, 3A.1.4 (new), 4.1.23A, 4.1.23B, 4.1.24, section 4.5B (replaced), clauses 4.10.1, 4.11.1, 4.11.3, 4.11.3B, 4.11.3BA (new), 4.11.3BB (new), 4.11.3BC (new), 4.11.3BD (new), 4.11.12, 4.12.1A, 4.12.2, 4.12.3, 4.12.4, 4.12.4A, 4.12.5, 4.12.6, 4.12.7, 4.23A.3, 4.25.1, 4.25.1A (new), 4.25.2, 4.25.2A (new), 4.25.2B (new), 4.25.2C (new), 4.25.2D (new), 4.25.2E (new), 4.25.4, 4.25.4B, 4.25.4C, 4.25.5, 4.25.6, 4.25.9, 4.25.12, 4.26.1, 4.26.2AD (new), 4.26.2AG (new), 4.26.2AH (new), 4.26.6, 4.28.8, 4.28.8A, 4.28.8B, 4.28A.1, 4.28A.1A (new), 4,28A.3, 4.29.3, 4.30.6, 4.30.10 (new), 4.30.11 (new), 4.32.1 (new), heading to Chapter 5, clauses 5.2A.2, 5.2A.3, section 5.3 (replaced), clauses 5.3A.1, 5.3A.2, 5.3A.3, 5.3A.4, heading to section 5.7, clauses 5.7.2, 5.7.3, 5.7.4, 5.9.1, 5.9.2, 5.9.3, 5.9.4, 6.3A.3, 6.6.9, 6.6.10, 7.2.4, 7.2.5, 7.4.46A (new), 7.5.11, 7.5.12, 7.9.4, 7.13.1A, 7.13.1B, 7.13.1CA (new), 7.13.1E, 7.13.2, 7.13.6 (new), 7.13.7 (new), 7.13.8 (new), 9.5.1, 9.5.2, 9.8.3, 9.9.4, 9.9.9, 9.9.10, 9.10.3, 9.10.6, 9.10.10, 9.10.14, 9.10.16, 9.10.22, 9.10.23, 9.10.27A (new), 9.10.27B (new), 9.10.27C (new), 9.10.27D (new), 9.10.28, 9.10.44 (new), 9.10.45 (new), 9.12.4A (new), 9.13.4 (new), 9.14.2, 10.2.1, 10.2.3, 10.2.3A, 10.2.3B, 10.2.3BA, 10.2.3C, 10.2.5, 10.2.6, 10.2.7, 10.5.1, 10.5.2, 10.7.1, 10.7.2, 10.8.2, 10.9.1, the Glossary, Appendix 1, Appendix 2A, Appendix 2B, Appendix 4A, Appendix 5, Appendix 5A, Appendix 9 and Appendix 10.	
1 October 2023	Minister amended clauses 1.7.1, 1.7.3, 1.7.3A, 1.7.4, 2.8.13, 2.13.6, 2.13.7, 2.13.15A, 2.13.52, 2.14.10, 2.15.7, 2.15.8, 2.15.9, 2.16.9, 2.18.1, 2.22A.2A, 2.24.1, 2.24.2, 2.24.2A, 2.24.2B, 2.24.3, 2.24.4, 2.24.5, 2.24.5A, 2.24.5B, 2.24.5C, 2.24.5D, 2.25.1, 2.25.1A, 2.25.1C (new), 2.25.2, 2.25.3, 2.27.5A, 2.27.15, 2.27.17, 2.28.5, 2.28.16A, 2.28.16B, 2.28.21, 2.29.4B, 2.29.4D, 2.29.4K, 2.29.4N, 2.30.8, 2.30.11, section 2.30A (new), heading to section 2.30B, clauses 2.30B.3, 2.30B.7, 2.30B.8F, 2.30B.10, 2.30B.11, 2.31.4A (new), 2.31.6, 2.31.10, 2.31.17, 2.32.7A, 2.32.7BA, 2.33.1, 2.33.8, 2.34.3, 2.34.4, 2.34.7, 2.34.8, 2.34.11, 2.34.12B, 2.34.14, 2.34.15, 2.34A.6, section 2.34B (new), clauses 2.35.1,	*Wholesale Electricity Market Amendment (Tranche 6 Amendments) Rules 2022, Schedule E (in accordance with notice in Gazette 2023/125).*

Date	Amendment	Rule Change Reference
	2.36.5A (new), 3.2.6 (new), 3.4.1, 3.4.2, 3.4.3, 3.4.4, 3.4.5, 3.4.5A (new), 3.4.6, 3.4.7, 3.4.8, 3.4.9, 3.5.5, 3.5.6, 3.5.8, 3.7.19, 3.11A.2, 3.11A.3, 3.11B.5, 3.11B.7, 3.15.1C, 3.15A.21, 3.15A.22, 3.15A.35, 3.15A.37, 3.15B.4, 3.15B.7, 3.15B.9, 3.17.10, 3.18.1, 3.18.3, 3.18.4, heading to section 3.18A, 3.18A.6, 3.18A.7, 3.18A.8, 3.18A.9, 3.18A.10, 3.18B.1, 3.18B.2, 3.18B.3, 3.18B.8, 3.18C.4, 3.18C.11, 3.18C.12, 3.18D.1, 3.18D.2, 3.18D.3, 3.18D.9, 3.18E.1, 3.18E.3, 3.18E.4, 3.18E.10, 3.18E.11, 3.18E.13, 3.19.3, 3.19.8, 3.20.1, 3.20.2, heading to section 3.21, clauses 3.21.1, 3.21.2, 3.21.6, 3.21.7, 3.21.7A, 3.21.7B, 3.21.7C, 3.21.8, 3.21.8A, 3.21.8B, 3.21.8C (new), 3.21.9, heading above section 3.22, clauses 3.22.1, 3.22.1A (new), 3.22.2, 3.22.3 (new), section 3.23 (new), clauses 3A.6.3, 3A.7.6, 3A.12.3, 4.1.23C, 4.1.24, 4.1A.8 (new), 4.10A.12 (new), 4.11.3BA, 4.12.1, 4.12.4, 4.12.5, 4.15.16, 4.16.8A (new), 4.20.18 (new), 4.25.3A, 4.25.9, 4.25.14, 4.26.1A, 4.26.1B, 4.26.1C, 4.26.1CA, 4.26.1I, 4.26.2AD, 4.26.2AH, 4.26.2D, 4.26.2E, 4.26.2F, 4.26.3, 4.26.3A, 4.26.6, 4.28.2, 4.28.6, 4.28.7, 4.28.9, 4.28.9A, 4.28.11A, 4.28.13 (new), 4.28A.1, 4.28A.2, 4.29.1, 4.29.1CA (new), 4.29.3, 4.29.5 (new), 5.2A.3, 5.9.2, 5.9.3, 6.2.1, 6.2.2, 6.2.2A, 6.2.3, 6.2.4B, 6.2.8, 6.2A.2A, 6.2A.4, 6.2A.5, heading to section 6.3, clauses 6.3.1 (new), 6.3A.1, 6.3A.2, 6.3A.2A (new), 6.3A.3, 6.3A.4, 6.3A.5 (new), 6.3B.1, 6.3B.1A, 6.3B.1B, 6.3B.1C (new), 6.3B.2, 6.3B.4, 6.3B.5, 6.3B.6, 6.3C.4, 6.4.6, 6.4.6A, 6.4.6B, 6.6.1, 6.6.2A, 6.6.5, 6.6.8, 6.7.1, 6.10.1, 6.10.2, 6.10.3, heading after section 6.11, sections 6.12 (new), 6.16A, 6.16B, clauses 6.20.10A (new), 6.20.14, 6.20.16, 6.20.17, 6.20.18, 6.20.19, 6.20.25, 6.20.31 (new), section 6.22 (new), clauses 7.1.3, 7.2.4, 7.2.4A (new), 7.2.5, heading to section 7.3, clauses 7.3.1, 7.3.2, 7.3.3, 7.3.4, heading above clause 7.4.1, clauses 7.4.1, 7.4.1A (new), 7,4,1B (new), 7.4.1C (new), 7.4.2, 7.4.2A, 7.4.2B (new), 7.4.5, 7.4.6, 7.4.7, 7.4.9, 7.4.10, 7.4.11, heading above clause 7.4.12, clauses 7.4.12, 7.4.13, 7.4.14, 7.4.15, 7.4.16, 7.4.17, 7.4.18, 7.4.19, 7.4.20, heading above clause 7.4.21, clauses 7.4.21, 7.4.22, 7.4.23, 7.4.24, 7.4.25, 7.4.26, 7.4.27, 7.4.28, 7.4.35, 7.4.36, 7.4.37, 7.4.37A (new), 7.4.38, 7.4.39, 7.4.40, 7.4.41, 7.4.42, 7.4.43, 7.4.46, 7.4.48, 7.4.49, heading above clause 7.4.50, clause 7.4.51, heading above clause 7.4.54, clauses 7.4.54, 7.4.55, 7.4.56, 7.4.57, 7.4.57A (new), 7.4.58, 7.4.59, 7.4.59A (new), 7.4.60, 7.4.61, heading above clause 7.4.62 (new), clause 7.4.62, section 7.4A (new), clauses 7.5.2, 7.5.8, 7.6.1, 7.6.2, 7.6.4, 7.6.5, 7.6.5A (new), 7.6.5B (new), 7.6.5C (new), 7.6.8, 7.6.9, 7.6.11A (new), 7.6.12, 7.6.13, 7.6.13A, 7.6.14, 7.6.15, 7.6.16, 7.6.17, 7.6.19, 7.6.23, 7.6.26,	

Date	Amendment	Rule Change Reference
	7.6.28, 7.7.3, 7.7.4, 7.7.9, 7.7.14, 7.8.1, 7.8.3, 7.8.4, 7.8.5, 7.8.6, 7.8.8, section 7.8A (new), clauses 7.9.2, 7.9.7, 7.9.10, 7.10.1, 7.10.1A (new), 7.10.2, 7.10.2A (new), 7.10.5, 7.10.15, 7.10.19, 7.10.21, heading above section 7.11, clauses 7.11.1, 7.11.5, 7.11.6, 7.11B.3, 7.11C.1A, 7.11C.5, heading above section 7.11D (new), sections 7.11D (new), 7.11E (new), clauses 7.13.1, 7.13.1A, 7.13.1B, 7.13.1C, 7.13.1CA, 7.13.1CB (new), 7.13.1D, 7.13.1E, 7.13.F, 7.13.1F (new), 7.13.1G, 7.13.1H, 7.13.1I (new), 7.13.1J (new), 7.13.1K (new), 7.13.1L (new), 7.13.4, 7.13.5, 7.13.6, 7.13.8, heading above section 7.13A, clauses 7.13A.2, 7.13A.3, 7.14.1, 8.6.2, 9.1.3, 9.2.1, heading to section 9.4, clauses 9.5.7, 9.6.3, 9.8.2, 9.10.7, 9.10.11, 9.10.15, 9.10.24, 9.10.26, heading to section 9.12, clauses 9.12.2, 9.12.3, 9.12.4, 9.12.4A, 9.13.1, 9.13.2, 9.13.3, 9.13.4, 9.15.8 (new), 9.15.9 (new), 9.15.10 (new), 9.18.13 (new), 9.20.2, 9.20.2A (new), 9.20.2B (new), 9.20.2C (new), 9.20.3, 9.20.4, 9.20.10, 9.20.11, sections 10.1 (replaced), 10.2 (replaced), 10.3 (replaced), 10.4 (replaced), 10.5 (replaced), 10.6 (replaced), 10.7, 10.8, 10.9, the Glossary, Appendix 1 (replaced), Appendix 2A, Appendix 2B, Appendix 2C, Appendix 4A, Appendix 5, Appendix 5A, Appendix 6 and Appendix 9.	
1 October 2023	Minister amended sections 1.61 (new), 1.62 (new), clauses 2.13.12, 2.13.21, 2.13.23, 2.13.26, 2.13.27, 2.13.35, 2.13.36, 2.13.37, 2.13.38, 2.13.39, 2.13.42, 2.13.43, 2.13.43A (new), 2.13.44, 2.13.45, 2.13.49, 2.13.49A (new), 2.15.3, 2.16.9A, 2.16.9B, 2.16.9C, 2.16.9D, 2.16.9E, 2.16.9F, 2.16.9FB, 2.16.9G, 2.16.13B, heading above section 2.16A (new), sections 2.16A (new), 2.16B (new), 2.16C (new), 2.16D (new), 2.16E (new), clause 2.17.1, heading above section 2.26, heading to section 2.26, clauses 2.26.1, 2.26.2, 2.26.2A (new), 2.26.2B (new), heading above clause 2.26.2C (new), clauses 2.26.2C (new), 2.26.2D (new), 2.26.2E (new), 2.26.2F (new), 2.26.2G (new), 2.26.2H (new), 2.26.2I (new), 2.26.2J (new), 2.26.2K (new), heading above clause 2.26.2L (new), clauses 2.26.2L (new), 2.26.2M (new), 2.26.2N (new), 2.26.2NA (new), 2.26.2O (new), 2.26.2P (new), 2.26.2Q (new), 2.26.2R (new), 2.26.2S (new), 2.26.2T (new), 2.26.2U (new), 2.26.2V (new), 2.26.2W (new), 2.26.3, 3.15A.2, 3.15A.5, 3.15A.20, 3.15A.22, 3.15A.27, 3.21.2, 6.3B.2, 6.6.2A, 6.6.3, 6.6.5, 6.6.8, 6.6.9, 6.6.10, 6.6.11, 6.6.12, 6.9.5, 6.9.6, section 6.20 (replaced), clauses 7.4.5, 7.4.26, 7.4.27, 7.4.51A (new), 7.4.60, 7.11B.3, 7.11B.3A (new), 7.11B.3B (new), 7.11E.1, 7.13.1D, 9.10.3, 9.10.3A (new), 9.10.3B (new), 9.10.3C (new), 9.10.3D (new), 9.10.3E (new), 9.10.3F (new), 9.10.3G (new), 9.10.3H (new), 9.10.3I (new),	*Wholesale Electricity Market Amendment (Tranche 6A Amendments) Rules 2023, Schedule B (in accordance with notice in Gazette 2023/125).*

Date	Amendment	Rule Change Reference
	9.10.3J (new), 9.10.3K (new), 9.10.3L (new), 9.10.3M (new), 9.10.3N (new), 9.10.3O (new), 9.10.3P (new), 9.10.7, 9.10.11, 9.10.15, 9.10.24, 9.21.1, the Glossary and Appendix 6.	
1 October 2023	Minister amended clauses 1.46.1, 1.47.12, 1.48.5, 1.48.6, 1.48.7, 2.28.16, 2.30.6, 2.36.5A, 2.37.A1 (new), 2.40.1, 2.40.2, 2.42.6, 3.5.5, 3.5.5A (new), 3.7.13, 3.7.17, 3.7.24, 3.11A.5, 3.11A.8, 3.11A.9, 3.11A.10, 3.11B.1, 3.11B.7, 3.15.3, 3.15A.16, 3.15A.26, 3.15A.27, 3.15A.29, 3.15A.30, 3.17.1, 3.18B.4, 3.18C.2, 3.18D.1, 3.18D.2, 3.18D.3, 3.19.5, 3.21.2, 3.21.2A (new), 3.24.11, 3B.2.5, 4.1A.2, 4.10.1, 4.11.3BA, 4.15.9, 4.15.9A (new), 4.15.17, 4.26.2CH, 6.2.7, 6.3A.3, 6.3A.5, 6.3C.1, 6.3C.3, 6.3C.6C, 6.4.1, 6.4.2, 6.4.3, 6.4.6C (new), 7.2.5, 7.5.9, 7.5.10, 7.5.10A, 7.6.31, 7.10.20, 7.11.4, section 7.12 (replaced), clauses 7.14.1, 8.6.1, 9.5.2, 9.5.3, 9.5.8, 9.6.3, 9.9.9, 9.9.15, 9.10.28, 9.11.4, section 9.11A (new), clauses 9.18.13, 9.19.2, 9.20.3, 9.20.5, heading to section 10.2 (new), heading to section 10.3, heading to section 10.5, the Glossary and Appendix 1.	*Wholesale Electricity Market Amendment (Tranche 7 Amendments) Rules 2023.*
1 October 2023	Minister amended clauses 3.4.4, 4.26.1D, 4.26.1F, 4.26.1H, 4.26.1J, 6.3A.2A, 7.1.1, 7.2.2, 7.2.2A (new), 7.2.4, 7.5.6, 7.5.7, 7.6.1, 7.6.2, 7.6.4, 7.6.5, 7.6.8, 7.6.12, 7.6.14, 7.6.22A (new), 7.7.1, 7.7.8, 7.7.9, 7.10.1, 7.10.4, 7.10.6, 7.10.6A (new), 7.11A.1, 7.11B.1A, 7.11B.1B (new), 7.11B.2, 7.11B.3, 7.11B.3A, 7.11B.3B, 7.11B.5, 7.11C.1, 7.11C.1A, 7.11C.2, 7.11C.3, 7.11C.4, 7.11C.6, 7.11D.1, 7.11D.2, 7.11D.2A (new), 7.11D.3, 7.11D.4, 7.11D.5 (new), 7.11D.6 (new), 7.13.1, 7.13.1A, 7.13.1B, 7.13.1BA (new), 7.13.1C, 7.13.1CA, 7.13.1CB, 7.13.1CC (new), 7.13.1CD (new), 7.13.1D, 7.13.1DA (new), 7.13.1E, 7.13.1EA (new), 7.13.1G, 7.13.1I, 7.13.1J, 7.13.1K, 7.13.1L, 7.13A.1, 7.13A.2, 7.14.1, 9.9.8, 9.9.9, 9.9.10, 9.10.3H, 9.10.3K, 9.10.3L, 9.10.3M, 9.10.3N, 9.10.3O, 9.10.6, 9.10.10, 9.10.14, 9.10.16, 9.10.22, 9.10.23, 9.10.30, 9.10.30A (new), 9.10.30B (new), 9.10.30C (new), 9.10.30D (new), 9.10.43, the Glossary, Appendix 2A and Appendix 2C.	*Wholesale Electricity Market Amendment (Market Suspension) Rules 2023.*
3 November 2023	Minister amended clause 7.11A.1.	*Wholesale Electricity Market Amendment (FCESS Shortfall Pricing) Rules 2023.*
13 December 2023	Minister amended section 1.63 (new), clause 2.16.13B, heading to section 2.26, clauses 2.26.3, 2.26.3A, 2.26.4, 2.26.5, 2.27A.7, 2.29.5E, 3.11B.2, 3.18.4, 3.18E.8, 4.1.3, 4.1.8, 4.1.10, 4.1.13, 4.1.15, 4.1.19, 4.1.21, section 4.1A, clauses 4.2.1, 4.2.4, 4.3.1, 4.4.2, 4.4.3, 4.4A.1, 4.4A.1A (new), 4.4A.2, 4.4A.3, 4.4A.4, 4.4A.5, 4.4A.6, 4.4A.7, 4.4B.2, 4.4B.3, 4.4B.4, 4.4B.4A, 4.4B.5, 4.4B.6, 4.4B.7 (new), 4.4B.8 (new),	*Wholesale Electricity Market Amendment (Reserve Capacity Reform) Rules 2023, Schedule 1.*

Date	Amendment	Rule Change Reference
	4.4B.9 (new), 4.5.2, 4.5.3A, 4.5.6, 4.5.8, 4.5.9, 4.5.10, 4.5.12, 4.5.13, 4.5.15A (new), 4.5.19, 4.5.20, 4.5A.7, 4.5B.8, 4.7.3, 4.8.1, 4.8.2, 4.8.3, 4.8A.1, 4.8A.3, 4.8A.4, 4.8A.5, 4.8A.6, 4.8A.7, 4.9.1, 4.9.2, 4.9.3, 4.9.5, 4.9.7A, 4.9.8, 4.9.9, 4.10.1, 4.10.2, 4.10.3, 4.10.3A, 4.10A.4, 4.10A.5, 4.10A.6, 4.10A.9, 4.10A.10, 4.11.1, 4.11.1A, 4.11.1B, 4.11.1C, 4.11.1D, 4.11.2, 4.11.2A, 4.11.2C (new), 4.11.3, 4.11.3A, 4.11.3B, 4.11.3BA, 4.11.3BB, 4.11.3BC, 4.11.3BD, 4.11.4, 4.11.5, 4.11.6, 4.11.10A, 4.11.11, 4.12.3, 4.13.1, 4.13.1A, 4.13.1B, 4.13.2, 4.13.2C, 4.13.3, 4.13.4, 4.13.6, 4.13.10, 4.13.10C, 4.13.11A, 4.13.13, 4.13.14, heading to section 4.13A, clauses 4.13A.1, 4.13A.2, 4.13A.3, 4.13A.4, 4.13A.6, 4.13A.7, 4.13A.8, 4.13A.9, 4.13A.10, 4.13A.11, 4.13A.12, 4.13A.13, 4.13A.15, 4.13A.16, 4.13A.17, 4.13A.18, 4.13A.19, 4.13A.21, 4.13A.22, 4.13A.23, 4.13A.24, 4.13B.6, 4.14.1B, 4.14.1CA (new), 4.14.1D, 4.14.2, 4.14.6, 4.14.8, 4.15.5, 4.15.9, 4.15.14, 4.15.15, heading to section 4.16, clauses 4.16.1, 4.16.2, 4.16.2A (new), 4.16.3, 4.16.4, 4.16.5, 4.16.6, 4.16.7, 4.16.8, 4.16.8A, 4.16.9, 4.16.11 (new), 4.16.12 (new), 4.16.13 (new), 4.16.14 (new), 4.20.5A, 4.20.5AA, 4.20.5B, 4.26.4, 4.26.5, 4.26.6, 4.27.11D, 4.28.4, 4.28C.2, 4.28C.2B, 4.28C.7, 4.28C.7A, 4.28C.7AA, 5.2A.3, 7.13.6, 7.13.7, 9.8.3, the Glossary and Appendix 3.	
1 April 2024	Minister amended clause 4.24.18.	*Wholesale Electricity Market Amendment (Supplementary Capacity No.2) Rules 2023, Schedule B.*
22 May 2024	Minister amended clause 1.61.2 and the Glossary.	*Wholesale Electricity Market Amendment (Price Ceiling) Rules 2024.*
8 June 2024	Minister amended clauses 1.33.1, 1.63.3 (new), 1.63.4 (new), section 1.64 (new), clauses 3.18E.8, 4.3.1, 4.4A.2, 4.4B.4, 4.4B.6, 4.7.3, 4.8A.4, 4.10.1, 4.10.1B (new), 4.10.2, 4.10.3, 4.11.3A, 4.11.3BA, 4.15.5, heading above section 4.16, heading to section 4.16, clauses 4.20.5A, 5.3.1, 7.5.8A (new), 7.6.5B, 7.14.1, the Glossary, Appendix 3 and Appendix 9.	*Wholesale Electricity Market Amendment (Cost Allocation Reform) Rules 2024, Schedule 1.*
27 July 2024	Minister amended clauses 2.8.13, 4.24.1B, 4.24.6, 4.24.6AA (new), 4.24.6AB (new), 4.24.7, 4.24.8, 4.24.8A (new), 4.24.11, 4.24.11B, 4.24.18, 4.24.19 and 4.24.20 (new).	*Wholesale Electricity Market Amendment (Supplementary Capacity No. 3) Rules 2024, Schedule 1.*
7 October 2024	Minister amended clauses 1.63.4A (new), 2.4A.1, 2.9.6, 2.10.13, 2.16.3A (new), 2.16.3B (new), 2.16.3C (new), 2.16.3D (new), 2.16.3E (new), 2.27.1, 2.27.1A (new), 2.27.2, 2.27.4, 2.27.5, 2.27.6, 2.27.10, 2.27.12, 2.27.13, 2.27.14, 2.27.15, 2.27B.6, 2.28.3, 2.28.3A, 2.29.1B,	*Wholesale Electricity Market Amendment (Miscellaneous Amendments No 3) Rules 2024, Schedule 1.*

Date	Amendment	Rule Change Reference
	2.29.4N, 2.29.5E, 2.30.5A, 2.30.5B, 2.30.5C, 2.30B.2, 2.31.1A (new), 2.31.2A (new), 2.31.2B (new), 2.31.2C (new), 2.31.2D (new), 2.31.2E (new), 2.31.2F (new), 2.31.2G (new), 2.31.2H (new), 2.31.2I (new), 2.31.2J (new), 2.31.2K (new), 2.31.2L (new), 2.31.2M (new), 2.31.2N (new), 2.31.2O (new), 2.31.2P (new), 2.31.13, 2.32.2, 2.32.5, 2.32.7BA, 2.32.7BB, 2.34.11, 2.34A.11, heading to section 3.8, clauses 3.8.1, 3.8.2, 3.8.2A, 3.8.3, 3.8.4, 3.8.5, 3.8.5A, 3.8.6, 3.8.7, 3.11B.7, 3.11B.15, 3A.5.5, 4.1.16A, 4.1.18A, 4.1.22, 4.1.26, 4.5.2, 4.5.12, 4.5.13, 4.10.1, 4.13.1A, 4.13.1B, 4.13.1C, 4.13.1D (new), 4.13.2A, 4.13.2B, 4.13.2C, 4.13.12, 4.13A.8, 4.20.5A, 4.20.5AA, 4.20.17B (new), 4.24.11B, 4.25.2, 4.25.4, 4.29.3, 6.3A.3, 6.4.7, 7.4.35, 7.4.47, 7.6.5B, 8.3.1, 8.3.1A (new), 9.10.3C, 9.10.3D, 9.10.3E, 9.10.3F, 9.10.3G, 10.4.4A (new), 10.4.26, the Glossary, Appendix 1 and Appendix 5A.	
7 October 2024	Minister amended clauses 4.28.2, 4.28.4, 4.28.4A (new), heading to section 6.3, clauses 6.3.1, 6.3A.2, 6.3A.4, 9.10.27D and 9.10.45.	*Wholesale Electricity Market Amendment (Miscellaneous Amendments No 3) Rules 2024, Schedule 2.*
30 October 2024	Minister amended section 1.65 (new), clauses 2.9.6, 2.22A.7, 2.22A.7A (new), 2.24.2, 2.24.2C (new), 2.24.3, 7.4.12 and 9.5.2A (new).	*Wholesale Electricity Market Amendment (FCESS Cost Review) Rules 2024, Schedule 1.*
20 November 2024	Minister amended clauses 2.16A.1, 2.16A.2, 2.16B.1, 2.16B.2, 2.16B.4 (new), 2.16B.5 (new), heading to section 2.16C, clauses 2.16C.1, 2.16C.2, 2.16C.3, 2.16C.3A (new), 2.16C.4, 2.16C.6, 2.16C.6A (new), 2.16C.8A (new), 2.16C.11, 2.16D.1, 2.16D.7, 2.16D.15, 2.16E.1, 2.16E.2, 2.26.2, 3.11.2, 7.4.2C (new), 7.4.2D (new), 7.4.5, 7.4.6, 7.4.7, 7.4.50, 7.4.51, 7.4.51A, heading above clause 7.5.15 (new), clauses 7.5.15 (new), 7.5.16 (new), 7.5.17 (new), 7.5.18 (new), heading above clause 7.6.23, clauses 7.6.23, 7.6.27, 7.7.4, 7.7.5, 7.7.8A (new), 7.8.4, 7.8.5, 7.8.5A, 7.8.5B (new), 7.8.6, 7.8.6A (new), 7.13.1EA, 7.13A.1, 7.13A.2, 7.14.1, heading above section 7.17 (new), section 7.17 (new), clauses 9.9.8, 9.9.9, 9.9.10, 9.10.3B, 9.10.3C, 9.10.3D, 9.10.3E, 9.10.3F, 9.10.3G, 9.10.3H, 9.10.3HA (new), 9.10.3I, 9.10.3J, 9.10.3K, 9.10.3L, 9.10.3M, 9.10.3N, 9.10.3O, 9.10.15 and the Glossary.	*Wholesale Electricity Market Amendment (FCESS Cost Review) Rules 2024, Schedule 2.*
1 January 2025	Minister amended clauses 7.11B.1B and 7.11C.1.	*Wholesale Electricity Market Amendment (Miscellaneous Amendments No 3) Rules 2024, Schedule 3.*
15 January 2025	Minister amended clauses 1.63.5 (new), 1.63.6 (new), 1.63.7 (new), 1.63.8 (new), 1.63.9 (new),	*Wholesale Electricity Market Amendment (RCM*

Date	Amendment	Rule Change Reference
	1.63.10 (new), 1.63.11 (new), section 1.66 (new), clauses 2.8.15 (new), 2.30.5, 3.21.6, 3.21.7, 3.21.8, 4.1.22, 4.1.26, 4.1.29, 4.2.7, 4.3.1, 4.4.1, 4.4B.9, 4.5.2A, 4.5.9, 4.5.10, 4.5.12, 4.5.13, 4.5.16, 4.6.1, 4.6.1A (new), 4.6.2, 4.6.2A (new), 4.7.3, 4.9.1, 4.9.2A (new), 4.9.3, 4.9.8, 4.9.9, 4.9.9A, 4.10.1, 4.10.1A (new), 4.10.2, 4.10.3, 4.10.3A, 4.11.1, 4.11.3A, 4.11.3C, 4.11.3E, 4.12.2, 4.12.5, heading to section 4.13, heading to section 4.13B, clauses 4.13B.1, 4.13B.3, 4.14.1, 4.14.1A (new), 4.14.1B, 4.14.1C, 4.14.1CA, 4.14.1CB (new), 4.14.1CC (new), 4.14.3, 4.14.6, 4.14.8, 4.14.9, 4.15.3, 4.16.12A (new), 4.16.13, 4.16.14, 4.20.5A, 4.20.5AA, 4.20.5B, 4.20.5BA (new), 4.20.5C, 4.20.9, 4.20.11, 4.20.12, 4.20.14, 4.20.15, 4.20.16, 4.20.16A (new), 4.20.17, 4.20.17A (new), 4.20.17B, 4.23A.4, 4.24.1, 4.24.1A, 4.24.3, 4.25.1, 4.25.2, 4.25.2D, 4.25.2E, 4.25.4, 4.25.4C, 4.25.4CA, 4.25.4D, 4.25.6, 4.26.1, 4.28.2, 4.28A.2, 4.28C.5, 4.28C.7, 4.28C.7B, 4.28C.8, 4.28C.8A, 4.28C.9, 4.29.1, 4.29.1A, 4.29.1AA (new), 4.29.1B, 4.29.1C, 4.29.1CA, 4.29.1D, 4.29.1E (new), 4.29.1F (new), 4.29.1G (new), 4.29.1H (new), 4.29.2, 4.29.2B, 4.29.3, 4.29.5, 7.8.9, 9.8.3, the Glossary and Appendix 7.	*Reviews Sequencing) Rules 2025, Schedule 1.*
1 February 2025	Minister amended clause 7.7.14.	*Wholesale Electricity Market Amendment (FCESS Cost Review) Rules 2024, Schedule 3.*
1 March 2025	Minister amended clause 7.13.1I.	*Wholesale Electricity Market Amendment (FCESS Cost Review) Rules 2024, Schedule 4.*
10 March 2025	The Coordinator amended section 1.65 (replaced).	RC_2024_01
4 June 2025	Minister replaced “WEM Rules” with “ESM Rules”, “WEM Regulations” with “ESM Regulations” and “Wholesale Market Objectives” with “State Electricity Objectives” throughout these ESM Rules; and amended heading above section 1.1, heading to section 1.1, clause 1.1.1, section 1.2 (replaced), clauses 1.63.9, 1.65.4, 1.65.5, section 1.68 (new), clauses 2.13.10, 2.16.3, 2.16A.1, 2.16A.2, 2.29.5AK (new), 2.29.5AL (new), 2.31.2L, 3.8.3, 3.19.8, 4.5.9, 4.5.10, 4.5.12, 4.5.12A (new), 4.5.13, 4.5B.6, headings above sections 4.7 and 4.8A, clauses 4.10.1, 4.11.1, 4.13.11A, 4.13.11B (new), 4.13.13, 4.13A.16, 4.13A.16A (new), 4.13B.2, 4.13B.3, 4.14.1CB, 4.16.9, 4.16.11A (new), 4.24.1B, 4.24.6, 4.24.7, 4.24.8, 4.24.10, 4.24.11B, 4.28.4, 4.28.4D (new), 4.29.1, 4.29.1D, 4.29.2, 4.29.3, 6.3A.2A, 6.4.6, 6.4.6A, 7.6.31, 7.10.1, 7.10.6B (new), 7.11D.5, 8.3.1, 9.8.2, 9.8.4A (new), 9.9.9, the Glossary,	*Electricity System and Market Amendment (Tranche 8) Rules 2025, Schedules 1 and 2.*

Date	Amendment	Rule Change Reference
	Appendix 3, Appendix 7, Appendix 11 and Appendix 12.	
27 September 2025	Minister amended clause 4.5A.2.	*Electricity System and Market Amendment (Tranche 8A) Rules 2025, Schedule 1.*
30 October 2025	Minister amended clause 7.13.1FA (new).	*Wholesale Electricity Market Amendment (Cost Allocation Reform) Rules 2024, Schedule 2.*
30 October 2025	Minister amended clauses 7.2.4, 7.13.1EA, 9.10.11, 9.10.11A (new), 9.10.32, 9.10.32A (new), 9.10.32B (new), 9.10.32C (new), 9.10.32D (new), 9.10.32E (new), 9.10.32F (new), 9.10.32G (new), the Glossary and Appendix 2E (new).	*Wholesale Electricity Market Amendment (Cost Allocation Reform) Rules 2024, Schedule 4.*
30 October 2025	Minister amended clauses 9.10.32E, 9.10.32F and the Glossary.	*Electricity System and Market Amendment (Tranche 8A) Rules 2025, Schedule 2.*
1 January 2026	Minister amended clause 1.63.8, section 1.67 (new), clauses 2.13.7, 2.29.5AB (new), 2.29.5AC (new), 2.29.5AD (new), 2.29.5AE (new), 2.29.5AF (new), 2.29.5B, 2.29.5BA (new), 2.29.5LA, 2.29.13, 2.33.3, 4.3.1, 4.5.10, 4.6.3, 4.9.9, 4.9.10, 4.10.1, 4.10.5 (new), 4.10.6 (new), 4.10.7 (new), 4.10.8 (new), 4.10.9 (new), 4.11.7, 4.11.8, 4.11.9, 4.14.1CB, 4.14.1CC, 4.15.16A (new), 4.15.17, 4.20.16B (new), 4.24.1AA (new), 4.24.1AB (new), 4.24.1AC (new), 4.24.1AD (new), 4.24.1B, 4.24.1C, 4.24.3, 4.24.3A (new), 4.24.6, 4.24.8, 4.24.10, 4.24.11B, 4.24.13, 4.24.14, 4.24.18, 4.24.18B and the Glossary.	*Wholesale Electricity Market Amendment (RCM Reviews Sequencing) Rules 2025, Schedule 2.*
1 January 2026	Minister amended section 1.69 (new), clauses 2.13.7, 2.29.5BA, 2.29.5E, 2.29.5EA (new), 2.29.13, 2.33.3, 4.5.10, 4.10.1, 4.11.4, 4.14.1CB, 4.14.1CC, 4.24.1B, 4.24.1C, 4.24.13, 4.24.18, 4.24.18B, Appendix 7 and Appendix 9.	*Electricity System and Market Amendment (Tranche 8) Rules 2025, Schedule 3.*
1 January 2026	Minister amended clauses 1.4.1, 1.7.4, 1.7.5 (new), 1.43.2, 1.43A.2, 1.63.10, 1.67.1, 1.67.2, 1.67.3, sections 1.70 (new), 1.71 (new), clauses 2.2C.2 (new), 2.3.1, 2.3.1D (new), 2.3.5, 2.3.5A, 2.3.5C, 2.3.8E, 2.3.10, 2.3.17, 2.8.15, 2.9.2CC (new), 2.9.2F, 2.9.6, 2.9.7E (new), 2.10.1, 2.10.2, 2.10.2A, 2.10.3, 2.10.5C, 2.10.7, 2.10.9, 2.10.10, 2.10.12C, 2.10.13, 2.10.17, 2.10.18, 2.11.1, 2.11.2, 2.11.3, 2.11.4, 2.13.23, 2.13.36, 2.13.43, 2.13.43A, 2.13.45, 2.16.13F, 2.29.5AB, 2.29.5AC, 2.29.5AD, 2.29.5AK, 2.29.5AM (new), 2.29.5AN (new), 2.29.5AO (new), 2.29.5B, 2.29.5E, 2.29.5HA (new), 2.29.5N, 2.29.12, 2.29.16 (new), 2.30B.11, 2.31.13, heading to section 2.34, heading above clause 2.34.1 (new), heading above clause 2.34.15 (new), clause 2.34.15 (new), section 2.34C (new), clauses 3.11.6,	*Electricity System and Market Amendment (Tranche 9) Rules 2025, Schedule 1.*

Date	Amendment	Rule Change Reference
	3.11A.2, 3.11B.4, 3.18G.2, 3.18GA.2, heading above section 3.25 (new), section 3.25 (new), clauses 4.4A.8 (new), 4.4B.10 (new), 4.5.12, 4.8A.3, 4.10.1, 4.10.1A, 4.10.1B, 4.11.1, 4.11.1B, 4.11.4, 4.11.4A (new), 4.13.14, 4.13A.5A (new), 4.13A.5B (new), 4.13A.15A (new), 4.13A.16, 4.13A.16A, 4.13A.16B (new), 4.16.2, 4.16.2A, 4.16.3, 4.16.9, 4.16.11, 4.16.12, 4.16.12A, 4.20.5A, 4.20.16B, 4.25.4C, 4.25.9, 4.29.1, 7.4.52, 7.13.1EA, 8.2.1, 8.3.1, 8.3.5, 8.4.2, 8.6.1, 9.1.3, 9.1.4, 9.2.1, 9.3.3, 9.14.2, heading above section 9.21, heading to section 9.21, clauses 9.21.1, 9.21.2, 9.21.3, 9.21.4, the Glossary, Appendix 1 and Appendix 3.	
26 February 2026	Minister amended heading above clause 7.5.19 (new), clauses 7.5.19 (new), 7.5.20 (new), 7.5.21 (new), 7.13.1EA, 9.10.30, 9.10.30B, 9.10.30C, 9.10.43, the Glossary and Appendix 2A.	*Wholesale Electricity Market Amendment (Miscellaneous Amendments No 3) Rules 2024, Schedule 4.*
26 February 2026	Minister amended clauses 7.7.8A, 7.7.8B (new), 9.10.3, 9.10.3F, 9.10.3Q (new), 9.10.3R (new), 9.10.3S (new), 9.10.3T (new), 9.10.15 and the Glossary.	*Electricity System and Market Amendment (Tranche 8) Rules 2025, Schedule 7.*
26 February 2026	Minister amended clause 2.34A.12I and Appendix 13.	*Electricity System and Market Amendment (Tranche 9) Rules 2025, Schedule 1A.*
1 April 2026	Minister amended clauses 1.63.3, 4.1.9, 4.1.16, 4.5.12, 4.11.2B (new), the Glossary, Appendix 7 and Appendix 9.	*Wholesale Electricity Market Amendment (RCM Reviews Sequencing) Rules 2025, Schedule 5.*
1 April 2026	Minister amended the Glossary and Appendix 9.	*Electricity System and Market Amendment (Tranche 8) Rules 2025, Schedule 6.*
1 April 2026	Minister amended clause 4.11.2B and Appendix 9.	*Electricity System and Market Amendment (Tranche 9) Rules 2025, Schedule 2.*
1 April 2026	The Coordinator amended clause 4.24.3.	RC_2025_01
1 May 2026	Minister amended clauses 8.4.3, 8.4.4 and 8.4.5.	*Electricity System and Market Amendment (Tranche 9) Rules 2025, Schedule 5.*
1 July 2026	Minister amended clauses 3.11A.2, 3.11B.7, 3.11B.8A (new), 3.11B.10, 4.24.7 and 4.24.8.	*Electricity System and Market Amendment (Tranche 9) Rules 2025, Schedule 2A.*
26 September 2026	Minister amended sections 1.72 (new), 1.73 (new), clause 2.16.13F, section 3.8B (new), clauses 4.1.19, 4.1.27, 4.3.1, 4.16.1, 4.16.3, 4.16.3A (new), 4.16.4, 4.16.5, 4.16.6, 4.16.7, 4.16.8, 4.16.8A, 4.16.9, 4.16.10, 4.20.5A, 7.7.5A	*Electricity System and Market Amendment (Tranche 10) Rules 2026, Schedule 1.*

Date	Amendment	Rule Change Reference
	(new), 7.7.14, 7.12.1, 7.12.1A (new), 7.12.1B (new), 7.12.1C (new), 7.12.2, 7.12.2A (new), 7.12.3, 7.12.7, 7.12.8, 7.12.8A (new) and the Glossary.	
1 October 2026	Minister amended clauses 2.16A.3A (new), 2.29.5AG (new), 2.29.5AH (new), 2.29.5AI (new), 2.29.5AJ (new), 2.29.5E, 4.13A.5A, 4.13A.5B, 4.13A.15A, 4.13A.16, 4.13A.20, 4.25.1, 4.25.2B, 4.25.3D (new), 4.25.4, 4.25.4B, 4.25.4CC (new), 4.25.4CD (new), 4.25.4CE (new), 4.25.4I, 4.25.6, section 4.25A, clauses 4.26.1, 4.26.1A, 4.26.1AA (new), 4.26.2CA, 4.26.2CB, 4.26.2CC, 4.26.2CD, 4.26.2CE, 4.26.2CF, 4.26.2CG, 4.26.2CH, 4.26.2D, 4.29.3, 4.30.1, 4.30.4, 4.30.6, 4.30.8, 4.30.9, 4.30.10, 4.30.11, 4.31.1, 7.1.3, heading to section 7.4A, clauses 7.4A.1, 7.4A.2, 7.4A.3, 7.4A.4, 7.4A.5, 7.4A.6, 7.4A.7, 7.4A.8, 7.4A.9, 7.4A.9A, heading above clause 7.4A.10, clauses 7.4A.10, 7.4A.11, heading above clause 7.4A.12, clauses 7.4A.12, 7.4A.13, heading above clause 7.4A.14, clauses 7.4A.14, 7.4A.15, heading above clause 7.4A.16, clauses 7.4A.16, 7.4A.17, 7.4A.18, 7.4A.19, 7.4A.20, 7.4A.21, 7.4A.22, 7.4A.23, heading above clause 7.4A.24, clauses 7.4A.24, 7.6.5B, 7.6.11A, 7.6.13, 7.6.13A, 7.6.15, 7.8A.1, 7.8A.3, 7.8A.4, 7.10.6B (new), 7.10.6C (new), 7.11.6, 7.13.1F, 7.13.1G, 7.13.5, 9.5.3, 9.5.4, the Glossary and Appendix 10.	*Wholesale Electricity Market Amendment (RCM Reviews Sequencing) Rules 2025, Schedule 3.*
1 October 2026	Minister amended clauses 2.13.7, 2.29.5AH, 2.29.13, 4.11.1, 4.13A.16, 4.13A.16A, 4.26.1A, 4.26.2D, 4.28.4D, 4.30.4, 7.4A.8, 7.6.13A, 7.10.6B, 7.10.6C, 7.13.1G and Appendix 10.	*Electricity System and Market Amendment (Tranche 8) Rules 2025, Schedule 4.*
1 October 2026	Minister amended clause 4.24.14A.	*Wholesale Electricity Market Amendment (Supplementary Capacity No. 3) Rules 2024, Schedule 2.*
1 October 2026	Minister amended clause 4.24.14A.	*Electricity System and Market Amendment (Tranche 8) Rules 2025, Schedule 8.*
1 October 2026	Minister amended clauses 2.29.5AG, 2.29.5AH, 2.29.5AI, 2.29.5AJ, 4.13A.5A, 4.13A.5B, 4.13A.15, 4.13A.15A, 4.13A.16, 4.13A.16A, 4.25.1, 4.25.2, 4.25.2B, 4.25.2BB (new), 4.25.2BC (new), 4.25.3D, 4.25.4, 4.25.4B, 4.25.4CC, 4.25.4CD, 4.25.4CE, 4.25.4F, 4.25.4G, 4.25.4H, 4.25.4I, 4.25.6, 4.26.1, 4.26.1A, 4.26.1AA, 4.26.1AB (new), 4.26.1AC (new), 4.26.1AD (new), 4.26.2CA, 4.26.2CB (new), 4.26.2CC (new), 4.26.2CD (new), 4.26.2CE (new), 4.26.2D, 4.26.3A, 7.13.1G, 7.13.5, the Glossary and Appendix 10.	*Electricity System and Market Amendment (Tranche 9) Rules 2025, Schedule 3.*
1 October 2026	Minister amended clauses 2.30.5, 4.1.29, 4.26.1, 4.26.2D, 4.28.1, 4.28.2, 4.28A.1A, 4.29.1A,	*Electricity System and Market Amendment*

Date	Amendment	Rule Change Reference
	4.29.1B, 4.29.1D, 4.29.1H, 4.29.2B, 4.29.3, 4.29.5, 7.11B.1B, 7.11C.1, 7.11D.3, 9.8.3, 9.8.3A (new), 9.8.3B (new), the Glossary and Appendix 10.	*(Tranche 10) Rules 2026, Schedule 2.*
1 October 2027	Minister amended clauses 1.63.10, 3.16.7, 3.16.7A (new), 3.18.4, 3.21.6, 3.21.7, 3.21.7A, 3.21.7B, 3.21.7C, 3.21.8, 3.21.8A, 3.21.8B, 3.21.8C, 3.21.11 (new), 3.21.12 (new), 3.21.13 (new), 3.21.14 (new), 3.21.15 (new), 3.21.16 (new), 3.21.17 (new), 3.21.18 (new), 3.21.19 (new), 3.22.3, 4.1.23AA (new), 4.1.23BA (new), 4.1.23C, 4.1.24, 4.1.29, 4.11.1, 4.12.1, 4.12.4, 4.12.5, 4.12.6, 4.12.7 (new), 4.12.8 (new), 4.12.9 (new), 4.13A.15A, 4.13B.3, 4.23A.4, 4.25.1B (new), 4.25.1C (new), 4.25.2AB (new), 4.25.2B, 4.25.2C, 4.25.3B (new), 4.25.3C (new), 4.25.3E (new), 4.25.3F (new), 4.25.3G (new), 4.25.3H (new), 4.25.4CB (new), 4.25.4E, 4.25.5, 4.25.6, 4.25.9, 4.26.1, 4.26.1A, 4.26.1B, 4.26.1C, 4.26.1CA, 4.26.1D, 4.26.1E, 4.26.1F, 4.26.1G, 4.26.1H, 4.26.1I, 4.26.1J, 4.26.2, 4.26.2AA, 4.26.2AD, 4.26.2AE, 4.26.2AG, 4.26.2AH, 4.26.2D, 4.26.2E, 4.26.2F, 4.26.3, 4.26.3A, 4.26.4 (new), 4.26.4A (new), 4.26.5 (new), 4.26.6 (new), 4.26.7 (new), 4.26.8 (new), 4.26.9 (new), 4.26.10 (new), 4.26.11 (new), 4.26.12 (new), 4.26.13 (new), 4.26.14 (new), 4.26.15 (new), 4.26.16 (new), 4.26.17 (new), 4.26.18 (new), 4.28.1, 4.28.1A (new), 4.28.2, 4.28.3, 4.28.3A (new), 4.28.4, 4.28.4A, 4.28.4B (new), 4.28.4C (new), 4.28.5, 4.28.5A (new), 4.28.5C (new), 4.28.6, 4.28.6A (new), 4.28.7, 4.28.7A (new), 4.28.9C, 4.28.9D, 4.28.11A, 4.28.11B (new), 4.28A.1, 4.28A.1A, 4.29.3, 4.29.5, 4.30.4A (new), 4.30.5, 4.30.11A (new), 4.31.1, 6.3A.3, 6.3A.4, 6.3A.5, 7.3.3, 7.3.4, 7.4A.5, 7.4A.8, 7.6.5B, 7.6.11, 7.8A.1, 7.8A.3, 7.10.6B, 7.13A.1, 9.8.2, 9.8.3, 9.8.3A (new), 9.8.3B (new), 9.8.4, 9.8.6 (new), 9.8.7 (new), 9.8.8 (new), 9.8.9 (new), the Glossary, Appendix 1, Appendix 4 and Appendix 5.	*Wholesale Electricity Market Amendment (RCM Reviews Sequencing) Rules 2025, Schedule 4.*
1 October 2027	Minister amended clauses 1.63.10, 4.12.5, 4.13.11B, 4.13A.15A, 4.13A.16A, 4.13B.3, 4.25.1B, 4.25.2A, 4.25.2AB, 4.25.2B, 4.25.2BA (new), 4.25.4CB, 4.25.4CF (new), 4.25.5, 4.25.6, 4.26.1, 4.26.3A, 4.26.4A, 4.26.14, 4.26.18, 4.28.4, 4.28.4D, 4.30.4A, 4.30.5, 7.4A.8, 7.8A.1, 9.8.2, 9.8.3A, 9.8.4A, 9.8.7, the Glossary, Appendix 1 and Appendix 5.	*Electricity System and Market Amendment (Tranche 8) Rules 2025, Schedule 5.*
1 October 2027	Minister amended clauses 2.30B.9, 4.1.23A, 4.28.5B (new), 4.28.8, 4.28.8B, 4.28.8C, 4.28.9, 4.28.9A, 4.28.9B, 4.28.9C, 4.28.9D, 4.28.9E, 4.28.9F, 4.28.11, the Glossary, Appendix 4A, Appendix 5, Appendix 5A and Appendix 9.	*Wholesale Electricity Market Amendment (RCM Reviews Sequencing) Rules 2025, Schedule 6.*
1 October 2027	Minister amended clauses 1.63.10, 3.16.7A, 4.13A.15A, 4.25.4CF, 4.25.6, 4.26.1, 4.26.1A,	*Electricity System and Market Amendment*

Date	Amendment	Rule Change Reference
	4.28.4D, 4.28.13, 4.29.3, the Glossary, Appendix 1 and Appendix 5.	*(Tranche 9) Rules 2025, Schedule 4.*
1 October 2027	Minister amended clauses 4.1.27, 4.26.1, 4.26.3A, 4.28.1, 4.28A.1A, 4.29.3, heading above clause 7.5.22 (new), clauses 7.5.22 (new), 7.5.23 (new), 7.5.24 (new), 9.5.5A (new), 9.5.5B (new), 9.5.7, 9.8.3A, 9.8.3B, 9.9.9, 9.9.10, 9.10.3T, 9.10.32E, 9.10.38, the Glossary, Appendix 5 and Appendix 10.	*Electricity System and Market Amendment (Tranche 10) Rules 2026, Schedule 3.*