

Electricity Industry (Wholesale Electricity Market) Regulations 2004

Wholesale Electricity Market Amendment (Tranches 2 and 3 Amendments) Rules 2020

Commencement

- The amending rules set out in Schedule A come into operation at 8:00 AM (WST) on 1 January 2021.
- The amending rules set out in Schedule B come into operation immediately after the commencement of the amending rules in the *Wholesale Electricity Market Amendment (Tranche 1 Amendments) Rules 2020*, that commence at 8:00 AM (WST) on 1 February 2021.
- The amending rules set out in Schedule C come into operation at a time specified by the Minister in a notice published in the Gazette. Different days may be specified for different provisions.

Schedule A

1. Section 1.36A inserted

1.1 Insert the following new section 1.36A:

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 Market Web Site 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 Market Web Site. 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 Market 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 Market Web Site 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 be 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 Market Web Site:
 - 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.

2. Section 1.36B inserted

2.1 Insert the following new section 1.36B:

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 Market Web Site 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.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 Market Web Site. 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 Market 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 Market Web Site 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;
- (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 Market Web Site:
 - 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.

3. Section 1.36C added

3.1 Insert the following new section 1.36C:

1.36C. General Transitional Provisions – Staging of Tranches 2 and 3 Amendments

1.36C.1. In this section 1.36C:

Commenced Tranches 2 and 3 Amending Rule: Means a Specific Amending Rule that has commenced on a Tranches 2 and 3 Amending Rules Commencement Day.

Post-Amended Rules: Means the WEM Rules as in force immediately after the most recent Tranches 2 and 3 Amending Rules Commencement Day.

Pre-Amended Rules: Means the WEM Rules as in force immediately before the most recent Tranches 2 and 3 Amending Rules Commencement Day.

Specific Amending Rule: Means an Amending Rule in the Tranches 2 and 3 Amending Rules.

Tranches 2 and 3 Amending Rules: Means the Amending Rules in the *Electricity Industry (Tranches 2 and 3 Amendments) Rules 2020* made by the Minister under regulation 7(5) of the WEM 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.

Tranches 2 and 3 Amending Rules Commencement Day: Means a date, by notice published in the Government Gazette, that a Specific Amending Rule commences.

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

1.36C.2. Before 8:00 AM on a Tranches 2 and 3 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 Tranches 2 and 3 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 a Tranches 2 and 3 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 Tranches 2 and 3 Amending Rules Commencement Day or subsequent Trading Days.

- 1.36C.4. If before 8:00 AM on a Tranches 2 and 3 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 Tranches 2 and 3 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 Tranches 2 and 3 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 a Tranches 2 and 3 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 Tranches 2 and 3 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 Tranches 2 and 3 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 Tranches 2 and 3 Amending Rule even though the Specific Amending Rules have not yet commenced.
- 1.36C.7. Where any Commenced Tranches 2 and 3 Amending Rule requires the operation of WEM Rules which have been amended, repealed or replaced by one or more Commenced Tranches 2 and 3 Amending Rules, regard may be had to those WEM Rules to interpret or give effect to the Commenced Tranches 2 and 3 Amending Rule even though those WEM Rules have been amended, repealed or replaced.
- 1.36C.8. For the purposes of this section 1.36C, 'WEM Rule' has the same meaning as 'Market Rule' in these Market Rules.

Schedule B

1. Clause 2.10.10 amended

- 1.1 Clause 2.10.10 is deleted and replaced with the following:

2.10.10. Following the closing date for submissions, the Rule Change Panel, AEMO, the Economic Regulation Authority, the Coordinator or the Network Operator, as applicable, must prepare a Procedure Change Report on the Procedure Change Proposal.

2. Clause 2.10.13 amended

2.1. Clause 2.10.13(c) is deleted and replaced with the following:

- (c) all submissions received before the due date for submissions, a summary of those submissions, and the response of the Rule Change Panel, AEMO, the Economic Regulation Authority, the Coordinator or the Network Operator, as applicable, to the issues raised in those submissions;

3. Clause 2.36A.5 amended

3.1 Clause 2.36A.5 is deleted and replaced with the following:

2.36A.5. AEMO must document in a WEM Procedure the communications and control system requirements necessary to enable it to remotely monitor the performance of a Network described in these WEM Rules.

4. Clause 4.16.3 amended

4.1 Clause 4.16.3(b) is deleted and replaced with the following:

- (b) AEMO must follow that documented WEM Procedure to annually review the value of the Benchmark Reserve Capacity Price in accordance with this section 4.16 and in accordance with the timing requirements specified in clause 4.1.19.

5. General amendments

5.1 In each place in the Market Rules listed in the Table, delete the words 'System Management' and replace them with the word 'AEMO'.

Table

Clause 3.13.3B(a)

Clause 7.6A.5(b)

5.2 In each place in the Market Rules listed in the Table, delete the words 'Market Procedure' and replace them with the words 'WEM Procedure'.

Table

Clause 2.9.2D(c)(i)

Clause 2.36A.2 (in each place where it occurs)

5.3 In each place in the Market Rules listed in the Table, delete the words 'Market Rules' and replace them with the words 'WEM Rules'.

Table
Clause 1.4.1(r) (in each place where it occurs)
Clause 1.36A.6
Clause 1.36B.6

- 5.4 In each place in the Market Rules listed in the Table, delete the words 'Market Web Site' and replace them with the words 'WEM Website'.

Table
Clause 1.36A.2
Clause 1.36A.3
Clause 1.36A.6(f)
Clause 1.36A.7(c)
Clause 1.36B.2
Clause 1.36B.3
Clause 1.36B.6(f)
Clause 1.36B.7(c)

Schedule C

1. Section 1.1 amended

- 1.1 Clause 1.1.2 is amended by deleting the word 'Ancillary' and replacing it with the words 'Essential System'.

2. Section 1.43 added

- 2.1 Insert the following new section 1.43:

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 WEM 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.

- 1.43.2. 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 WEM 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 WEM 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 for a period of six months from the date that the relevant WEM Procedure was deemed to be the WEM Procedure under clause 1.43.6(b) provided that, in determining a commencement date for the amended or replaced 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 the expiry of the six month period, any amendment or replacement of the WEM Procedure must be made in accordance with the Procedure Change Process.

3. Section 1.44 inserted

3.1 Insert the following new section 1.44:

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.

4. Section 1.45 inserted

4.1 Insert the following new section 1.45:

1.45. Specific Transitional Provisions – Registration for the 2021 Reserve Capacity Cycle and the 2022 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) an unregistered facility intending to participate in the 2021 Reserve Capacity Cycle or the 2022 Reserve Capacity Cycle assigned by AEMO under clause 1.45.9.

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

- (a) a Market Generator and Market Customer registered under these WEM 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 and the 2022 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 1.45.10:
- (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 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 1.45.10.
- 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 2.29.1A.
- 1.45.7. AEMO's determination of an RCM Facility Class under this section 1.45 is final.
- 1.45.8. A Market Participant intending to participate in the 2021 Reserve Capacity Cycle and/or the 2022 Reserve Capacity Cycle in respect of a facility that is unregistered as at the New RCM Transition Date, must apply to AEMO for an RCM Facility Class assessment.
- 1.45.9. In respect of an application for RCM Facility Class assessment received pursuant to clause 1.45.8, AEMO must assess the facility and assign an RCM Facility Class in accordance with the WEM Procedure specified under clause 1.45.10, taking into account the indicative Facility Class assigned to that facility under section 4.8A.
- 1.45.10. AEMO must develop a WEM Procedure specifying:

- (a) the process a RCM Market Participant must follow when applying to AEMO to seek an assessment in respect of their Registered Facility under clause 1.45.4,
- (b) the process a RCM Market Participant must follow when applying to AEMO to seek an assessment in respect of their unregistered facility under clause 1.45.8;
- (c) the process AEMO must follow when assigning an RCM Facility Class to a facility in respect of an application submitted under clause 1.45.4 or clause 1.45.8, which must take into account the Facility Technology Types comprising a facility; and
- (d) the timeframes an RCM Market Participant must adhere to when submitting an application under clause 1.45.4 or clause 1.45.8; and
- (e) the timeframes AEMO must adhere to when conducting an assessment under clause 1.45.6 or clause 1.45.8. For avoidance of doubt, AEMO's timeframes must comply with clause 1.45.5.

5. Section 1.46 inserted

5.1 Insert the following new section 1.46:

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

- iii. for a GIA Facility that is not an Intermittent Generating System, the quantity, in MW, of the lesser of:
 - 1. the Capacity Credits assigned to the Facility for the 2021 Reserve Capacity Cycle; and
 - 2. the Certified Reserve Capacity assigned to the Facility for the 2022 Reserve Capacity Cycle that is intended to be traded bilaterally in accordance with 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.

6. Section 1.47 inserted

6.1 Insert the following new section 1.47:

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

- 1.47.1. On the date determined by AEMO, which must be prior to the New WEM Commencement Day, and published on the WEM Website:
- (a) a Market Customer, Market Generator and Ancillary Service Provider registered under these WEM Rules on the New WEM Commencement Day are deemed to be registered in the Market Participant class; and
 - (b) subject to clause 1.47.3, a Registered Facility that is registered to a Market Customer or Market Generator referred to in clause 1.47.1(a) is deemed to be registered under the equivalent Facility Class set out in clause 1.47.2.
- 1.47.2. For the purpose of clause 1.47.1(b), the table below sets out the equivalent Facility Class that is deemed to apply to a Registered Facility.

Facility Class as at the last Trading Interval immediately preceding the date determined by AEMO under clause 1.47.1	Equivalent Facility Class from the date determined by AEMO under clause 1.47.1
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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
Interruptible Load	Interruptible Load
Demand Side Programme	Demand Side Programme

1.47.3. For the purposes of clause 1.47.1(b), 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 1.47.8:

- (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 on or after the New WEM Commencement Day;
- (c) any equipment is planned to be removed from the Registered Facility after the New WEM Commencement Day; or
- (d) 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 1.47.2.

1.47.4. AEMO must process any application for assessment it receives under clause 1.47.3, in accordance with the WEM Procedure specified in clause 1.47.8.

1.47.5. When conducting an assessment under clause 1.47.4, 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.

1.47.6. A Market Participant intending to register a facility prior to the New WEM Commencement Day with an intended effective registration date on or from the New WEM Commencement Day must apply to AEMO for a Facility Class assessment.

- 1.47.7 In respect of an application for Facility Class assessment received pursuant to clause 1.47.6, AEMO must assess the facility and assign a Facility Class in accordance with the WEM Procedure in clause 1.47.8.
- 1.47.8. AEMO must develop a WEM Procedure specifying:
- (a) the process a Market Participant must follow when applying to seek an assessment in respect of their Registered Facility under clause 1.47.3;
 - (b) the process a Market Participant must follow when applying to seek an assessment in respect of their unregistered facility under clause 1.47.6;
 - (c) the process AEMO must follow when assigning a Facility Class to a facility in respect of an application submitted under clause 1.47.3 or clause 1.47.6, which must take into account the Facility Technology Types comprising a facility;
 - (d) the timeframes a Market Participant must adhere to when submitting an application under clause 1.47.3 or clause 1.47.6; and
 - (e) the timeframes AEMO must follow when conducting an assessment under clause 1.47.5 or clause 1.47.7, which must be before the New WEM Commencement Day.

7. Section 1.48 inserted

7.1 Insert the following new section 1.48:

1.48. Tranches 2 and 3 Amendments - Various

1.48.1. In this section 1.48:

Post-Amended Rules: Has the meaning in section 1.36C where the relevant Tranches 2 and 3 Amending Rules Commencement Day is the day that this section 1.48 commenced.

Pre-Amended Rules: Has the meaning in section 1.36C where the relevant Tranches 2 and 3 Amending Rules Commencement Day is the day that this section 1.48 commenced.

1.48.2 Notwithstanding clause 2.30B.1, a Load or part of a Load that was treated by AEMO as an Intermittent Load under the Pre-Amended Rules is deemed to have met the requirements of clause 2.30B.2 of the Post-Amended Rules for that Load or part of the Load to be treated as an Intermittent Load under the Post-Amended Rules.

1.48.3. Notwithstanding the provisions of these WEM Rules:

- (a) AEMO must not register a Load or part of a Load as a new Intermittent Load under section 2.30B pursuant to an application received by AEMO after 8:00 AM on the New WEM Commencement Day; and
 - (b) a reference to an Intermittent Load in these WEM Rules is a reference to a Load or part of a Load that was registered or treated as an Intermittent Load at 8:00 AM on the New WEM Commencement Day.
- 1.48.4. For the purposes of clause 1.48.3(b):
- (a) an Intermittent Load that is no longer eligible to be treated as an Intermittent Load under these WEM Rules after 8:00AM on the New WEM Commencement Day will not be considered to be an Intermittent Load under clause 1.48.3(b) from the date the Intermittent Load ceases to be eligible to be treated as an Intermittent Load; and
 - (b) for an Intermittent Load to which clause 1.48.4(a) applies, AEMO must not subsequently reassess whether the Load is eligible to be treated as an Intermittent Load.
- 1.48.5. 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.
- 1.48.6. 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.

8. Section 2.1A amended

- 8.1 Clause 2.1A.2(a) is deleted and replaced with the following:
- (a) to operate the Reserve Capacity Mechanism, the Short Term Energy Market and the Real-Time Market;
- 8.2 Clause 2.1A.2(cA) is deleted.
- 8.3 Clause 2.1A.2(e) is deleted and replaced with the following:
- (e) to process applications for participation, and for the registration, de-registration, transfer and Essential System Services accreditation of facilities;
- 8.4 Insert the following new clauses 2.1A.2(eA) and 2.1A.2(eB):
- (eA) to procure, schedule and dispatch Essential System Services to meet the Essential System Service Standards;
 - (eB) to monitor Rule Participants' compliance with the WEM Rules in accordance with clause 2.13.7;
- 8.5 Clauses 2.1A.2(IF) and 2.1A.2(IG) are deleted and replaced with the following:

- (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 under clause 4.5A.8 relating to the preparation of the Whole of System Plan by the Coordinator; and

9. Section 2.2C amended

9.1 Clause 2.2C.1(bA) is deleted and replaced with the following:

- (bA) provide information and assistance to the Coordinator relating to the preparation of the Whole of System Plan by the Coordinator;

10. Section 2.9 amended

10.1 Insert the following new clause 2.9.7D:

2.9.7D. A Network Operator must comply with WEM Procedures applicable to it.

10.2 Clause 2.9.8 is deleted and replaced with the following:

2.9.8. A Rule Participant, other than AEMO or a Network Operator, must comply with WEM Procedures applicable to it.

11. Section 2.13 amended

11.1 Section 2.13 is deleted and replaced with the following:

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 WEM 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 WEM 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 WEM 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 WEM 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 WEM Rules and WEM Procedures.
- 2.13.6. The Economic Regulation Authority must disclose the market related data, information or documents provided by AEMO to the Economic Regulation Authority as part of the systems and processes the Economic Regulation Authority must have in place in accordance with clause 2.13.4 as follows:
- (a) where AEMO periodically provides market related data, information or documents as part of the systems and processes in place under clause 2.13.4, publishing the types of market related data, information or documents provided on the Economic Regulation Authority's website in as much detail as the Economic Regulation Authority considers is reasonably practicable;
 - (b) 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:
 - i. is not one of the types disclosed under clause 2.13.6(a); and
 - ii. 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 Participant's behaviour for compliance with section 7.10;

- (b) monitor Rule Participant's behaviour for compliance with the WEM Procedure referred to in clause 2.29.9A;
- (c) ensure it has processes and systems in place to allow it to monitor Rule Participant's behaviour in accordance with clause 2.13.7(a) and clause 2.13.7(b), 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 the alleged breach of the WEM Rules or WEM Procedures and report any alleged breaches resulting from its monitoring under clause 2.13.7(a) and clause 2.13.7(b) to the Economic Regulation Authority.
- (e) subject to clause 2.13.12, record the alleged breach of the WEM Rules or WEM Procedures and report any alleged breaches resulting from its monitoring under clause 2.13.7(a) and clause 2.13.7(b) to the Economic Regulation Authority.

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 WEM 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 WEM 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. Subject to clause 2.13.7(b), 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 WEM Rules and the WEM Procedures, regardless of whether AEMO is required under the WEM 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 WEM Rules or WEM Procedures.
- 2.13.15. Except where clause 2.13.14 applies, where AEMO becomes aware of an alleged breach of the WEM Rules (other than a provision of the WEM 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 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 WEM 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 may 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) must notify the Economic Regulation Authority in writing if it considers that it has breached, or has reasonable cause to suspect it may have breached, the WEM Rules or a WEM Procedure. 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 WEM 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 breached, or has reasonable cause to suspect it may have breached, a provision of Chapter 3A of these WEM Rules, or a WEM Procedure that is referred to in Chapter 3A, 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 WEM 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) it must determine whether a breach of the WEM 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 WEM 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 WEM 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 WEM 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 clauses 2.13.23 or 2.13.24.

Enforcement action

- 2.13.36. Where the Economic Regulation Authority determines that a breach of the WEM Rules or WEM Procedures has taken place 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 WEM 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) if the WEM Regulations permit, issue an infringement notice in accordance with the WEM Regulations;
 - (c) issue a civil penalty notice where the contravention relates to a Category A WEM Rule;
 - (cA) if the WEM Regulations permit, issue a civil penalty notice where the contravention relates to a Category B WEM Rule or Category C WEM Rule; and
 - (d) subject to clause 2.13.37, if the WEM Regulations permit:
 - i. the making of an order; or
 - ii. the bringing of proceedings before the Electricity Review Board for one or more orders specified in the WEM Regulations as required to be made by the Electricity Review Board.
- 2.13.37. Where the Economic Regulation Authority determines that a breach of the WEM Rules or WEM Procedures has taken place in accordance with clause 2.13.27(d), in addition to any of the actions the Economic Regulation Authority may take under clause 2.13.36, the Economic Regulation Authority may bring proceedings before

the Electricity Review Board for an order by the Electricity Review Board under regulations 33(1)(e), 33(1)(f) or 33(1)(g) of the WEM Regulations.

- 2.13.38. The orders, if any, that the Economic Regulation Authority may make for a breach of the WEM Rules are set out in the WEM Regulations.
- 2.13.39. The orders that the Electricity Review Board may make for a breach of the WEM Rules and the procedures for the operation of the Electricity Review Board are set out in the WEM 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:
- (a) issues an infringement notice under clause 2.13.36(b);
 - (b) issues a civil penalty notice under clause 2.13.36(c); or
 - (c) makes an order under clause 2.13.36(d),
- the Economic Regulation Authority must have regard to all relevant matters, including:
- (d) the nature and extent of the breach, including whether the breach is ongoing;
 - (e) whether the Rule Participant has self-reported or has taken any mitigating actions;
 - (f) the nature and extent of any loss or damage suffered as a result of the breach;
 - (g) the impact and potential impact of the breach on the market and the power system;
 - (h) the circumstances in which the breach took place;
 - (i) 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
 - (j) in the case of an order under clause 2.13.36(d), the consequences of making the order.

- 2.13.43. If the Economic Regulation Authority issues an infringement notice under clause 2.13.36(b), or a civil penalty under clause 2.13.36(c), it must inform AEMO of the determination and penalty amount to assist with the settlement processes in Chapter 9.
- 2.13.44. Where the Economic Regulation Authority:
- (a) issues an infringement notice under clause 2.13.36(b);
 - (b) issues a civil penalty notice under clause 2.13.36(c); or
 - (c) makes an order under clause 2.13.36(d),
- the Rule Participant that received the infringement notice, civil penalty notice or order may seek a review of that decision by the Electricity Review Board in accordance with the WEM 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 WEM 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; and
 - (g) unless they have been set aside by the Electricity Review Board:
 - i. infringement notices issued by the Economic Regulation Authority under clause 2.13.36(b);
 - ii. civil penalties imposed by the Economic Regulation Authority under clause 2.13.36(c); and
 - iii. orders made by the Economic Regulation Authority under clause 2.13.36(d).
- 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 Wholesale Market Objectives.
- 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 WEM Rules where the Economic Regulation Authority issued an infringement notice under clause 2.13.36(b) or a civil penalty notice under clause 2.13.36(c), that were not set aside by the Electricity Review Board; and
 - (b) any other breaches or contraventions of the WEM 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.
- 2.13.50. 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 WEM 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 WEM 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 the provisions for reporting information in section 10.2.
- 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.

12. Section 2.14 amended

- 12.1 The section 2.14 heading is deleted and replaced with 'Market Audit and Compliance Reports'.
- 12.2 Clause 2.14.1A is deleted.
- 12.3 Clause 2.14.5 is deleted and replaced with the following:
- 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.
- 12.4 Clause 2.14.5A is deleted and replaced with the following:
- 2.14.5A. The Economic Regulation Authority must annually provide to the Minister a report on the Economic Regulation Authority's compliance with the WEM Rules and WEM Procedures and publish the report on its website.

- 12.5 Clause 2.14.5D is deleted and replaced with the following:
- 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.
- 12.6 Clauses 2.14.6 to 2.14.9 (inclusive) are deleted and replaced with the following:
- 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 WEM Rules and WEM Procedures. The report must contain the results of any investigations of each Network Operator's compliance with the WEM 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 WEM 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.
- 12.7 Insert the following new clause 2.14.10:

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 clause 2.14.5B or 2.14.6 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.

13. Section 2.15 amended

13.1 The section 2.15 heading is amended by deleting the word 'Requirements' and replacing it with the words 'WEM Procedures'.

13.2 Clause 2.15.2 is deleted and replaced with the following:

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 WEM Rules to monitor, investigate and enforce Rule Participants' behaviour for compliance with the WEM Rules and WEM Procedures.

13.3 Clause 2.15.3 is deleted and replaced with the following:

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 WEM Rules and WEM Procedures by Rule Participants, which must include, where the Economic Regulation Authority is required to investigate under clause 2.13.27(b), or has decided under clause 2.13.27(c) to investigate, an alleged breach by a Rule Participant:
 - i. a requirement for notice to be given by the Economic Regulation Authority to that Rule Participant that identifies the alleged breach to be investigated by the Economic Regulation Authority; and
 - ii. a process through which the Rule Participant may make submissions to the Economic Regulation Authority to explain the alleged breach, prior to the Economic Regulation Authority reaching a decision on whether a Rule Participant has breached the WEM Rules or WEM Procedures;
- (b) a process for Rule Participants to report alleged breaches of the WEM Rules or WEM Procedures under clause 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 WEM 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 WEM Rules or WEM Procedures;
- (f) the processes for suspending or closing investigations of alleged breaches of the WEM Rules or WEM Procedures under clause 2.13.36, 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 WEM 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 WEM 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 WEM 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:
 - i. issue an infringement notice under clause 2.13.36(b);
 - ii. issue a civil penalty notice under clause 2.13.36(c); or
 - iii. make an order under clause 2.13.36(d);
- (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 WEM Rules and WEM Procedures;
and

- (m) any other relevant matters under sections 2.13, 2.14 and 2.15.

13.4 Clauses 2.15.4 – 2.15.6C (inclusive) are deleted.

13.5 Insert the following new clause 2.15.4:

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.

14. Section 2.16 amended

14.1 Clause 2.16.2(gC) is deleted and replaced with the following:

- (gC) Offers of Frequency Co-optimised Essential System Services in the Real-Time Market;

14.2 Clause 2.16.2(j) is deleted and replaced with the following:

- (j) the frequency and nature of Dispatch Instructions to Market Participants;

14.3 Clause 2.16.2(m) is deleted and replaced with the following:

- (m) details of any System Restart Service Contracts;

14.4 Clause 2.16.4(cA) is deleted and replaced with the following:

- (cA) any consistent or significant variations between the Fuel Declarations and Availability Declarations for, and the actual operation of, a Market Participant facility in real-time;

14.5 Clause 2.16.9(a) is deleted and replaced with the following:

- (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;

14.6 Clause 2.16.9(b)(v) is deleted and replaced with '[Blank]'.

14.7 Clause 2.16.12(b)(iv) is deleted and replaced with the following:

- iv. Real-Time Market;

14.8 Clause 2.16.12(b)(viii) is deleted and replaced with the following:

- viii. Essential System Services, including the SESSM.

15. Section 2.17 amended

15.1 Clause 2.17.1(g) is deleted and replaced with the following:

- (g) clauses 2.13.36(b), 2.13.36(c) and 2.13.36(d);

15.2 Clause 2.17.1(h) is deleted and replaced with the following:

- (h) clause 2.13.49(b);

15.3 Clause 2.17.3 is amended by inserting the word 'WEM' immediately before the word 'Regulations'.

16. Section 2.22A amended

16.1 Clause 2.22A.1(a) is deleted and replaced with the following:

- (a) market operation services, including AEMO's operation of the Reserve Capacity Mechanism, STEM, Real-Time Market and settlement and information release functions;

17. Section 2.24 amended

17.1 Clauses 2.24.1 – 2.24.5B (inclusive) are deleted and replaced with the following:

2.24.1. The Market Fees charged by AEMO are:

- (a) Market Participant Market Fees and Market Participant Regulator Fees the rates of which are determined in accordance with section 2.24;
- (b) Application Fees described in clauses 2.33.1(a), 2.33.2(a), 2.33.3(a), 2.33.4(a), 2.33.5(a), 4.9.3(c), 4.26.2CC and 4.28.9B; and
- (c) a Reassessment Fee described in clause 4.11.11.

2.24.2. Before 30 June each year, AEMO must determine and publish the level of the Market Participant Market Fee rate and Market Participant Regulator Fee rate, and the level of each of the Application Fees, and the level of the Reassessment Fee to apply over the year starting 1 July in accordance with AEMO's budget published under clause 2.22A.4 and information provided by the Economic Regulation

Authority under clause 2.24.6 (if any). Where the Economic Regulation Authority has not provided AEMO with the information required under clause 2.24.6 by the date which is five Business Days prior to 30 June, AEMO will 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.

- 2.24.2A. AEMO must determine and publish a level of revised Market Participant Market Fee rate or Market Participant Regulator Fee rate (as applicable) within five Business Days of making any adjustment to AEMO's budget and receiving the information, if in any year the Economic Regulation Authority provides AEMO with the information required under clause 2.24.6 later than the date which is five Business Days prior to 30 June.
- 2.24.2B A revised Market Participant Market Fee rate and Market Participant Regulator Fee rate will supersede any expected Market Participant Market 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.
- 2.24.3. At the same time as AEMO publishes a level of revised Market Participant Market 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 for AEMO's:
 - i. market operation services;
 - ii. system planning services;
 - iii. market administration services; and
 - iv. system management services,where the amounts to be earned for each service is equal to the relevant costs in AEMO's budget published in accordance with clause 2.22A.4 or as adjusted under clause 2.24.2A;
 - (c) Market Participant Regulator Fees collected for:
 - i. the Economic Regulation Authority's monitoring, compliance, enforcement and regulation services and RCP Secretariat Support Services; and
 - ii. the Rule Change Panel's market administration services, where the amount to be earned for those services is equivalent to the costs identified by the Economic Regulation Authority as costs incurred in the performance of the Rule Change Panel's functions under these WEM Rules or the WEM Regulations,

and in each case, where the amount must be consistent with the relevant amount notified in accordance with clause 2.24.6.

- 2.24.4. The Market Participant Market 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 WEM Rules, the WEM Regulations and the Panel Regulations from the collection of Market Participant Regulator Fees under these WEM 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 Economic Regulation Authority may recover, on behalf of the Rule Change Panel, the costs identified by the Economic Regulation Authority as costs incurred in the performance of the Rule Change Panel's functions under these WEM Rules or the WEM Regulations, from the collection of Market Participant Regulator Fees under these WEM Rules.

18. Section 2.25 amended

- 18.1 The section 2.25 heading is amended by deleting the word 'Participant'.
- 18.2 Clauses 2.25.1 – 2.25.4 (inclusive) are deleted and replaced with the following:
 - 2.25.1. AEMO must charge a Market Participant the relevant payment amount for Market Participant Market Fees and Market Participant Regulator Fees for a Trading Week in accordance with clause 9.12.
 - 2.25.1A. AEMO is an agent for the collection of 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.

2.25.2. Each Market Participant must pay the relevant payment amount for Market Participant Market 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) pay the Economic Regulation Authority the payment received as calculated in clause 9.13.3; and
- (b) transfer to the fund established under clause 9.18.9 the payment received as calculated in clause 9.13.2.

2.25.4. [Blank]

19. Section 2.26 amended

19.1 Clause 2.26.3(h) is amended by deleting the word 'Balancing' and replacing it with the word 'Real-Time'.

20. Section 2.27 amended

20.1 Clause 2.27.17 is deleted and replaced with the following:

2.27.17. Each Network Operator must document the standards, methodologies, classification systems and procedures to be used in determining Loss Factors in a WEM Procedure

21. Section 2.27A amended

21.1 Clause 2.27A is deleted and replaced with the following:

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 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) for 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) for 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 Preliminary RCM Constraint Equations and 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 Wholesale Market Objectives; 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 WEM 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 respond to 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 WEM 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).

22. Section 2.27B amended

22.1 Clause 2.27B.3(b) is deleted and replaced by the following:

- (b) as soon as practicable after a Dispatch Interval, each Constraint Equation that bound during the Dispatch Interval;

22.2 Clause 2.27B.3(c) is deleted and replaced by the following:

- (c) each report described in clauses 2.27B.6 and 7.2.7(b);

22.3 Clause 2.27B.6(a)(i) is amended by deleting the word 'Trading' and replacing it with the word 'Dispatch'.

23. Section 2.28 amended

23.1 Clause 2.28.1 is deleted and replaced by the following:

2.28.1. The classes of Rule Participant are:

- (a) Network Operator;
- (b) Market Participant; and
- (c) AEMO;

23.2 Clause 2.28.3(b) is deleted and replaced by the following:

- (b) no Registered Facilities owned or operated by a Market Participant are directly connected to the transmission system or distribution system.

23.3 Clause 2.28.3A is deleted and replaced by the following:

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 Network Operators and any other source; and
 - 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.

23.4 Clauses 2.28.3B is deleted and replaced with the following.

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 provided under clause 2.28.3A; 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) 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 the Network Operator has submitted that revised data and associated model validation report and AEMO is satisfied that the performance of the facility (or equipment within the facility) is performing substantially in accordance with that data.

23.5 Clause 2.28.3C is deleted.

23.6 Clauses 2.28.5 – 2.28.7 (inclusive) are deleted and replaced with the following:

2.28.5. [Blank]

2.28.6. Subject to clause 2.28.16, a person who owns, controls or operates 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 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 as a Market Participant where the person is not intending to register as a Rule Participant.

23.7 Insert the following new clause 2.28.7A:

2.28.7A. AEMO must grant an exemption from the requirement to register in the Market Participant Class for an application received under clause 2.28.7 unless AEMO determines, in accordance with the WEM Procedure specified in clause 2.28.20, that the Energy Producing System must be registered for the purposes of Power System Security and Power System Reliability, in which case, the relevant person in clause 2.28.7 must register as a Rule Participant in the Market Participant class.

23.8 Clause 2.28.8 is deleted and replaced with the following:

2.28.8. Subject to clause 2.28.8A, a person who intends to own, control or operate an Energy Producing System 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 in a Rule Participant class.

23.9 Insert the following new clause 2.28.8A:

2.28.8A. Clause 2.28.8 does not apply where:

- (a) the Energy Producing System 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 2.28.20, that the Energy Producing System must be registered for the purposes of Power System Security and Power System Reliability.

23.10 Clause 2.28.9 is deleted and replaced with the following:

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 an Energy Producing System must be registered in accordance with clause 2.28.8A,

the person who owns, controls or operates the Energy Producing System must register as a Rule Participant in the Market Participant class.

23.11 Insert the following new clauses 2.28.9A – 2.28.9C (inclusive):

2.28.9A. Where a person who owns, controls or operates an Energy Producing System is:

- (a) granted an exemption by AEMO under clause 2.28.7A or clause 2.29.4C; or
- (b) or is exempt from the requirement to register its Energy Producing System under clause 2.28.8 or clause 2.29.4D,

and the person intends to make modifications to its Energy Producing System, 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 2.28.20 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 Energy Producing System 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 Energy Producing System must:

- (a) register as a Rule Participant in the Market Participant class; and
- (b) register its Energy Producing System 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 2.29.4C, if AEMO considers that the relevant Energy Producing System no longer meets the exemption criteria for the relevant exemption set out in the WEM Procedure referred to in clause 2.28.20.
- 23.12 Clauses 2.28.10 and 2.28.11 are deleted and replaced with the following:
- 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.
- 23.13 Clauses 2.28.11A and 2.28.11B are deleted.
- 23.14 Clause 2.28.13 is deleted and replaced with the following:
- 2.28.13. Subject to clause 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 WEM Rules to or from AEMO, including, without limitation, a person who intends to or provides an Essential System Service, must register as a Rule Participant in the Market Participant class.
- 23.15 Clause 2.28.16 is amended by deleting the words ', 2.28.11A'.
- 23.16 Clause 2.28.16A(a) is amended by deleting the word 'may' and replacing it with the word 'must'.
- 23.17 Clause 2.28.16B(d) is deleted and replaced with the following:
- (d) The meter or meters measuring the generation system remains registered by an existing Market Participant; and
- 23.18 Insert the following new clause 2.28.20:
- 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);
 - (d) the processes to be followed by AEMO when accessing the information specified in clause 2.28.20(a);
 - (e) the criteria AEMO will use to determine whether or not to exempt persons from Rule Participant registration requirements in this section 2.28, 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.
 - (f) the processes to be followed by a Market Participant in applying for an exemption in respect of Rule Participant registration under this section 2.28; and
 - (g) 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 this section 2.28.

24. Section 2.29 amended

24.1 Clauses 2.29.1 – 2.29.2 (inclusive) are deleted and replaced with the following:

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;
- (f) a Scheduled Load;
- (g) a Small Aggregation; and
- (h) a Non-Dispatchable 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.
- 2.29.2. Subject to clause 2.29.2A, no facility registered in one Facility Class can simultaneously be registered in another Facility Class.
- 24.2 Insert the following new clause 2.29.2A:
- 2.29.2A. Notwithstanding clause 2.29.2, AEMO may allow a Market Participant to register a Demand Side Programme and Interruptible Load at a common set of network connection points provided that the Demand Side Programme and the Interruptible Load are registered to the same Market Participant.
- 24.3 Clause 2.29.4 is deleted and replaced with the following:
- 2.29.4. A Market Participant must register each facility comprising one or more Facility Technology Type listed in clauses 2.29.1(c) to 2.29.1(h) in a Facility Class in accordance with the registration process specified in section 2.31.
- 24.4 Insert the following new clauses 2.29.4A - 2.29.4F:
- 2.29.4A. Subject to clause 2.29.9, a person who owns, controls or operates a facility 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 in a Facility Class.
- 2.29.4B. A person that owns, controls or operates a facility 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.
- 2.29.4C. Where AEMO receives an application under clause 2.29.4B, AEMO must grant an exemption from the requirement to register unless AEMO determines, in accordance with the WEM Procedure specified in clause 2.28.20, that the facility must be registered in a Facility Class for the purposes of Power System Security and Power System Reliability.

2.29.4D. 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.

2.29.4E. Clause 2.29.4D does not apply where AEMO determines, in accordance with the WEM Procedure specified in clause 2.28.20, that the facility must be registered in a Facility Class for the purposes of Power System Security and Power System Reliability.

2.29.4F. Where AEMO:

(a) does not grant an exemption in respect to an application made under clause 2.29.4B; or

(b) determines that the Energy Producing System must be registered in accordance with clause 2.29.4E,

the person who owns, controls or operates the Energy Producing System in must register the Energy Producing System in a Facility Class.

24.5 Clauses 2.29.5 and 2.29.5A are deleted and replaced with the following:

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.

24.6 Insert the following new clauses 2.29.5AA and 2.29.5AB:

2.29.5AA. A Market Participant that owns, controls or operates a Load may register that Load as a Registered Facility containing a Scheduled Load provided AEMO has certified the Load to be controllable for the purposes of scheduling and dispatch.

2.29.5AB. AEMO must document in a WEM Procedure referred to in clause 2.29.9A(d) the processes to be followed by AEMO and Market Participants for a Load to be accredited as a Scheduled Load, including the accreditation criteria AEMO will apply in determining the extent to which the relevant Load is controllable for the purposes of Dispatch.

24.7 Clause 2.29.5B is deleted and replaced with the following:

2.29.5B. A Market Participant with a Demand Side Programme may apply to AEMO to associate a Non-Dispatchable Load with the Demand Side Programme. The Market Participant must provide the following information to AEMO in support of the application:

- (a) if relevant, evidence satisfactory to AEMO that the Market Participant has entered into a contract with the person who owns, operates or controls the Load to provide curtailment on request by the Market Participant;
- (b) the network connection point of the Load;
- (bA) the single Transmission Note Identified for the Load;
- (c) the expected Minimum Consumption of the Load in units of MW;
- (d) if the Market Participant requesting the association owns, operates or controls the relevant Load, then the start date and end date proposed by the Market Participant;
- (e) if the Market Participant requesting the association has entered into a contract with a person who owns, operates or controls the relevant Load, then the contract start date and contract end date;
- (f) where the Load has an Energy Producing System that can connect to the network behind its associated meter, a single line diagram for the Load, including the locations of generators, transformers, switches, operational and settlement meters; and
- (g) the single Transmission Node Identifier for that Non-Dispatchable Load provided by the Market Participant under clause 4.10.1(f)(viii).

24.8 Clauses 2.29.5E(a) to 2.29.5E(e) (inclusive) are deleted and replaced with the following:

- (a) AEMO considers that the evidence provided by the Market Participant under clauses 2.29.5B and 2.29.5C is not satisfactory;
- (b) the relevant Load is not equipped with interval metering;
- (c) [Blank];
- (d) the relevant Load is registered as an Intermittent Load for any part of the proposed Association Period;

- (e) subject to clause 2.29.2A, the relevant Load is already associated with a Demand Side Programme or an Interruptible Load for any part of the proposed Association Period; or

24.9 Clauses 2.29.5F to 2.29.5H (inclusive) are deleted and replaced with the following:

2.29.5F. If AEMO accepts an application under clause 2.29.5D then AEMO must include in its notification to the applicant:

- (a) the date and time from which the relevant Load will be associated with the Demand Side Programme as defined under clause 2.29.5G(a) or 2.29.5G(b); and
- (b) the date and time from which the relevant Load will cease to be associated with the Demand Side Programme as defined under clause 2.29.5G(a) or 2.29.5G(b).

2.29.5G If AEMO accepts an application submitted under clause 2.29.5B then AEMO must associate the relevant Load (“**Associated Load**”) with the Demand Side Programme for the period (“**Association Period**”) between:

- (a) if the Market Participant making the application owns, operates or controls the relevant Load, the start of the Trading Day commencing on the start date provided under clause 2.29.5B(d) and the end of the Trading Day commencing on the end date provided under clause 2.29.5B(d); otherwise;
- (b) if the Market Participant making the application has entered into contract with the person who owns, operates or controls the relevant Load, the contract start date provided under clause 2.29.5B(e) and 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 under clause 2.29.5B.

24.10 Clause 2.29.5I is amended by deleting the word 'Customer' and replacing it with the word 'Participant'.

24.11 Clauses 2.29.5LA to 2.29.5LC (inclusive) are deleted and replaced with the following:

2.29.5LA. 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 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.

24.12 Clauses 2.29.5N and 2.29.5O are deleted.

24.13 Clause 2.29.6 is deleted and replaced with the following:

2.29.6. A person that owns, operates or controls a facility with a System Size that is less than 10 MW may request their facility to be registered as a Non-Scheduled Facility, a Scheduled Facility or a Semi-Scheduled Facility.

24.14 Insert the following new clauses 2.29.6A and 2.29.6B:

2.29.6A. AEMO must grant a request by a person that owns, operates or controls a facility with a System Size less than 10 MW to register as a Non-Scheduled Facility; unless AEMO determines the facility must be controllable via Constraint Equations for the purposes of Power System Security and Power System Reliability in accordance with the WEM Procedure referred to in clause 2.29.9A.

2.29.6B. If AEMO determines that a facility must be controllable pursuant to clause 2.29.6A, or if a person applies to register their facility as a Scheduled Facility, or a Semi-Scheduled Facility under clause 2.29.6B, then AEMO must register the relevant facility as either a Scheduled Facility or a Semi-Scheduled Facility in accordance with clause 2.29.8 and the WEM Procedure referred to in clause 2.29.9A

24.15 Clauses 2.29.7 and 2.29.8 are deleted and replaced with the following:

2.29.7. AEMO must not register a facility with a System Size greater than or equal to 10 MW as a Non-Scheduled Facility.

2.29.8. In determining whether a facility is to 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;
- (b) a Semi-Scheduled Facility cannot meet the criterion in clause 2.29.8(a); however, the facility must be able to reduce the absolute value of its Injection or Withdrawal to comply with a Dispatch Cap issued by AEMO.

24.16 Clause 2.29.8A is deleted.

24.17 Clause 2.29.9 is deleted and replaced with the following:

2.29.9. 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.

24.18 Insert the following new clause 2.29.9A:

2.29.9A AEMO must develop a WEM Procedure specifying:

- (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 2.29.8; and
 - ii. how reliably a facility can follow Dispatch Instructions within its Tolerance Range.
- (b) when determining reliability under clause 2.29.9A(a)(ii), AEMO must take into account:
 - i. how accurately a facility is able to follow a Dispatch Instruction;
 - ii. how frequently a facility is able to follow a Dispatch Instruction within Tolerance Range; and
 - iii. the period of time over which the facility can control its output.
- (c) when assessing whether a facility is controllable, AEMO may consider:
 - i. the maximum output and/or consumption capability of different components of the facility;
 - ii. whether the facility is primarily a supply-side or demand-side facility based on its components; and
 - iii. the fuel used;

- (d) the process AEMO will use to register and accredit facilities containing Scheduled Loads, including:
 - i. the process a Market Participant must follow when applying to register a facility containing a Load which they wish to have accredited as a Scheduled Load, and
 - ii. the assessment criteria AEMO must use when accrediting the relevant Load as a Scheduled Load; where the criteria must take into account the extent to which the relevant Load is controllable for the purposes of Dispatch; and
- (e) 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 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;
- (f) the processes to be followed by a Market Participant in applying for an exemption in respect of Facility registration under this section 2.29; and
- (g) 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.

24.19 Insert the following new clauses 2.29.12 – 2.29.15:

- 2.29.12. A Market Participant for a Scheduled Facility or Semi-Scheduled Facility containing an Electric Storage Resource must install metering for the Electric Storage Resource and all associated Parasitic Loads.
- 2.29.13. Electric Storage Resource Metering is to be used solely for the purpose of:
 - (a) certification of Reserve Capacity under section 4.9; and
 - (b) a Reserve Capacity Test under section 4.25.

To avoid doubt, Electric Storage Resource Metering must not be used for the purposes of settlement under Chapter 9.
- 2.29.14. Electric Storage Resource 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 Electric Storage Resource Metering in a WEM Procedure:
 - (a) the characteristics and requirements of Electric Storage Resource Metering, including accuracy requirements;

- (b) the procedures to be followed by Market Participants for auditing of Electric Storage Resource 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 Electric Storage Resource Metering information to AEMO; and
- (e) any other matters which AEMO considers relevant.

25. Section 2.30 amended

25.1 Clause 2.30.5(c) is deleted and replaced with the following:

- (c) none of the Facilities within the aggregated Facility are subject to a Network Control Service Contract that requires that Facility not be part of an aggregated Facility;

26. Section 2.30A deleted.

26.1 Section 2.30A is deleted.

27. Section 2.30B amended

27.1 Clauses 2.30B.1, 2.30B.2 and 2.30B.3 (inclusive) are deleted and replaced with the following:

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 exist:
 - i. which can typically supply the maximum amount of that Load to be treated as Intermittent Load either in accordance with clause 2.30B.11 or without requiring energy to be withdrawn from a Network. Where clause 2.30B.11 applies then, for the purpose of this clause 2.30B.2(a)(i), the amount that the Energy Producing System can supply must be Loss Factor adjusted from the connection point of the Energy Producing System to the connection point of the Intermittent Load;
 - ii. the output of which is netted off consumption of the Load either in accordance with clause 2.30B.12 or by the meter registered to that Load; and

- iii. which would in the view of AEMO, if it were not serving an Intermittent Load, be eligible to hold an amount of Certified Reserve Capacity, determined in accordance with clause 2.30B.4, at least sufficient to supply the amount of energy that the Energy Producing System is required by clause 2.30B.2(a)(i) to be able to supply while simultaneously being able to satisfy obligations on any Capacity Credits associated with that Energy Producing System;
 - (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 clause 2.30B.10) for not more than 4320 Trading Intervals in any Capacity Year;
 - (c) the Market Participant for that 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 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 Market Participant must have applied to register the Load or part of a Load as an Intermittent Load prior to the date specified in clause 1.48.3(a).
- 2.30B.3. AEMO must require that a Market Participant for a Load or part of a Load to be treated as an Intermittent Load provide in regard to the Energy Producing System referred to in clause 2.30B.2(a):
- (a) the maximum capacity in MW, excluding capacity for which Capacity Credits are held, that the Energy Producing System can be guaranteed to have available to supply Intermittent Load, when it is operated normally at an ambient temperature of 41°C;
 - (aA) where clause 2.30B.11 applies, the connection point of the Energy Producing System;
 - (b) at the option of the Market Participant:
 - i. the anticipated reduction, measured in MW, in the maximum capacity described in clause 2.30B.3(a) when the ambient temperature is 45°C;

- ii. the method to be used to measure the ambient temperature at the site of the Energy Producing System 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 generator by the SCADA system operated by AEMO or the relevant Network Operator (as applicable),

where no method is specified, a temperature of 41°C 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 from operating at its full capacity.

27.2 Clause 2.30B.5 is deleted and replaced with the following:

2.30B.5. A Market Participant may apply for a Load or part of a Load to be treated as an Intermittent Load as part of Market Participant registration (for a Non-Dispatchable Load) or Facility registration (for an Interruptible Load) provided the application is received by AEMO prior to the date specified in clause 1.48.3(a).

28. Section 2.33 amended

28.1 Clause 2.33.5(f) is deleted and replaced with the following:

- (f) evidence to AEMO's satisfaction that the party making the application has assumed the Reserve Capacity Obligations associated with the Facility;

29. Section 2.34 amended

29.1 Clauses 2.34.7A – 3.24.7C (inclusive) are deleted.

30. Section 2.34A deleted

30.1 Insert the following new section 2.34A:

2.34A. Essential System Service Accreditation

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.
- 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 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.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 and the Market Participant must include the following information in its Standing Data for the Facility 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 Standing Enablement Minimum and Standing Enablement Maximum for each relevant Facility operating configuration;
 - (b) the Standing Low Breakpoint and Standing High Breakpoint for each relevant Facility operating configuration;
 - (c) 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); and
 - ii. whether the Facility is subject to the Maximum Contingency Reserve Block Size; and
 - (d) 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.
- 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 in the

future, 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 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, AEMO may 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 to reflect the amended Frequency Co-optimised Essential System Service Accreditation Parameters.

2.34A.13. AEMO must document in a WEM Procedure the processes to be followed by AEMO and Market Participants in respect of the accreditation of a Facility to provide a Frequency Co-optimised Essential System Service. The WEM Procedure must include:

- (a) the format of information which Market Participants must submit;
- (b) 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);
- (c) the manner and form of control system or communication arrangements required for the provision, and monitoring, of each Frequency Co-optimised Essential System Service;
- (d) the Maximum Contingency Reserve Block Size and the method used to determine the Maximum Contingency Reserve Block Size;
- (e) the format and nature of data to be provided as evidence of performance after each Contingency Event;
- (f) 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;
- (g) 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);
- (h) the process for a Market Participant to seek to amend the Frequency Co-optimised Essential System Service Accreditation Parameters for a Facility;
- (i) 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;
- (j) 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;
- (k) timeframes for notification requirements and provision of information including updating any Standing Data; and

- (l) 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.

31. Section 2.35 amended

31.1 Clauses 2.35.1 and 2.35.2 are deleted and replaced with the following:

- 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.

31.2 Clause 2.35.4 is deleted and replaced with the following:

- 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 WEM Rules in a WEM Procedure, including for issuing Dispatch Instructions.

32. Section 2.36 amended

32.1 The section 2.36 heading is amended by deleting the word 'Market' and replacing it with the word 'AEMO'.

32.2 Clause 2.36.1 is amended by deleting the opening paragraph and replacing it with the following:

- 2.36.1. Where AEMO uses software systems to perform calculations of quantities, prices or amounts defined under these WEM Rules, AEMO must:

32.3 Clause 2.36.7 is deleted and replaced with the following:

- 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 WEM 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.

32.4 Clauses 2.36.8 to 2.36.10 (inclusive) are deleted.

33. Section 2.36A amended

33.1 Section 2.36A is deleted and replaced with the following:

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 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.

34. Section 2.37 amended

34.1 Insert the following new clause 2.37A1:

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).

34.2 Clause 2.37.4 is amended by deleting the word '70' and replacing it with the word '35'.

34.3 Clause 2.37.4(a) is amended by deleting the word '70' and replacing it with the word '35'.

34.4 Clause 2.37.5 is deleted and replaced by the following:

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.

34.5 Clause 2.37.7 is amended by deleting the word 'Market' and replacing it with the word 'Rule'.

35. Section 2.38 amended

35.1 Insert the following new clause 2.38.A1:

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).

36. Section 2.39 amended

36.1 Insert the following new clause 2.39.A1:

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).

37. Section 2.40 amended

37.1 Insert the following new clause 2.40.A1:

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).

37.2 Clause 2.40.1(c) is deleted and replaced with the following:

- (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 either the next Settlement Date.

38. Section 2.41 amended

38.1 Insert the following new clause 2.41.A1:

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).

39. Section 2.42 amended

39.1 Insert the following new clause 2.42.A1:

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).

39.2 Clause 2.42.6 is amended by deleting the word '9.23' and replacing it with the word '9.19'.

40. Section 2.43 amended

40.1 Insert the following new clause 2.43.A1:

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).

41. Section 3.1 amended

41.1 Clause 3.1.1 is deleted and replaced with the following:

3.1.1. The frequency and time error standards for the SWIS are as defined in Chapter 3B and Appendix 13.

41.2 Clause 3.2.1 is deleted and replaced with the following:

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.

41.3 Clauses 3.2.5 to 3.2.7 (inclusive) are deleted and replaced with the following:

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.

3.2.7. 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.

41.4 Insert the following new clause 3.2.A:

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.

42. Section 3.3 amended

- 42.1 The section 3.3 heading is amended by deleting the word 'Normal' and replacing it with the word 'Reliable'.
- 42.2 Clause 3.3.1 is deleted and replaced with the following:
- 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.
- 42.3 Clause 3.3.2 is deleted and replaced with the following:
- 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.
- 42.4 Clause 3.3.3 is deleted and replaced with the following:
- 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.

43. Section 3.4 amended

43.1 The section 3.4 heading is deleted and replaced with the following:

3.4. Satisfactory and Secure Operating States

43.2 Clauses 3.4.1 to 3.9 (inclusive) are deleted and replaced with the following:

- 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 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); or

- (d) direct Facilities to adjust output or operate in a particular way, in accordance with the Registered Generator Performance Standards applicable to the Facility;
 - (e) direct a 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 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.
- 3.4.6. 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.

44. Section 3.5 amended

- 44.1 Clauses 3.5.1 is deleted and replaced with the following:
- 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 WEM Rules.
- 44.2 Insert the following new clause 3.5.1A:
- 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.
- 44.3 Clauses 3.5.3 – 3.5.11 (inclusive) are deleted and replaced with the following:

- 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 ability 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 other actions as considered necessary, consistent with good electricity industry practice, in order to return the SWIS to a Satisfactory Operating State, Secure Operating State or Reliable Operating State.
- 3.5.6. AEMO must ensure the SWIS returns from an Emergency Operating State to a Satisfactory 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 to a Satisfactory 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.

45. Section 3.8 amended

- 45.1 Clauses 3.8.1 and 3.8.2 are deleted and replaced with the following:

- 3.8.1. AEMO must investigate any incidents in the operation of equipment comprising the SWIS that:
- (a) endangers Power System Security or Power System Reliability to a significant extent; or
 - (b) causes significant disruption to the operation of the Central Dispatch Process set out in section 7.6; and
 - (c) AEMO considers has had, or had the potential to have had, a significant impact on the effectiveness of the market.
- 3.8.2. Where 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.
- 45.2 Clause 3.8.5 is deleted and replaced with the following:
- 3.8.5. Where AEMO considers that changes in a WEM Procedure which these WEM 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.
- 45.3 Clause 3.8.5A is amended by inserting a full stop after the word '3.8.5A' and by deleting the word 'clause' and replacing it with the word 'section'.
- 45.4 Clause 3.8.6 is deleted and replaced with the following:
- 3.8.6. Where AEMO has recommended any changes to the WEM Procedures which these WEM 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.
- 45.5 Insert the following new clause 3.8.7:
- 3.8.7 Where AEMO recommends to the Economic Regulation Authority or Network Operator that changes to a WEM Procedure are necessary, the Economic

Regulation Authority or Network Operator (as relevant) must publish the recommended changes on the WEM Website and its decision and reasons as to whether the recommended changes are necessary.

46. Section 3.9 amended

46.1 The heading immediately above the section 3.9 heading is deleted and replaced with the following:

Essential System Services

46.2 The section 3.9 heading is deleted and replaced with the following:

3.9. Definitions of Essential System Services

46.3 Clauses 3.9.1 – 3.9.9 (inclusive) are deleted and replaced with the following:

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 is an Essential System Service that is not a Frequency Co-optimised Essential System Service.

47. Section 3.10 amended

- 47.1 The section 3.10 heading is deleted and replaced with the following:

3.10. Essential System Service Standards

- 47.2 Clauses 3.10.1 to 3.10.6 (inclusive) are deleted and replaced with the following:

- 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.

48. Section 3.11 amended

- 48.1 Section 3.11 is deleted and replaced with the following:

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 Reference 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 Frequency Co-optimised Essential System Service Accreditation Shortfall and, in its reasonable opinion, the Frequency Co-optimised Essential System Service 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.

49. Section 3.12 amended

49.1 Section 3.12 is deleted and replaced with the following:

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.

50. Section 3.15 amended

50.1 The section 3.15 heading is deleted and replaced with the following:

3.15. Review of Essential System Service Process and Standards

50.2 Clause 3.15.1 is deleted and replaced with the following:

3.15.1. The Economic Regulation Authority, 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.

50.3 Insert the following new clauses 3.15.1A to 3.15.2 (inclusive):

3.15.1A. The Economic Regulation Authority 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 Economic Regulation Authority 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 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 Economic Regulation Authority, 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.

50.4 Clause 3.15.2 is deleted and replaced with the following new clause 3.15.3:

3.15.3. The Economic Regulation Authority 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 Economic Regulation Authority 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.

50.5 Insert the following new clause 3.15.4:

3.15.4. The Economic Regulation Authority 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.

50.6 Clause 3.15.3 is deleted and replaced with the following new clause 3.15.5:

3.15.5. If the Economic Regulation Authority recommends any changes in a report published under clause 3.15.3, the Economic Regulation Authority 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 WEM 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.

51. Section 3.15A inserted

51.1 Insert the following new section 3.15A:

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 under clauses 3.15.1A or 3.15.1B or its 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 Wholesale Market Objectives.
- 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 WEM 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 (excluding Enablement Losses); 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 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 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;
- (b) the number of Dispatch Intervals in the past 12 months within the SESSM Service Timing for which the Market Participant included forecast Enablement Losses for the Facility in the prices in its Real-Time Market Offers for the relevant Frequency Co-optimised Essential System Service;
- (c) the average percentage of the price in Real-Time Market Offers for the Dispatch Intervals identified in 3.15A.22(b) that related to forecast Enablement Losses; and

- (d) a comparison of the proposed SESSM Offer Cap for the Facility to its historic offer prices offered in the Real-Time Market (excluding Enablement Losses) 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 clause 3.15A.24 and clause 3.15A.2527; 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 Enablement Losses 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 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 of the outcome of the SESSM, including providing the Economic Regulation Authority 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 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 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 2.13.10(d);
 - (b) determine that a breach has taken place, in which case the Economic Regulation Authority may issue a penalty notice in accordance with the WEM 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 Rule Participant Market Restricted.

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 WEM 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 Wholesale Market Objectives.

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.

52. Section 3.15B added

- 52.1 Insert the following new section 3.15B:

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 clauses 10.5.1(y) and 10.5.1(z); 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 Rule Participant Market Restricted.
- 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 WEM Rules, including in a review under clauses 3.15.1A or 3.15.1B or its monitoring pursuant to clause 2.16.9, and in deciding whether to trigger the SESSM in accordance with clause 3.15A.2.

53. Section 3.16 amended

53.1 Section 3.16 is deleted and replaced with following:

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 WEM 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 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 WEM 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.

54. Section 3.17 amended

54.1 Section 3.17 is deleted and replaced with the following:

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 3.2.3, 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. AEMO must set the confidentiality status of any information provided by a Rule Participant in response to a request under clause 3.17.8 as Rule Participant Market Restricted.
- 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.

55. Section 3.18 amended

55.1 Section 3.18 is deleted and replaced with the following:

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 or a component of 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 a Non-Co-optimised Essential System Service contract, SESSM Award or Network Control Service Contract.

(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 the Outage Capability in respect of energy of a Semi-scheduled Facility or Non-scheduled Facility that is intermittent where:

- i. there is a shortfall of the intermittent energy source used by the Semi-scheduled Facility or Non-scheduled Facility to generate electricity; or
- ii. the average MW de-rating over the relevant Dispatch Interval is less than:

$$\min (0.1 \times \text{Nameplate_Capacity}, 10)$$

where Nameplate_Capacity is the MW quantity provided for the Semi-scheduled Facility or Non-scheduled Facility in the Standing Data for the Semi-scheduled Facility or Non-scheduled Facility, as applicable;

(d) does not occur for the energy Outage Capability of a Scheduled Facility as a result of temperature de-rating that is consistent with the Standing Data or Registered Generator Performance Standards for the Scheduled Facility;

- (e) does not occur for a Demand Side Programme where there is an uninstructed reduction in Withdrawal below the Relevant Demand for the Demand Side Programme; and
- (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;
 - ii. any other supporting information that may be used by AEMO to evaluate or assess an Outage Plan; and
 - iii. information required from Demand Side Programmes to support Outage Evaluations;
- (f) forecast assumptions and the methodology to be used for Outage Evaluations, which may differ across evaluation timeframes;

- (g) the methodology for assessing whether there would be a shortfall of available accredited capacity to provide Essential System Services if an Outage Plan is approved;
- (h) publication of Outage-related information; and
- (i) any other matters relating to this section 3.18 and sections 3.18A to 3.21.

56. Section 3.18A inserted

56.1 Insert the following new section 3.18A:

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 and Demand Side Programmes 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 generation systems serving an Intermittent Load under clause 2.30B.2(a) with a nameplate capacity that equals or exceeds 10 MW;
 - (e) all Registered Facilities accredited under section 2.34A to provide an Essential System Service, or subject to a Non-Co-optimised Essential System Service contract or Network Control Service 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 generation system that is part of 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 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.

57. Section 3.18B added

57.1 Insert the following new section 3.18B:

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;
- (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. each Separately Certified Component of the Facility affected by the Outage;
 - ii. each Outage Capability for each Separately Certified Component affected by the Outage;
 - iii. a description of the purpose of the Outage;
 - iv. the Outage Period, where the Outage Commencement Interval and end of the Outage are expressed as Dispatch Intervals;
 - v. an Outage Contingency Plan;
 - vi. where relevant, the Remaining Available Capacity of each Outage Capability for each Separately Certified Component of the Outage Facility; and
 - vii. confirmation of any applicable Availability Declaration Exemption;
 - (b) the Outage Commencement Interval;
 - (c) an Outage First Submission Date; and
 - (d) 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 clauses 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; and
 - (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; and
 - 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; and
 - (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) for an Outage of an Equipment List Facility and a Self-scheduling Outage Facility that is not Opportunistic Maintenance, no earlier than 3 years.

58. Section 3.18C added

58.1 Insert the following new section 3.18C:

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) a confirmation by the Impacting Participant that it has notified the Impacted Participant; and
- (b) details of the discussions between the Impacting Participant and Impacted Participants to coordinate the Outage proposed in the Outage Plan and the outcome of those discussions,

at least 6 months prior to the Outage Commencement Interval.

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 or Impacted Participant, or both, 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. AEMO must set the confidentiality status for all Outage coordination information as Public.

- 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 approved Outage Plans, 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.

59. Section 3.18D added

59.1 Insert the following new section 3.18D:

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 completion of the Planned Outage, provided:
- (a) the revised Outage Commencement Interval is not earlier than the previous Outage Commencement Interval;
 - (b) the revised Outage Period is not proposed to be increased;
 - (c) the revised Remaining Available Capacity for the Outage Facility is not proposed to be reduced; and

- (d) other aspects of the Outage Plan, as specified in the WEM Procedure referred to in clause 3.18.4, are unchanged.
- 3.18D.2. An Outage Plan may be revised at any time as long as the revision addresses each of the requirements specified in clause 3.18B.8.
- 3.18D.3. AEMO may, but is not required to, undertake an Outage Evaluation for an Outage Plan revised under clause 3.18D.1 where the reason for the revision is one or more of the following:
- (a) the Outage Period is proposed to be reduced;
 - (b) the Remaining Available Capacity for the Outage Facility is proposed to be increased; 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 the 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.

60. Section 3.18E added

60.1 Insert the following new section 3.18E:

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;
- (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 WEM 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 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 with a Submission Date more than one month ahead of the Outage Commencement Interval;
- (e) give priority to Outage Plans in the order of the Outage First Submission Date; and

- (f) 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 for the relevant Outage Capability and 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:

- (a) AEMO must provide reasons to the Rule Participants; and
- (b) the Market Participant or Network Operator must revise or withdraw 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.

61. Section 3.18F added

61.1 Insert the following new section 3.18F:

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 WEM Rules or WEM Procedure referred to in clause 3.18.4; and
 - (b) if AEMO had followed the WEM 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 WEM 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 WEM Rules or the WEM Procedure referred to in clause 3.18.4; and
 - ii. if AEMO had followed the WEM 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).

62. Section 3.18G added

62.1 Insert the following new section 3.18G:

3.18G. Economic Regulation Authority Review of Outage Planning Process

- 3.18G.1. At least once in every five year period starting from the New WEM Commencement Day, the Economic Regulation Authority, with the assistance of AEMO, must conduct a review of the Outage planning process against the Wholesale Market Objectives. At a minimum, the review must include:
- (a) a technical study of the effectiveness of the Outage Evaluation Criteria;
 - (b) an economic study on the impact of Network Operator Outages on the market; and
 - (c) a public consultation process with Rule Participants.
- 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 technical study and economic 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 WEM Rule changes, 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 WEM Rules or WEM Procedures in a report published under clause 3.18G.2(c), the Economic Regulation Authority must either submit a Rule Change Proposal in accordance with clause 2.5.1 or initiate a Procedure Change Process in accordance with section 2.10 to effect the change, as the case may be.

63. Section 3.18H added

63.1 Insert the following new section 3.18H:

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.

64. Section 3.19 amended

64.1 Section 3.19 is deleted and replaced with the following:

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 clause 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. In the event that Outage Intention Plans validly submitted by Market Participants or Network Operators under clause 3.19.1, 3.19.2 or clause 3.19.8 conflict, AEMO must notify the affected Market Participants or Network Operators.
- 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.

65. Section 3.20 amended

65.1 Clause 3.20.1 – 3.20.3 (inclusive) are deleted and replaced with the following:

- 3.20.1 In order to maintain Power System Security or Power System Reliability, AEMO may reject a Planned Outage that has commenced, and 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 or withdraw the 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.

65.2 Insert the following new clause 3.20.4:

- 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.

66. Section 3.21 amended

66.1 Section 3.21 is deleted and replaced with the following:

3.21. Forced Outages

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 2.28.3C; or
 - ii. a non-compliance with a Registered Generator Performance Standard;
- (b) any Dispatch Intervals of an Outage that commences prior to its approved Outage Commencement Interval, or extends beyond its approved Outage Period; 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) notify AEMO as soon as practicable of:
 - i. the time the Outage commenced or is expected to commence;
 - ii. the time the Outage ended or is expected to end;
 - iii. the Outage Capability or Outage Capabilities affected;
 - iv. the Separately Certified Components of the Facility affected;
 - v. the cause of the Outage;
 - vi. the Outage Facility affected;
 - vii. for each affected Outage Capability and each relevant Dispatch Interval, an indication of the Remaining Available Capacity of each Outage Capability affected; and
 - viii. for each affected Separately Certified Component of the Facility, an indication of the Remaining Available Capacity of the energy Outage Capability for that Separately Certified Component.
- (b) provide AEMO with full available details of the Forced Outage as prescribed in the WEM Procedure referred to in clause 3.21.10 as soon as practicable, using best endeavours to provide AEMO with the full available

details within 24 hours of the Forced Outage occurring and 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).

3.21.3. 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. AEMO must determine the Outage quantity for each Planned Outage and Forced Outage for energy in each Dispatch Interval for each Separately Certified Component of a Registered Facility:

$$Q(c, DI, o) = RAC(c, DI, o - 1) - RAC(c, DI, o)$$

Where:

$Q(c,DI,o)$ is the Outage quantity for Outage o of Separately Certified Component c in Dispatch Interval DI

$$RAC(c, DI, 0) = MaxCap(c, DI)$$

Outage $o - 1$ refers to the Outage of Separately Certified Component c relating to Dispatch interval DI that was submitted most recently prior to the submission time of Outage o

$MaxCap(c,DI)$ = maximum capacity for the energy Outage Capability of Separately Certified Component c in Dispatch Interval DI as specified in Standing Data

$RAC(c,DI,o)$ = Remaining Available Capacity for energy for Separately Certified Component c in Dispatch Interval DI under Outage o

- 3.21.7. AEMO must determine the Capacity Adjusted Forced Outage Quantity for energy for each Dispatch Interval for each Separately Certified Component of a Registered Facility:

$$CAFO(c, DI) = \max \left(0, \sum_{o \in FO} Q(c, DI, o) - (MaxCap(c, DI) - DefRCOQ(c, DI)) \right)$$

Where:

$CAFO(c,DI)$ = Capacity Adjusted Forced Outage Quantity for Separately Certified Component c in Dispatch Interval DI

FO is the set of all Forced Outages for Separately Certified Component c that include Dispatch Interval DI

$Q(c,DI,o)$ = outage quantity for Outage o of Separately Certified Component c in Dispatch Interval DI as calculated in clause 3.21.6

$MaxCap(c,DI)$ = maximum capacity for the energy Outage Capability of Separately Certified Component c in Dispatch Interval DI as specified in Standing Data

$DefRCOQ(c,DI)$ = 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 AEMO must determine the Capacity Adjusted Forced Outage Quantity for energy for each Trading Interval for each Separately Certified Component of a Registered Facility:

$$CAFO(c, t) = \frac{\sum_{DI \text{ in } t} CAFO(c, DI)}{6}$$

Where:

CAFO(c,t) is the Capacity Adjusted Forced Outage Quantity for Separately Certified Component c in Trading Interval t

DI in t denotes all Dispatch Intervals in Trading Interval t

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 AEMO must determine the Capacity Adjusted Forced Outage Quantity for each Trading Interval for each Registered Facility with a Reserve Capacity Obligation Quantity greater than zero:

$$CAFO(f, t) = \sum_{c \text{ in } f} CAFO(c, t)$$

Where:

CAFO(f,t) is the Capacity Adjusted Forced Outage Quantity for Facility f in Trading Interval t

c in f denotes all Separately Certified Components of Facility f

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

- 3.21.8. AEMO must determine the Capacity Adjusted Planned Outage Quantity for energy for each Dispatch Interval for each Separately Certified Component of a Registered Facility:

$$CAPO(f, DI) = \max \left(0, \sum_{o \in PO} Q(c, DI, o) - \max \left(0, \text{MaxCap}(c, DI) - \text{DefRCOQ}(c, DI) - \sum_{o \in FO} Q(c, DI, o) \right) \right)$$

Where:

CAPO(c,DI) = Capacity Adjusted Planned Outage Quantity for Separately Certified Component c in Dispatch Interval DI

PO is the set of all Planned Outages for Separately Certified Component c that include Dispatch Interval DI

FO is the set of all Forced Outages for Separately Certified Component c that include Dispatch Interval DI

Q(c,DI,o) = outage quantity for Outage o of Separately Certified Component c in Dispatch Interval DI as calculated in clause 3.21.6

MaxCap(c,DI) = maximum capacity for the energy Outage Capability of Separately Certified Component c in Dispatch Interval DI as specified in Standing Data

DefRCOQ(c,DI) = 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. AEMO must determine the Capacity Adjusted Planned Outage Quantity for energy for each Trading Interval for each Separately Certified Component of a Registered Facility:

$$CAPO(c, t) = \frac{\sum_{DI \text{ in } t} CAPO(c, DI)}{6}$$

Where:

CAPO(c,t) is the Capacity Adjusted Refund Payable Planned Outage Quantity for Separately Certified Component *c* in Trading Interval *t*

DI in *t* denotes all Dispatch Intervals in Trading Interval *t*

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 AEMO must determine the Capacity Adjusted Planned Outage Quantity for each Trading Interval for each Registered Facility with a Reserve Capacity Obligation Quantity greater than zero:

$$CAPO(f, t) = \sum_{c \text{ in } f} CAPO(c, t)$$

Where:

CAPO(f,t) is the Capacity Adjusted Planned Outage Quantity for Facility *f* in Trading Interval *t*

c in *f* denotes all Separately Certified Components of Facility *f*

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

- 3.21.9. Where required under clause 4.12.4(b), AEMO must revise the quantities calculated in this section 3.21 to account for actual temperatures.
- 3.21.10. AEMO must document the procedure to be followed in determining and reporting Forced Outages in a WEM Procedure.

67. Section 3.21A amended

- 67.1 Clauses 3.21A.1 – 3.21A.17 (inclusive) are deleted and replaced with the following:

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.

68. Section 3.21B deleted

68.1 The heading immediately above section 3.21B is deleted.

68.2 Section 3.21B is deleted.

69. Section 3.22 amended

69.1 Section 3.22 is deleted and replaced with the following:

3.22. Outage Data Publication

3.22.1. AEMO must as soon as practicable after AEMO receives a request for a Planned Outage or a revision is made to a Planned Outage for an Equipment List Facility publish the following details on the WEM Website:

- (a) whether the request is for Opportunistic Maintenance or not;
- (b) the information provided under clause 3.18B.1;
- (c) the time and date when:
 - i. the Outage Plan was received by AEMO or was subsequently revised by the Rule Participant responsible for the Outage Plan;
 - ii. any amendment to the Outage status occurred; and
- (d) the Remaining Available Capacity for each relevant Outage Capability for each Separately Certified Component of the Facility.

- 3.22.2. AEMO must, as soon as practicable after AEMO receives a notification of a Forced Outage in its computer system, publish on the WEM Website:
- (a) the information provided under clauses 3.21.2(b), 3.21.2(c), 3.21.2(d) and 3.21.3;
 - (b) the time and date when the Forced Outage was first notified to AEMO; and
 - (c) the Remaining Available Capacity for each relevant Outage Capability for each Separately Certified Component of the Facility.

70. Section 3.23 deleted

70.1 Section 3.23 is deleted

71 Section 4.1 amended

71.1 Section 4.1 is deleted and replaced with the following:

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 WEM 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 the start of the first Trading Interval on 1 October of Year 3 and the end of the last Trading Interval 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 17 June of Year 1 of a Reserve Capacity Cycle.
- 4.1.9. [Blank]
- 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 17 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 DSM 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 amount 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. [Blank]
- 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) 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 of the Reserve Capacity Cycle:
 - i. to 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;
 - (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]
- 4.1.18A. AEMO must publish the summary of information described in clause 4.20.5AA by the date and time specified in clause 4.1.16A.
- 4.1.19. AEMO must commence a review of the Benchmark Reserve Capacity Price as required by clause 4.16.3 with the objective of completing the review, including

consideration of public submissions in relation to that review, so as to allow a reasonable time for the Economic Regulation Authority to approve any proposed change in value and for that value to be implemented prior to the date and time specified in clause 4.1.4 that relates to the following Reserve Capacity Cycle.

- 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 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, 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. [Blank]
- 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 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 12 Peak SWIS Trading 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.

- 4.1.23C. For each Trading Month, AEMO must determine and publish the Indicative Individual Reserve Capacity Requirement for each Market Participant 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 publish the Individual Reserve Capacity Requirement for each Market Participant in accordance with clause 4.28.7 by 5:00PM 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) [Blank]
 - (d) for the 2018 Reserve Capacity Cycle:
 - i. where AEMO has determined in accordance with clause 4.20.5A(aA) that the Reserve Capacity Requirement has been met or exceeded with the Capacity Credits assigned for Year 3 of the Reserve Capacity Cycle for which no Reserve Capacity Security was required to be provided under section 4.13, from the Trading Day commencing on 1 October of Year 3 of the Reserve Capacity Cycle; and
 - ii. where AEMO has determined in accordance with clause 4.20.5A(aA) that the Reserve Capacity Requirement has not been met with the Capacity Credits assigned for Year 3 of the Reserve Capacity Cycle for which no Reserve Capacity Security was required to be provided under section 4.13:
 - 1. from the Trading Day commencing on 1 October of Year 3 of the Reserve Capacity Cycle, for Facilities that were commissioned as at 17 September 2018 or for Facilities which have provided Capacity Credits in one or both of the two previous Reserve Capacity Cycles;
 - 2. from the Trading Day commencing on 1 June of Year 3 of the Reserve Capacity Cycle, for Facilities commissioned

between 17 September 2018 and 1 June of Year 3 of the Reserve Capacity Cycle;

- 2A. from the Trading Day commencing 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 commissioned between 1 June of Year 3 of the Reserve Capacity Cycle and 1 October of Year 3 of the Reserve Capacity Cycle; or
3. from the Trading Day commencing on 1 October of Year 3 of the Reserve Capacity Cycle, for new Energy Producing Systems undertaking Commissioning Tests after 1 October of Year 3 of the Reserve Capacity Cycle; and

(e) from the 2019 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 4.20.5A(aA) that the Reserve Capacity Requirement has been met or exceeded with the Capacity Credits assigned for Year 3 of the Reserve Capacity Cycle:

1. to 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. where AEMO has determined in accordance with clause 4.20.5A(aA) that the Reserve Capacity Requirement has not been met with the Capacity Credits assigned for Year 3 of the Reserve Capacity Cycle:

1. to 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 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 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 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 undertaking Commissioning Tests after 1 October of Year 3 of the Reserve Capacity Cycle.

4.1.27. [Blank]

4.1.28. [Blank]

4.1.29. The Reserve Capacity Price and each Facility Monthly 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.

71.2 Insert the following new section 4.1A:

4.1A. Initial Network Access Quantities for the 2022 Reserve Capacity Cycle and Capacity Credit Uplift

4.1A.1. For the 2022 Reserve Capacity Cycle, AEMO must determine an Initial Network Access Quantity in accordance with clause 4.1A.2 for each Facility, other than a GIA Facility, that:

- (a) was assigned Capacity Credits for the 2021 Reserve Capacity Cycle; and

- (b) has been assigned Certified Reserve Capacity for the 2022 Reserve Capacity Cycle that is intended to be traded bilaterally under clause 4.14.1(c).
- 4.1A.2. The Initial Network Access Quantity to be determined by AEMO under clause 4.1A.1 for a Facility is a quantity, in MW, equal to:
- (a) where the Facility is an Intermittent Generating System, the Certified Reserve Capacity assigned to the Facility for the 2022 Reserve Capacity Cycle that is intended to be traded bilaterally in accordance with 4.14.1(c); and
 - (b) for each other Facility, the lesser of:
 - i. the Capacity Credits assigned to the Facility for the 2021 Reserve Capacity Cycle; and
 - ii. the Certified Reserve Capacity assigned to the Facility for the 2022 Reserve Capacity Cycle that is intended to be traded bilaterally in accordance with 4.14.1(c).
- 4.1A.3. Each Initial Network Access Quantity is to be expressed to a precision of 0.001 MW.
- 4.1A.4. Subject to clause 4.1A.6, for the 2022 Reserve Capacity Cycle, where a Facility, other than a GIA Facility, is assigned a Network Access Quantity in accordance with section 4.15 that is less than the Initial Network Access Quantity determined by AEMO under clause 4.1A.1, AEMO must record the difference as the CC Uplift Quantity for the Facility (“**CC Uplift Quantity**”).
- 4.1A.5. Where, in respect of a Reserve Capacity Cycle:
- (a) a CC Uplift Quantity has been determined for a Facility; and
 - (b) the sum of the Network Access Quantity determined for the Facility in accordance with section 4.15 and the CC Uplift Quantity determined for the Facility exceeds the Certified Reserve Capacity for the Facility for the Reserve Capacity Cycle,
- then AEMO must reduce the CC Uplift Quantity so that the Network Access Quantity and the revised CC Uplift Quantity equals the Certified Reserve Capacity for the Facility for the Reserve Capacity Cycle.
- 4.1A.6. At any time the maximum amount of CC Uplift Quantity is to be the sum recorded by AEMO under clause 4.1A.4, as may be reduced by AEMO under clause 4.1A.5. To avoid doubt, a CC Uplift Quantity, as may be reduced under clause 4.1A.5, may not be increased in any subsequent Reserve Capacity Cycle.

- 4.1A.7. Any CC Uplift Quantity is deemed to be a Capacity Credit in the same quantities and subject to the same obligations including testing requirements, refunds, payment arrangements and all other provisions applicable to Capacity Credits (including the determination of the Reserve Capacity Price) under these WEM Rules save that for the purposes of determining whether the Reserve Capacity Requirement has been met or exceeded in accordance with clause 4.20.5A(aA), AEMO must disregard any CC Uplift Quantity.

72. Section 4.2 amended

- 72.1 Section 4.2 is deleted and replaced with the following:

4.2. The Reserve Capacity Expression of Interest Process

- 4.2.1. The purpose of the Reserve Capacity Expression of Interest is for existing and new Market Participants to notify AEMO of the amount of new Energy Producing System and Demand Side Management capacity they intend to make available as Reserve Capacity in the Capacity Year to which the Expression of Interest relates. To avoid doubt, a Market Participant must submit an Expression of Interest as a condition of being eligible to seek certification of Reserve Capacity under section 4.8 for any new capacity, which includes an upgrade of a Facility, in the Reserve Capacity Cycle to which the Expression of Interest relates.
- 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) in local and national media which, in the opinion of AEMO, is likely to be seen by potential suppliers of Reserve Capacity.
- 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 number of Expressions of Interest received;

- (b) based on the Expressions of Interest, the additional Reserve Capacity potentially available, categorised as:
 - 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 Reserve Capacity potentially available by:
 - i. Facility Technology Types, including:
 - 1. Intermittent Generating Systems;
 - 2. Non-Intermittent Generating Systems;
 - 3. Electric Storage Resources;
 - 4. Small Aggregation; and
 - ii. Demand Side Programmes;
- (cA) if the Facility is an Energy Producing System, the technologies proposed for the Energy Producing System;
- (cB) whether more than one technology is proposed for the Facility or location;
- (d) based on the Expressions of Interest, the additional Reserve 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.

73. Section 4.3 amended

73.1 Section 4.3 is deleted and replaced with the following:

4.3. Information to be Included in a Request for Expression of Interest

73.2 Clause 4.3.1 is deleted and replaced with the following:

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 Requirement 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 Requirement determined in accordance with clause 4.6.1;
 - ii. the Availability Curve referred to in clause 4.5.10(e) applicable to that Reserve Capacity Cycle;
 - iii. [Blank]
 - iv. the number of Capacity Credits acquired by AEMO;
 - v. the Benchmark Reserve Capacity Price;
 - vi. the Reserve Capacity Price;
 - vii. each Facility Monthly Reserve Capacity Price that applied to a Facility; and
 - viii. the aggregate quantity of MW of Capacity Credits assigned to Facilities at each of the prices referred to in clauses 4.3.1(c)(vi) and 4.3.1(c)(vii);
- (d) the number of Capacity Credits which AEMO expects to be traded bilaterally in accordance with clause 4.14.1(c);
- (e) the amount of capacity expected to be required from new Facilities, where this figure is based on the difference between the value as determined in accordance with clause 4.6.3 and the latest information available to AEMO as to the aggregate available capacity for the SWIS during the period to which the Reserve Capacity Requirement relates;
- (f) the Benchmark Reserve Capacity Price applicable to the relevant Reserve Capacity Cycle;
- (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 WEM 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;
 - 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; and
 - v. the date and time by which AEMO will publish the Preliminary RCM Constraint Equations;
- (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; and
- (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.

74. Section 4.4 amended

74.1 The section 4.4 heading is deleted and replaced with the following:

4.4. Information to be Included in an Expression of Interest

74.2 Clause 4.4.1 is deleted and replaced with the following:

- 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) 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, the technologies proposed for the Energy Producing System;
- (bB) whether more than one technology is proposed for the Facility or location;
- (c) the maximum Reserve 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; and
 - vi. whether the Facility is expected to be nominated to be classified as a Network Augmentation Funding Facility.

75. Section 4.4A amended

75.1 Clauses 4.4A.1 and 4.4A.2 are deleted and replaced with the following:

- 4.4A.1. Where a Facility, that is not 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.2. AEMO must within five Business Days after receiving a notice under clause 4.4A.1, publish the following information on the WEM Website:
- (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 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; and
- (f) the Network Access Quantity assigned to the Facility at the time of the notice and for any subsequent Reserve Capacity Cycle.

75.2 Clauses 4.4A.5(a) is deleted and replaced with the following:

- (a) the Market Participant becomes insolvent within the meaning of clause 9.19.2;

76. Section 4.4B added

76.1 Insert the following new section 4.4B:

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 March 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 where the intention is for the Facility to cease operation permanently by 1 October of Year 3 of the Reserve Capacity Cycle; and
- (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.

4.4B.3. By 5:00 PM on the last Business Day falling on or before 15 April 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; and
 - 2. all transmission Network assets scheduled to be retired, 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 Preliminary RCM Constraint Equations and RCM Constraint Equations in accordance with this section 4.4B. In formulating Preliminary RCM Constraint Equations and RCM Constraint Equations, AEMO must:
- (a) use RCM Limit Advice to develop Preliminary RCM Constraint Equations and RCM Constraint Equations; and
 - (b) where a Network Operator has not been able to provide Non-Thermal Network Limits for Facilities that are not yet in-service 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 15 April 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 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.3; and
- (e) an explanation for any changes to the RCM Limit Advice provided to AEMO for the Reserve Capacity Cycle 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 20 May in Year 1 of the Reserve Capacity Cycle, AEMO must publish the following information in the Constraints Library for the Reserve Capacity Cycle:

- (a) the information provided by each Network Operator under clause 4.4B.5; and
- (b) the Preliminary RCM Constraint Equations.

77. Section 4.5 amended

77.1 Clauses 4.5.2(b) and 4.5.2(c) are deleted and replaced with the following:

- (b) expected Demand Side Management 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, for Non-Scheduled Facilities, Semi-Scheduled Facilities and Electric Storage Resources, production profiles;

77.2 Clause 4.5.3A is deleted and replaced with the following:

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 Contractual 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 Contractual Maximum Demand level unless AEMO has previously been provided with that evidence.

77.3 Clause 4.5.9 is deleted and replaced with the following:

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 a reserve margin equal to the greater of:
 - i. 7.6% of the forecast peak demand (including transmission losses and allowing for Intermittent Loads); and
 - ii. the maximum capacity, measured at 41°C, of the largest generating unit;

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; and

- (b) limit expected energy shortfalls to 0.002% of annual energy consumption (including transmission losses and taking into account transmission network capabilities including constraints).

77.4 Clause 4.5.10(a) is deleted and replaced with the following:

- (a) assess the extent to which the anticipated installed capacity of the energy producing systems and Demand Side Management capacity is capable of satisfying the Planning Criterion, identifying any capacity shortfalls 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.

77.5 Clause 4.5.10(d) is deleted and replaced with the following:

- (d) identify any potential transmission, generation, storage or demand side capacity augmentation options to alleviate capacity shortfalls identified in clauses 4.5.10(a) and 4.5.10(c); and

77.6 Clause 4.5.12(b) is deleted and replaced with the following:

- (b) the minimum capacity required to be provided by Availability Class 1 capacity if Power System Security and Power System Reliability is to be maintained. This minimum capacity is to be set at a level such that if:
 - i all Availability Class 2 capacity were activated during the Capacity Year so as to minimise the peak demand during that Capacity Year; and
 - ii the Planning Criterion and the criteria for evaluating Outage Plans set out in clause 3.18E.8 were to be applied to the load scenario defined by clause 4.5.12(b)(i), then

it would be possible to satisfy the Planning Criterion and the Outage Evaluation Criteria, as applied in clause 4.5.12(b)(ii), using, to the extent that the capacity is anticipated to provide Certified Reserve Capacity, the anticipated installed Availability Class 1 capacity and, to the extent that further Availability Class 1 capacity would be required, an appropriate mix of Availability Class 1 capacity to make up that shortfall; and

77.7 Clause 4.5.13(a)(ii) is deleted and replaced as follows:

- ii. the capacities of each energy producing Registered Facility;

77.8 Clause 4.5.13(a)(iii) is deleted and replaced as follows:

- iii. the generation capacities of each committed energy producing project;

77.9 Clause 4.5.13(a)(iv) is deleted and replaced as follows:

- iv. the generation capacities of each probable energy producing project;

77.10 Clause 4.5.13(c) is deleted and replaced as follows:

- (c) the amount by which the installed Energy Producing System capacity plus the Demand Side Management available exceeds or falls short of the

Reserve Capacity Target for each Capacity Year and each demand growth scenario considered in the study;

77.11 Clause 4.5.13(e) is deleted and replaced as follows:

- (e) a statement of potential Energy Producing System, demand side and transmission options that would alleviate capacity shortfalls relative to the Reserve Capacity Target and to capacity requirements in Electrical Locations of the SWIS;

77.12 Insert the following new clauses 4.5.13(eA) and 4.5.13(eB) as follows:

- (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 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;

78. Section 4.5A added

78.1 Insert the following new section 4.5A:

4.5A. Whole of System Plan

- 4.5A.1. The Coordinator must prepare and publish on the Co-ordinator'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 2025 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 methodology 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.

79. Section 4.6 amended

79.1 Clauses 4.6.1 – 4.6.3 (inclusive) are deleted and replaced with the following:

- 4.6.1. The Reserve Capacity Requirement for a Reserve Capacity Cycle is the 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 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.
- 4.6.3. The preliminary Reserve Capacity Requirement for a Reserve Capacity Cycle to be included in the relevant Request for Expression of Interest is the Reserve Capacity Target 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.

80 Section 4.7 amended

80.1 Clause 4.7.3(b) is deleted and replaced with the following:

- (b) an explicit description of the Availability Curve to be used in restricting the amount of Reserve Capacity only available for a limited number of hours per year that can be traded bilaterally in accordance with clause 4.14.9; and

81. Section 4.8 amended

81.1 Clause 4.8.2 is deleted and replaced with the following:

4.8.2. Subject to clause 4.8.3, AEMO must not accept an application for certification of Reserve Capacity under clause 4.8.1 for a Reserve Capacity Cycle, for a facility, or an upgrade of a Facility, that has not been assigned Capacity Credits in a previous Reserve Capacity Cycle, unless an Expression of Interest for the facility, or upgrade of the Facility, for that Reserve Capacity Cycle has been provided to AEMO under clause 4.2.6.

81.2 Insert the following new clause 4.8.3:

4.8.3. Clause 4.8.2 does not apply to an application for Early Certified Reserve Capacity submitted under clause 4.28C.2 for a facility, or an upgrade of a Facility.

82. Section 4.8A added

82.1 Insert the following new clause 4.8A:

Indicative Facility Class and Facility Technology Type

4.8A. Indicative Facility Class and Indicative Facility Technology Type

4.8A.1. Where 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 an indicative Facility Technology Type, where 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 Type 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 Market Participant that intends to apply for Early Certified Reserve Capacity under section 4.28C for a new facility or Facility upgrade, must, prior to submitting the application, apply to AEMO for an indicative Facility Class and an indicative Facility Technology Class to be assigned to the facility or Facility upgrade.
- 4.8A.4. An application under clause 4.8A.3 must include the information required under clause 4.4.1.
- 4.8A.5. Where AEMO receives an application under clause 4.8A.3, AEMO must:
- (a) assign an indicative Facility Class and an indicative Facility Technology Type 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 Type assigned to the new Facility or Facility upgrade; or
 - (c) request the applicant provide clarification or further information, in which case, the application submitted by the applicant under clause 4.8A.3 will be deemed to be withdrawn and then resubmitted under clause 4.8A.3 once AEMO receives the clarification or further information.
- 4.8A.6. AEMO must notify the applicant of the indicative Facility Class and indicative Facility Technology Type assigned to the new Facility or Facility upgrade under clause 4.8A.5(b) within 30 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 Class to a new Facility or Facility upgrade under this section 4.8A;
 - (b) the information required to be provided in support of an application under clause 4.8A.3;
 - (c) the processes to be followed by an applicant in relation to making an application under clause 4.8A.3; and
 - (d) any other matters AEMO considers relevant.

83. Section 4.9 amended

83.1 Clause 4.9.1(b) is deleted and replaced with the following:

- (b) for a future Reserve Capacity Cycle may be lodged with AEMO at any time prior to the date and time specified in clause 4.1.7 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.

83.2 Clauses 4.9.3(b) and 4.9.3(c) are deleted and replaced with the following:

- (b) in the case of an application for certification of Reserve Capacity for a Non-Scheduled Facility (other than a Non-Scheduled Facility that comprises only an Electric Storage Resource) or a Semi-Scheduled Facility that is yet to enter service, the report described in clause 4.10.3; 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.

83.3 Clauses 4.9.5(c) and 4.9.5(d) are deleted and replaced with the following:

- (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 Certified Reserve Capacity was assigned and is correct, then AEMO must confirm:
 - i. the Certified Reserve Capacity;
 - ii. [Blank]; and
 - iii. the Reserve Capacity Security or DSM Reserve Capacity Security levels,

that were previously conditionally assigned, set or determined by AEMO, subject to the Certified Reserve Capacity for an Intermittent Generating System being assigned in accordance with clause 4.11.2(b); 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 Certified Reserve Capacity was assigned, then AEMO must process the application without regard for the Conditional Certified Reserve Capacity.

83.4 Insert the following new clause 4.9.7A:

4.9.7A. Where AEMO has received an application for certification of Reserve Capacity under clause 4.9.1 for a future Reserve Capacity Cycle, the application will be processed by AEMO at the time AEMO next processes applications for Certified Reserve Capacity for a Reserve Capacity Cycle in accordance with section 4.11.

83.5 Clause 4.9.8 is deleted and replaced with the following:

- 4.9.8. AEMO must notify applicants for certification of Reserve Capacity for:
- (a) the current Reserve Capacity Cycle, of the quantity of the 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 Certified Reserve Capacity assigned to each Facility covered by that application by the date and time specified in clause 4.1.2 in the Reserve Capacity Cycle when AEMO next processes applications for Certified Reserve Capacity in accordance with section 4.11.

83.6 Clause 4.9.9(f) is deleted and replaced with the following:

- (f) whether AEMO accepted or rejected a proposed alternative value to be used in the calculation of the Required Level for a Facility for which a Market Participant nominated to use the methodology described in clause 4.11.2(b) in its application for certification of Reserve Capacity, as determined in accordance with clause 4.11.2A, if applicable.

83.7 Clause 4.9.10 is deleted and replaced with the following:

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 methodology AEMO uses for determining Planned Outage rates and Forced Outage rates;
- (c) the procedures AEMO must follow when processing applications for Certified Reserve Capacity, including:
 - i. how Certified Reserve Capacity is assigned;
 - ii. how Reserve Capacity Obligation Quantities are set under clause 4.12.4; and
 - iii. 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, where available.

84. Section 4.10 amended

84.1 Clause 4.10.1 is deleted and replaced with the following:

- 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, where applicable, except to the extent that it is already accurately provided in Standing Data, the following information:
- (a) the identity of the Facility;
 - (b) the Reserve Capacity Cycle to which the application relates;
 - (bA) with the exception of applications for Conditional Certified Reserve Capacity, 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;
 - 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. except where the Facility is a Demand Side Programme, 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 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 where 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;
- (e) for a Non-Intermittent Generating System:
- i. the capacity of the Facility and the temperature dependence of that capacity;
 - ii. the maximum sent out capacity, net of Intermittent Loads, embedded and Parasitic Loads, that can be guaranteed to be available for supply to the relevant Network from the Facility when it is operated normally at an ambient temperature of 41°C;
 - iii. [Blank]
 - iv. at the option of the applicant, the method to be used to measure the ambient temperature at the site of the Facility for the purpose of defining the Reserve Capacity Obligation Quantity, 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 generator by the SCADA system operated by AEMO or the relevant Network Operator (as applicable).
- (Where no method is specified, a temperature of 41°C will be assumed);

- v. details of primary and any alternative fuels,¹ including:
 - 1. where the Facility has primary and alternative fuels:
 - i. the process for changing from one fuel to another; and
 - ii. the fuel or fuels which the Facility is to use in respect of the application for Certified Reserve Capacity; and
 - 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 Facility operating at its full capacity for Peak Trading Intervals on Business Days;
 - vi. the expected forced and unforced outage rate based on manufacturer data; and
 - vii. for Facilities that have operated for at least 12 months, the forced and unforced outage rate of the Facility;
- (f) for Demand Side Programmes:
- i. the amount of Reserve Capacity the Market Participant expects to make available from the Facility;
 - ii. the maximum number of hours that the Demand Side Programme will be available to provide Reserve Capacity during a Capacity Year, which must be at least 200 hours;
 - iii. the maximum number of hours per day that the Facility will be available to provide Reserve Capacity if issued a Dispatch Instruction, where this must be at least twelve hours;
 - iv. [Blank]
 - v. the minimum notice period required for dispatch under clause 7.6.15 of the Facility;
 - 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;
 - vii. the proposed DSP Ramp Rate Limit for the Facility; and
 - viii. the single Transmission Node Identifier for the Facility;

¹ A Facility may satisfy its fuel obligations using a combination of primary and alternative fuels.

- (fA) for a Scheduled Facility comprising only an Electric Storage Resource:
- 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 embedded and Parasitic Loads, that can be guaranteed to be available for supply to the relevant Network from the Facility when it is operated normally at an ambient temperature of 41°C;
 - iii. the sent-out capacity, net of Parasitic Loads that can be guaranteed to be available for supply across the 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°C for each year of the expected life of the Electric Storage Resource, which must be supported by manufacturer 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; and
 - v. the expected forced and unforced outage rate of the Electric Storage Resource taking into account the Electric Storage Resource Obligations Duration based on manufacturer data;
- (fB) in addition to any other requirements in this clause 4.10.1 for a Scheduled Facility, for a Scheduled Facility containing an Electric Storage Resource:
- 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 embedded and Parasitic Loads associated with the Electric Storage Resource, that can be guaranteed to be available for supply to the relevant Network from the Facility when it is operated normally at an ambient temperature of 41°C;
 - iii. the sent-out capacity, net of Parasitic Loads that can be guaranteed to be available for supply across the 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°C for each year of the expected life of the Electric Storage Resource, supported by manufacturer data;

- iv. manufacturer nameplate capacity and maximum Charge Level capability and minimum Charge Level capability data for the Electric Storage Resource for each year of its expected remaining life; and
- v. the expected forced and unforced outage rate of the Electric Storage Resource taking into account the Electric Storage Resource Obligations Duration based on manufacturer data;

(fC) in addition to any other requirements in this clause 4.10.1 for a Semi-Scheduled Facility, for a Semi-Scheduled Facility containing an Electric Storage Resource:

- 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 embedded and Parasitic Loads, that can be guaranteed to be available for supply to the relevant Network from the Facility when it is operated normally at an ambient temperature of 41°C;
- iii. the sent-out capacity, net of Parasitic Loads that can be guaranteed to be available for supply across the 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°C for each year of the expected life of the Electric Storage Resource, supported by manufacturer 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; and
- v. the expected forced and unforced outage rate of the Electric Storage Resource taking into account the Electric Storage Resource Obligations Duration based on manufacturer data;

(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 Charge Level of each Electric Storage Resource;
 - iii. the sent-out capacity, net of Parasitic Loads that can be guaranteed to be available for supply across the 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°C 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 the Electric Storage Resource Obligation Intervals;
- (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 Certified Reserve Capacity;
- (i) [Blank];
- (j) whether the Facility will be subject to a Network Control Service Contract;
- (k) where a Facility, or component of a Facility, is being assigned Certified Reserve Capacity or Conditional Certified Reserve Capacity using the methodology described in clause 4.11.2(b) and the Facility or relevant component of the Facility is already in full operation under the configuration for which certification is being sought (as outlined in 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 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, part of 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, part of 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.

84.2 Clauses 4.10.2 – 4.10.3A (inclusive) are deleted and replaced with the following:

- 4.10.2. The types of Facilities eligible to use the methodology described in clause 4.11.2(b), for the purpose of assigning Certified Reserve Capacity or Conditional Certified Reserve Capacity to the Facility are:
 - (a) components of Semi-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 period of performance assessment identified in step 1(a) of the Relevant Level Methodology; and
 - (c) Non-Scheduled Facilities comprising only Electric Storage Resources that have been in operation for the full period of performance assessment identified in step 1(a) of the Relevant Level Methodology.
- 4.10.3. An application for certification of Reserve Capacity for a Facility, or component of a Facility, that is to be assessed using the methodology described in clause 4.11.2(b) 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 outlined in clause 4.10.1(dA) for the full period of performance assessment identified in step 1(a) of the Relevant Level Methodology,

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 Certified Reserve Capacity for the Facility, or the relevant component of the Facility, that is to be assessed using the methodology described in clause 4.11.2(b) and to determine the Required Level for that Facility in accordance with clause 4.11.3B(b).

4.10.3A. A report provided under clause 4.10.3 must include:

- (a) for each Trading Interval during the period identified in step 1(a) of the Relevant Level Methodology, 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 methodology described in clause 4.11.2(b) 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 in clause 4.11.3B;
- (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).

85. Section 4.10A amended

85.1 Section 4.10A is deleted and replaced with the following:

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; and
 - (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.

- 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 where 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, where:
- (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) AEMO has notified the relevant Market Participant under clause 4.10A.9(b) that it has classified the Facility as a Network Augmentation Funding Facility; and
 - (c) AEMO has assigned Certified Reserve Capacity to the Facility under clause 4.9.9.
- 4.10A.6. Where 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. Where the Network Operator verifies the information specified in a request in accordance with clause 4.10A.8(a), 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. Where 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.

86. Section 4.11 amended

86.1 Clause 4.11.1 is deleted and replaced with the following:

- 4.11.1. Subject to clause 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 Certified Reserve Capacity for a Scheduled Facility comprising only Non-intermittent Generating Systems for a Reserve Capacity Cycle must

- not exceed AEMO's reasonable expectation of the amount of capacity likely to be available, after netting off capacity required to serve Intermittent Loads, embedded loads and Parasitic Loads, for Peak Trading Intervals on Business Days from the Trading Day starting 1 October in Year 3 of the Reserve Capacity Cycle to the end of July in Year 4 of the Reserve Capacity Cycle, assuming an ambient temperature of 41oC;
- (b) for a Scheduled Facility comprising only Non-Intermittent Generating Systems, the Certified Reserve Capacity must not exceed the sum of the capacities specified in clauses 4.10.1(e)(ii) and 4.10.1(e)(iii);
 - (bA) where the Facility is an Energy Producing System, the 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) where two or more Facilities share a Declared Sent Out Capacity, the total quantity of 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 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 Certified Reserve Capacity must be:
 - i. determined in accordance with the Relevant Level Methodology determined in accordance with clause 4.11.2; or
 - ii. if the Electric Storage Resource has not been in operation for the full period of performance assessment identified in step 1(a) of the Relevant Level Methodology, 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 Certified Reserve Capacity assigned to the Facility must be determined in accordance with the Relevant Level Methodology, determined in accordance with clause 4.11.2;
 - (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 Capacity Credits assigned to it under clause 4.28C for the Reserve Capacity Cycle; or
 - v. [Blank]
 - 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) subject to clauses 4.11.1B and 4.11.1C, AEMO may decide not to assign any Certified Reserve Capacity to a Facility, or to assign a lesser quantity of Certified Reserve Capacity to a Facility than it would otherwise assign in accordance with this clause 4.11.1, if:
- i. the Facility has been in Commercial Operation for at least 36 months and has had a Forced Outage rate or a combined Planned Outage rate and Forced Outage rate greater than the applicable percentage specified in the table in clause 4.11.1D, over the preceding 36 months; or
 - ii. the Facility has been in Commercial Operation for less than 36 months, or is yet to commence Commercial Operation, and AEMO has cause to believe that over the first 36 months of Commercial Operation the Facility is likely to have a Forced Outage rate or a combined Planned Outage rate and Forced Outage rate greater than the applicable percentage specified in the table in clause 4.11.1D,

where the Planned Outage rate and the Forced Outage rate for a Facility for a period are calculated in accordance with the WEM Procedure specified in clause 4.9.10;

- (i) the Certified Reserve Capacity assigned to a Facility is to be expressed to a precision of 0.001 MW;
- (j) the Certified Reserve Capacity for a Demand Side Programme for a Reserve Capacity Cycle must only consist of Associated Loads at the same Transmission Node, and must not exceed either of the following:
 - i. AEMO's reasonable expectation of the amount of capacity likely to be available from that Facility during the periods specified in clause 4.10.1(f)(vi), after netting off capacity required to serve Minimum Consumption for each of the Facility's Associated Loads, from the Trading Day starting on 1 October in Year 3 of the Reserve Capacity Cycle to the end of July in Year 4 of the Reserve Capacity Cycle; and
 - ii. AEMO's reasonable expectation of the amount by which the Facility could reduce its consumption, measured as a decrease from the Facility's Relevant Demand, by the end of one Trading Interval in response to a Dispatch Instruction requiring it to reduce consumption from the beginning of the Trading Interval at the ramp rate proposed for the Facility under clause 4.10.1(f)(vii), for which purpose AEMO may have regard to the ramp rate proposed under clause 4.10.1(f)(vii) and any other information AEMO considers relevant; and
- (k) the Certified Reserve Capacity assigned to a Facility is to be, where relevant, the sum of the Certified Reserve Capacity assigned to each relevant component of a Facility.

86.2 Clause 4.11.1C(b)(iii) is amended by inserting the word 'Reserve' immediately before the words 'Capacity Cycle'.

86.3 Clause 4.11.2 is deleted and replaced with the following:

4.11.2. Where an applicant submits an application for Certified Reserve Capacity, in accordance with clause 4.10, and AEMO is required to use the methodology described in clause 4.11.2(b) to apply to an Intermittent Generating System or a Non-Scheduled Facility (excluding where 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 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 Methodology, but subject to clauses 4.11.1(bA), 4.11.1(bB), 4.11.1(c), 4.11.1(f) and 4.11.1(h).

86.4 Clause 4.11.3 is deleted and replaced with the following:

4.11.3. The Certified Reserve Capacity for an Electric Storage Resource for the Reserve Capacity Cycle under clause 4.11.1, for a component of a Scheduled Facility, Semi-Scheduled Facility or Non-Scheduled Facility, except where clause 4.11.1(bD) applies, the quantity of Certified Reserve Capacity to be assigned is AEMO's reasonable expectation of the Linearly De-rated Capacity that each Electric Storage Resource can sustain over the Electric Storage Resource Obligation Duration after netting off capacity required to serve embedded loads and Parasitic 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.

86.5 Clause 4.11.3A is deleted and replaced with the following:

4.11.3A. AEMO must:

- (a) determine and, by the date and time specified in clause 4.1.8, publish on the WEM Website (which may be published in the Statement of Opportunities Report) the Trading Intervals in each Trading Day that are classified as Electric Storage Resource Obligation Intervals;
- (b) only amend the Trading Intervals classified as Electric Storage Resource Obligation Intervals as permitted under these WEM Rules and in consultation with Market Participants; and
- (c) document the following in a WEM Procedure:
 - i. the processes to be followed by AEMO for determining the Trading Intervals that will be classified as Electric Storage Resource Obligation Intervals in a Trading Day;
 - ii. the processes to be followed by AEMO for publishing the Trading Intervals classified as Electric Storage Resource Obligation Intervals on the WEM Website; and
 - iii. the circumstances, if any, that allow AEMO to amend the Trading Intervals classified as Electric Storage Resource Obligation

Intervals and the obligations on AEMO to consult with Market Participants.

86.6 Clause 4.11.3B is deleted and replaced with the following:

4.11.3B. The Required Level for a Facility is the sum of each relevant 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.

86.7 Insert the following new clause 4.11.3BA

4.11.3BA. The Required Level for each component of a Facility:

- (a) for a Non-intermittent Generating System assigned Certified Reserve Capacity under clause 4.11.1(a), is calculated by AEMO using the Capacity Credits assigned to the Facility and temperature dependence information submitted to AEMO under clause 4.10.1(e)(i) or provided in Standing Data (where available) and converted to a sent out basis to 41°C;
- (b) for an Intermittent Generating System assigned Certified Reserve Capacity under clause 4.11.2(b), or for a Non-Scheduled Facility containing an Electric Storage Resource component for which Certified Reserve Capacity has been assigned under clause 4.11.1(bE), is 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 Facility, submitted to AEMO in the report described in clause 4.10.3A(b); or
 - ii. the proposed alternative value, expressed in MW as a sent out value, provided in the report described in clause 4.10.3A(c), where AEMO has accepted the proposed alternative value under clause 4.11.2A;
- (c) for Demand Side Programmes, is calculated by AEMO using the Facility's Relevant Demand minus the Capacity Credits assigned to the Facility;
- (d) for an Electric Storage Resource component of a Facility for which Certified Reserve Capacity has been assigned under clause 4.11.3 or 4.11.1(bD), is the Capacity Credits assigned to the Electric Storage Resource component of the Facility and temperature dependence information submitted to AEMO under clauses 4.10.1(fA), 4.10.1(fB), 4.10.1(fC) or 4.10.1(fD) and converted to a sent out basis to 41°C; and
- (e) for a Non-Scheduled Facility comprising only an Electric Storage Resource for which Certified Reserve Capacity has been assigned under clause

4.11.1(bD), is the Capacity Credits assigned to the Non-Scheduled Facility and converted to a sent out basis to 41°C.

86.8 Clause 4.11.4 is amended by deleting the words ' an Interruptible Load or'.

86.9 Clause 4.11.5(a) is amended by deleting the words ' or clause 4.10A'.

86.10 Clause 4.11.6 is amended by deleting the words 'Intermittent Generators' and replacing them with the words' Intermittent Generating System or a Non-Scheduled Facility (excluding where clause 4.11.1(bD)(ii) applies)'.

86.11 Section 4.11.12 is deleted and replaced with the following:

4.11.12. AEMO must not assign Certified Reserve Capacity to a Facility with a rated capacity equal to or greater than 10 MW 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.

87. Section 4.12 amended

87.1 Clauses 4.12.1(a), 4.12.1(b) and 4.12.1(c) are deleted and replaced with the following:

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:
 - i. the aggregate MW equivalent of the quantity of Capacity Credits held by the Market Participant applicable in that Trading Interval for Demand Side Programmes registered to the Market Participant; plus
 - ii. the MW quantity calculated by doubling the Market Participant's Net Contract Position in MWh for the Trading Interval, corrected for Loss Factor adjustments so as to reverse any adjustments made to account for losses to the reference node; plus
 - iii. the MW quantity calculated by doubling the total MWh quantity covered by STEM Offers which were not scheduled and the STEM Bids which were scheduled in the relevant STEM Auction determined by AEMO for that Market Participant under section 6.9 for that Trading Interval, corrected for loss factor adjustments so as to reverse any adjustments made to account for losses to the reference node,
 - iv. [Blank]

is greater than or equal to the sum over all Registered Facilities registered to that Market Participant of the lesser of:

- v. the Reserve Capacity Obligation Quantity for that Trading Interval as at the Bilateral Submission Cutoff for the Trading Day including that Trading Interval; and
 - vi. the average across all Dispatch Intervals in that Trading Interval of the lowest Remaining Available Capacity for energy under any Forced Outage or Outage Plan which has not been rejected or subject to an Outage Recall Direction, as at the Bilateral Submission Cutoff for the Trading Day including that Trading Interval.
- (b) [Blank]
- (c) the Market Participant must make the capacity associated with the Capacity Credits provided by a Registered Facility applicable to a Dispatch Interval, up to the Reserve Capacity Obligation Quantity for the Registered Facility for that Dispatch Interval, available for dispatch by AEMO in accordance with Chapter 7.

87.2 Insert the following new clause 4.12.1A:

4.12.1A. Without limiting clause 4.12.1, the Reserve Capacity Obligation Quantity for a Registered Facility in a Dispatch Interval is equal to the Reserve Capacity Obligation Quantity for the Registered Facility for the Trading Interval in which the Dispatch Interval falls.

87.3 Clauses 4.12.3 and 4.12.4 are deleted and replaced with the following:

4.12.3. AEMO must use the amount of Capacity Credits assigned under section 4.20 to set the Reserve Capacity Obligation Quantity to apply to a Facility in each Trading Interval. The Reserve Capacity Obligation Quantity to apply to a Facility may differ between Trading Intervals.

4.12.4. Where AEMO establishes the initial Reserve Capacity Obligation Quantity to apply for a Facility for a Trading Interval:

- (a) the Reserve Capacity Obligation Quantity must not exceed the amount of Capacity Credits assigned under section 4.20 held by the Market Participant for the Facility;
- (aA) for Semi-Scheduled Facilities that do not contain an Electric Storage Resource, the Reserve Capacity Obligation Quantity is zero;
- (aB) for Semi-Scheduled Facilities containing an Electric Storage Resource the Reserve Capacity Obligation Quantity is the Electric Storage Resource

Obligation Quantity during the Electric Storage Resource Obligation Intervals, otherwise, outside of the Electric Storage Resource Obligation Intervals, zero;

- (b) for Scheduled Facilities, except where otherwise precluded by this clause 4.12.4, the Reserve Capacity Obligation Quantity:
 - i. must not be less than the amount of Capacity Credits assigned under section 4.20 except on Trading Days when the maximum daily temperature at the site of the Scheduled Facility exceeds 41°C, in which case the Reserve Capacity Obligation Quantity must not be adjusted to an ambient temperature of 45°C and the temperature dependence information submitted to AEMO under clause 4.10.1(e)(i);
 - ii. [Blank]
 - iii. must account for staffing and other restrictions on the ability of the Facility to provide energy upon request; and
- (bA) for Scheduled Facilities containing an Electric Storage Resource the Reserve Capacity Obligation Quantity must equal:
 - i. during a Trading Interval that is an Electric Storage Resource Obligation Interval, the Electric Storage Resource Obligation Quantity; otherwise,
 - ii. the amount determined in accordance with clause 4.12.4(b);
- (c) for Demand Side Programmes, except where otherwise precluded by this clause 4.12.4, the Reserve Capacity Obligation Quantity:
 - i. will equal zero once the capacity has been dispatched under clause 7.6.16 for the number of hours per year that are specified under clause 4.10.1(f)(ii);
 - ii. will equal zero for the remainder of a Trading Day in which the capacity has been dispatched under clause 7.6.16 for the number of hours per day that are specified under clause 4.10.1(f)(iii);
 - iii. [Blank]
 - iv. must account for staffing and other restrictions on the ability of the Facility to curtail energy upon request;
 - v. will equal zero for Trading Intervals which fall outside of the periods specified in clause 4.10.1(f)(vi); and

- (d) for Non-Scheduled Facilities, including Non-Scheduled Facilities containing an Electric Storage Resource, the Reserve Capacity Obligation Quantity is zero.

87.4 Insert the following new clause 4.12.4A:

4.12.4A. Where AEMO issues a direction under clause 7.7.5 in respect of a Facility containing an Electric Storage Resource:

- (a) if the direction requires the Facility to operate at a value higher than its Reserve Capacity Obligation Quantity in the Trading Interval in which the Dispatch Interval to which the direction relates falls; then
- (b) despite clause 4.12.4, the Reserve Capacity Obligation Quantity for the Electric Storage Resource component of the Facility must be reduced to zero for all subsequent Trading Intervals in that Trading Day.

87.5 Insert the following new clause 4.12.6

4.12.6. Subject to clause 4.12.7, any initial Reserve Capacity Obligation Quantity set in accordance with clause 4.12.4 is to be reduced once the Reserve Capacity Obligations take effect, as follows:

- (a) if the aggregate MW equivalent to the quantity of Capacity Credits (as modified from time to time under the WEM Rules) for a Facility is less than the Capacity Credits assigned under section 4.20 (for example as a result of the application of clause 4.20.14, clause 4.25.4 or clause 4.25.6), then AEMO must reduce the Reserve Capacity Obligation Quantity or the Electric Storage Resource Obligation Quantity, as relevant, to reflect the amount by which the aggregate Capacity Credits fall short of the Capacity Credits assigned under section 4.20;
- (b) during Trading Intervals where there is a Planned Outage in respect of an Outage Facility 3.21.8, AEMO must reduce the Reserve Capacity Obligation Quantity or Electric Storage Resource Obligation Quantity, as relevant for that Facility and that Trading Interval, after taking into account adjustments in accordance with clause 4.12.6(a), to reflect CAPO(f,t) as calculated under clause 3.21.8B; and
- (c) if the Facility referred to in clause 3.21.5, is subject to a Commissioning Test Plan approved by AEMO during a Trading Interval, then AEMO must reduce the Reserve Capacity Obligation Quantity for that Facility to zero during that Trading Interval.

87.6 Insert the following new clause 4.12.8:

4.12.8. AEMO must document in a WEM Procedure the processes to be followed by AEMO in determining adjustments to the Reserve Capacity Obligation Quantity for a Scheduled Facility with an Electric Storage Resource where the maximum daily temperature at the site of the Scheduled Facility exceeds 41°C.

87.7 Insert the following new clause 4.12.9:

4.12.9. Where a Registered Facility, that has a Reserve Capacity Obligation Quantity greater than zero for a Dispatch Interval, did not comply with the Dispatch Target in a Dispatch Instruction for that 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:

- (a) submit a Forced Outage in accordance with section 3.21; and
- (b) the Remaining Available Capacity to be submitted for the Forced Outage must be equal to the Injection of the Facility for the Dispatch Interval.

88. Section 4.13 amended

88.1 Clause 4.13.1A is amended by deleting the word 'clause' and replacing it with the word 'section'.

88.2 Clause 4.13.1C is amended by deleting the word 'clause' and replacing it with the word 'section'.

88.3 Clause 4.13.2 deleted and replaced with the following:

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 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 Certified Reserve Capacity assigned to the Facility; less
 - ii. the total of any 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 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 Capacity Credits assigned to the Facility under clause 4.20.5A.

88.4 Clauses 4.13.9 and 4.13.10 are deleted and replaced with the following:

- 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 WEM Rules (including for the purposes of setting the Reserve Capacity Obligation Quantity).
- 4.13.10 If a Market Participant that provides Reserve Capacity Security in respect of each component of a Facility:
- (a) either:
- i. operates the Facility, or component of a Facility, at a level which is at least equivalent to its Required Level, adjusted to 90 percent of the level of 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, or component of a Facility, can operate at a level which is at least equivalent to its Required Level, adjusted to 90 percent of the level of 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.
- 88.5 Clause 4.13.10C is deleted and replaced with the following:
- 4.13.10C For a Facility, or component of a Facility, assigned a quantity of Certified Reserve Capacity under clause 4.11.2(b), a Market Participant may provide AEMO with a report, in accordance with a 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, or component of a Facility, can operate, expressed in MW as a sent out value, at the time the report is prepared.
- 88.6 Clause 4.13.11 is amended by inserting the word 'Reserve' immediately before the words 'Capacity Cycle'.
- 88.7 Clause 4.13A.14 is deleted and replaced with the following:
- 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 WEM Rules.

88.8 Clause 4.13A.16(b) is deleted and replaced with the following:

- (b) secondly, once all costs to which clause 4.13A.16(a) refers are covered, make a rebate payment to Market Participants in proportion to their Individual Reserve Capacity Requirements during the relevant Trading Day in accordance with Chapter 9.

89. Section 4.13B added

89.1 Insert the following new clause 4.14B:

4.13B. Coordinator Review of Effectiveness of Certification of Reserve Capacity for Electric Storage Resources

4.13B.1. The Coordinator must review the effectiveness of the approach for certification of Reserve Capacity for Electric Storage 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, within five years of the start of the 2021 Reserve Capacity Cycle; 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 methodology for rating the capacity of Electric Storage Resources for the purposes of setting Certified Reserve Capacity remains consistent with the Wholesale Market Objectives;
- (b) whether the Electric Storage Resource Obligation Duration for Electric Storage Resources remains consistent with the Wholesale Market Objectives;
- (c) whether the Electric Storage Resource Obligation Intervals for Electric Storage Resources remain consistent with the Wholesale Market Objectives; and
- (d) whether the methodology and processes used by AEMO to determine the Electric Storage Resource Obligation Intervals, in which the Reserve Capacity Obligation Quantity for Electric Storage Resources applies, remain consistent with the Wholesale Market Objectives.

- 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, where 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.

90 Section 4.14 amended

90.1 The heading immediately above section 4.14 is deleted and replaced with the following:

Commitment of Capacity to Bilateral Trade

90.2 Section 4.14 is deleted and replaced with the following:

4.14. Bilateral Trade Declaration

- 4.14.1. Subject to 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 (expressed in MW to a precision of 0.001 MW):
- (a) [Blank]
 - (b) [Blank]
 - (c) the total amount of Reserve Capacity the Market Participant intends will be traded bilaterally; and
 - (d) the total amount of Reserve Capacity that the Market Participant has decided will not now be made available to the market,

where the sum of the values for clauses 4.14.1(c) and (d) must equal the Certified Reserve Capacity of the Facility for the Reserve Capacity Cycle.

- 4.14.1A. Where AEMO assigns Certified Reserve Capacity to an Electric Storage Resource component of a Facility, the Market Participant for the Facility must, at the same time it makes a submission under clause 4.14.1 for the Facility, notify AEMO of the amount of Reserve Capacity the Market Participant intends to trade bilaterally for:
- (a) the Electric Storage Resource component of the Facility; and
 - (b) the remaining part of the Facility.
- 4.14.1B. A Market Participant holding 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 the Facility be classified as a Fixed Price Facility.
- 4.14.1C. For the purposes of clause 4.14.1B, a 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 a Network Control Service Contract (at the date Capacity Credits are first assigned to the Facility); and
 - (e) the Facility is not a Network Augmentation Funding Facility under section 4.10A; and
 - (f) section 4.28C does not apply to the Facility.
- 4.14.1D. A Market Participant holding Certified Reserve Capacity for the current Reserve Capacity Cycle for 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 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 WEM Rules where:
- (a) the Market Participant holding the Capacity Credits in respect of a Facility has entered into an arrangement with another Market Participant under which any of the Capacity Credits for that Facility will be allocated to the other Market Participant for settlement purposes to allow the other Market Participant to meet its Individual Reserve Capacity Requirement in accordance with sections 4.30 and 4.31; or

- (b) the Market Participant holding the Capacity Credits in respect of a Facility allocates any of the Capacity Credits for that Facility for settlement purposes to meet its own Individual Reserve Capacity Requirement in accordance with sections 4.30 and 4.31.
- 4.14.3. A Market Participant must not make a submission under clause 4.14.1 with respect to a Facility subject to a Network Control Service Contract.
- 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 clause 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 Certified Reserve Capacity will be accepted ahead of Facilities with lower 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 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 clause 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 WEM Rules (including for the purposes of determining an Initial Network Access Quantity under clause 4.1A.2).

4.14.9. AEMO must notify each Market Participant that specified a non-zero amount under clause 4.14.1(c) by the date and time specified in clause 4.1.15 of the quantity of Certified Reserve Capacity held by the Market Participant in respect of each Facility that it can trade bilaterally, where this quantity 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.

91. Section 4.15 amended

91.1 The heading immediately above section 4.15 is deleted and replaced with the following:

The Benchmark Reserve Capacity Price

91.2 Section 4.15 is deleted and replaced with the following:

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.5(c);
 - (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 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 (as described in clause 4.15.3(c));
 - (b) include Facilities with Certified Reserve Capacity for the current Reserve Capacity Cycle and Network Control Service Facilities;
 - (c) ensure the sum of facility dispatch in each scenario equals peak demand (as described in clause 4.15.3(c)); and
 - (d) ensure a Facility is not dispatched to a level greater than the Certified Reserve Capacity for the Facility.
- 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 Wholesale Market Objectives.

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. The principles that must be applied by the Network Access Quantity Model under clause 4.15.7 are:

- (a) where 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) where 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 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 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.
- 4.15.10. 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) where 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 methodology described in Appendix 3 for the Capacity Year in respect of the current Reserve Capacity Cycle.
- 4.15.15. Where, for a Reserve Capacity Cycle:
- (a) a Facility, other than a Semi-Scheduled Facility or a Non-Scheduled Facility, is assigned a quantity of 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 Certified Reserve Capacity assigned to the Facility for that Reserve Capacity Cycle; and

- (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.

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; and
- (b) the name of each Facility for which a Network Access Quantity has been determined and the Network Access Quantity determined for the Facility.

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 to 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 WEM 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 to Facilities under Appendix 3; and
- (f) any other matters that AEMO reasonably deems relevant to performing its functions under this section 4.15.

92. Section 4.16 amended

92.1 Clause 4.16.3 is amended by deleting the colon after the word "documenting".

92.2 Clause 4.16.3(b) is amended by deleting the word 'section' and replacing it with the word 'clause'.

93. Section 4.20 amended

93.1 Clause 4.20.5A is deleted and replaced with the following:

4.20.5A. AEMO must:

- (a) subject to clause 4.20.5C, assign a quantity of Capacity Credits to each Facility and record the Capacity Credits associated with each component of the Facility, where relevant, where the quantity is determined in accordance with clause 4.20.5B for the relevant Facility;
- (aA) determine whether the Reserve Capacity Requirement has been met or exceeded with the Capacity Credits (excluding any Capacity Credits associated with any CC Uplift Quantities) assigned for Year 3 of a Reserve Capacity Cycle:
 - i. to 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, by the date and time specified in clause 4.1.16A:
 - i. AEMO's determination under clause 4.20.5A(aA); and,
 - ii. for each Facility assigned Capacity Credits under clause 4.20.5A(a):
 - 1. the quantity of Capacity Credits assigned;
 - 2. any CC Uplift Quantity associated with the Capacity Credits assigned; and
 - 3. the Facility Class.

93.2 Clause 4.20.5AA(b) is amended by adding the word 'and' after the semi-colon (;).

93.4 Clause 4.20.5AA(c) is amended by deleting the words '; and' and replacing them with a full stop (.).

93.5 Clause 4.20.5B is deleted and replaced with the following:

4.20.5B. The quantity of Capacity Credits assigned to a Facility f is equal to the sum of:

- (a) the Network Access Quantity determined by AEMO in accordance with section 4.15 for Facility f;

- (b) the CC Uplift Quantity applicable to Facility f as determined and amended by AEMO in accordance with section 4.1A; and
- (c) if Facility f is subject to a Network Control Service Contract, the same quantity as the quantity of Certified Reserve Capacity assigned to Facility f under clause 4.9.9(a).

93.6 Clause 4.20.5C is deleted and replaced with the following:

4.20.5C. Where, for a Facility, excluding a Facility that is subject to a Network Control Service Contract, 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 Capacity Credits under clause 4.20.5A(a) for that Reserve Capacity Cycle, including, to avoid doubt, a quantity equal to zero.

93.7 Insert the following new clauses 4.20.16 and 4.20.17:

4.20.16. Where AEMO has assigned Capacity Credits to a Facility for a Capacity Year that is less than the total 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 Capacity Credits that are to be associated with each component of the Facility for the Capacity Year, where the number must not exceed the Certified Reserve Capacity assigned to each component of the Facility for that Capacity Year.

4.20.17. Where AEMO has assigned Capacity Credits to a Facility containing an Electric Storage Resource for a Capacity Year, AEMO must set the number of Capacity Credits to be associated with the Electric Storage Resource for the Capacity Year as:

- (a) the number of Capacity Credits the Market Participant nominated to trade bilaterally for the Electric Storage Resource 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 the Electric Storage Resource.

94. Section 4.23 amended

94.1 Clauses 4.23A.3 and 4.23A.4 are deleted and replaced with the following:

- 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, Network Access Quantity and Reserve Capacity Obligation Quantities 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, Capacity Credits or Reserve Capacity Obligation Quantity 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, the total number of Capacity Credits and the total Reserve Capacity Obligation Quantities, respectively, of the primary facility and the Registered Facilities must equal the Certified Reserve Capacity, the Network Access Quantity, the number of Capacity Credits, and the Reserve Capacity Obligation Quantity 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 Certified Reserve Capacity, Network Access Quantity, Capacity Credits and 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.

95. Section 4.24 amended

95.1 Clause 4.24.1 is deleted and replaced with the following:

4.24.1. If, at any time after the day which is six months before the Capacity Year AEMO considers that, in its opinion, inadequate Reserve Capacity will be available in the SWIS to maintain Power System Security and Power System Reliability, using the most recent published forecasts and the methodology outlined in clauses 4.5.9(a) and 4.5.9(b) 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 capacity in accordance with clause 4.24.2.

95.2 Clause 4.24.3(a) is amended by deleting the word 'Customer' and replacing it with the word 'Participant'.

95.3 Clause 4.24.3(b) is amended by deleting the word 'generation systems' and replacing them with the words 'Energy Producing Systems'.

95.4 Clause 4.24.3(c) is deleted and replaced with the following:

- (c) the generation of electricity by Energy Producing Systems, or load reductions provided by loads, that are Registered Facilities but only to

extent that the electricity is generated, or the load reduction is provided, by capacity for which the relevant Market Participant, either:

- i. does not hold Capacity Credits in the current Reserve Capacity Cycle; and
 - ii. has not held Capacity Credits in the current Reserve Capacity Cycle or a previous Reserve Capacity Cycle; and
 - iii. holds Capacity Credits in a subsequent Reserve Capacity Cycle,
- or
- iv. 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.

95.5 Clause 4.24.6 is amended by deleting the words 'on the WEM Website and in major local and national newspapers' and replacing them with the words 'in accordance with clause 4.24.6A'.

95.6 Insert the following new clause 4.24.6A:

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.

95.7 Clause 4.24.7(i) is amended by deleting the word 'and' after the semi-colon (;).

95.8 Clause 4.24.7(j) is deleted and replaced with the following:

- (j) the values of
 - i. the availability price for the Eligible Service expressed in dollars; and
 - ii. the activation price for the Eligible Service, expressed in dollars per hour of activation, where this price must reflect direct or opportunity costs incurred,

where the activation price plus:

- iii. the availability price; divided by
- iv. 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 accordance with clause 4.24.7(d),

must not exceed the maximum contract value per hour of availability specified in the advertisement for the call for tenders under clause 4.24.6(g); and

95.9 Insert the following new clause 4.24.7(k):

- (k) the location of the Eligible Service and any associated Transmission Node Identifier.

95.10 Clause 4.24.8(b) is amended by deleting the word 'and' after the semi-colon (;).

95.11 Clause 4.24.8(c)iv.2. is amended by deleting the full stop (.) and replacing it with '; and'.

95.12 Insert the following new clause 4.24.8(d):

- (d) AEMO must be reasonably satisfied that the provider of the Eligible Service has access to a network, where applicable.

95.13 Clause 4.24.10(c) is deleted and replaced with the following:

- (c) details of the information to be provided by the potential supplier, including:
 - i. the amount of the Eligible Service available;
 - ii. the mechanism for activating the Eligible Service;
 - iii. the mechanisms available for measuring the Eligible Service provided;
 - iv. the availability price for the Eligible Service expressed in dollars;
 - v. the activation price for the Eligible Service, expressed in dollars 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.

95.14 Clause 4.24.13(e) is amended by deleting the word 'clause' replacing it with 'section'.

95.15 Clause 4.24.15 is amended by deleting the word 'clause' replacing it with 'section'.

95.16 Clause 4.24.18 is deleted and replaced with the following:

4.24.18. AEMO must document in a WEM Procedure the procedures it follows in:

- (a) acquiring Eligible Services;
- (b) entering into Supplementary Capacity Contracts;
- (c) determining the maximum contract value per hour of availability for any Supplementary Capacity Contract;
- (d) 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
- (e) determining under clause 4.24.8(d) that a provider of an Eligible Service has access to the network.

96. Section 4.25 amended

96.1 Clause 4.25.1 is deleted and replaced with the following:

4.25.1. AEMO must take steps to verify, in accordance with clause 4.25.2, that each Facility assigned Capacity Credits can:

- (a) in the case of a Scheduled Facility comprising only a Non-Intermittent Generating System, during the period the Reserve Capacity Obligations apply, operate at a level equivalent to its Required Level, adjusted to the level of Capacity Credits currently held, at least once during each of the following periods and such level of operation during those periods must be achieved on each type of fuel notified under clause 4.10.1(e)(v):
 - i. 1 October to 31 March; and
 - ii. 1 April to 30 September; and
- (b) [Blank]
- (c) in the case of a Demand Side Programme, during the period the Reserve Capacity Obligations apply, and during the period between 8:00 AM and 8:00 PM on a Business Day, other than a Trading Interval the subject of a Verification Test, decrease its consumption to operate at a level equivalent to its Required Level, adjusted to the level of Capacity Credits currently held, at least once during the period between 1 October to 31 March; and
- (d) in the case of a Scheduled Facility comprising only an Electric Storage Resource, during the period the Reserve Capacity Obligations apply, operate at a level equivalent to the Required Level for the Electric Storage Resource, adjusted to the level of Capacity Credits currently held by the Facility, during the Electric Storage Resource Obligation Duration, at least once during each of the following periods:
 - i. 1 October to 31 March; and

- ii. 1 April to 30 September;
- (e) in the case of a Scheduled Facility containing an Electric Storage Resource component:
- i. in respect of the component that is not an Electric Storage Resource component, during the period the Reserve Capacity Obligations apply, operate at a level equivalent to the Required Level for that component, adjusted to the level of Capacity Credits currently held by that component, at least once during each of the following periods and such level of operation during those periods must be achieved on each type of fuel notified under clause 4.10.1(e)(v):
 - 1. 1 October to 31 March; and
 - 2. 1 April to 30 September; and
 - ii. in respect of the Electric Storage Resource component, during the period the Reserve Capacity Obligations apply, operate at a level equivalent to the Required Level for that component, adjusted to the level of Capacity Credits currently held by that component, throughout the Electric Storage Resource Obligation Duration, at least once throughout each of the following periods:
 - 1. 1 October to 31 March; and
 - 2. 1 April to 30 September; and
- (f) in the case of an Electric Storage Resource component of a Semi-Scheduled Facility, during the period the Reserve Capacity Obligations apply, operate at a level equivalent to the Required Level for that component, adjusted to the level of Capacity Credits currently held by that component, throughout the Electric Storage Resource Obligation Duration, at least once throughout each of the following periods:
- i. 1 October to 31 March; and
 - ii. 1 April to 30 September.

96.2 Insert the following new clause 4.25.1A:

4.25.1A. Notwithstanding anything else in this section 4.25, clause 4.25.1 does not apply to an Intermittent Generating System. To avoid doubt, an Intermittent Generating System is not subject to Reserve Capacity Tests under this section 4.25.

96.3 Clause 4.25.2 is deleted and replaced with the following:

4.25.2. AEMO may verify the matters specified in clause 4.25.1 by:

- (a) in the case of a Scheduled Facility comprising only a Non-Intermittent Generating System:
 - i. observing the Facility operate at a level equivalent to its Required Level, adjusted to the level of Capacity Credits currently held, at least once as part of normal market operations as determined from Meter Data Submissions; or
 - ii. testing, in accordance with clause 4.25.9, the Facility's ability to operate at a level equivalent to its Required Level, adjusted to the level of Capacity Credits currently held, for not less than two Trading Intervals and the Facility successfully passing that test;
- (b) in the case of a Demand Side Programme:
 - i. [Blank]
 - ii. testing, in accordance with clause 4.25.9, the Facility's ability to reduce demand to a level equivalent to its Required Level, adjusted to the level of Capacity Credits currently held, for not less than two Trading Intervals and the Facility successfully passing that test;
- (c) [Blank]
- (d) in the case of a Scheduled Facility comprising only an Electric Storage Resource:
 - i. observing the Facility operate at a level equivalent to the Required Level for the Facility adjusted to the level of Capacity Credits currently held by the Facility, throughout the Electric Storage Resource Obligation Duration at least once as part of normal market operations as determined from Meter Data Submissions; or
 - ii. subject to clause 4.25.2A, testing, in accordance with clause 4.25.9, the Facility's ability to operate at the level equivalent to the Required Level for the Facility adjusted to the level of Capacity Credits currently held by the Facility, throughout the Electric Storage Resource Obligation Duration at least once and the Facility successfully passing that test;
- (e) in the case of a Scheduled Facility containing an Electric Storage Resource component:
 - i. observing the Facility operate at:

1. in respect of the component that is not an Electric Storage Resource component, a level equivalent to the Required Level for that component, adjusted to the level of Capacity Credits currently held by that component, at least once as part of normal market operations as determined from Meter Data Submissions and the meter data recorded by the Electric Storage Resource Metering; and
 2. in respect of the Electric Storage Resource component, a level equivalent to the Required Level for that component, adjusted to the level of Capacity Credits currently held by that component, throughout the Electric Storage Resource Obligation Duration at least once as part of normal market operations as determined from meter data recorded by Electric Storage Resource Metering; or
- ii. subject to clause 4.25.2B, testing, in accordance with clause 4.25.9, the Facility's ability to operate at:
1. in respect of the component that is not an Electric Storage Resource component, a level equivalent to the Required Level for that component, adjusted to the level of Capacity Credits currently held by that component, for not less than two Trading Intervals and that component successfully passing that test; and
 2. in respect of the Electric Storage Resource component, a level equivalent to the Required Level for that component, adjusted to the level of Capacity Credits currently held by that component, throughout the Electric Storage Resource Obligation Duration at least once and that component successfully passing that test;
- (f) in the case of an Electric Storage Resource component of a Semi-Scheduled Facility:
- i. observing the component's ability to operate at a level equivalent to the Required Level for that component, adjusted to the level of Capacity Credits currently held by that component, throughout the Electric Storage Resource Obligation Duration at least once as part of normal market operations as determined from meter data recorded by Electric Storage Resource Metering; or
 - ii. subject to clause 4.25.2B, testing, in accordance with clause 4.25.9, the component's ability to operate at a level equivalent to

the Required Level for that component, adjusted to the level of Capacity Credits currently held by that component, throughout the Electric Storage Resource Obligation Duration at least once and that component successfully passing that test.

96.4 Insert the following new clause 4.25.2A:

4.25.2A. A Market Participant for a Scheduled Facility containing an Electric Storage Resource component or a Semi-Scheduled Facility containing an Electric Storage Resource component may provide AEMO with meter data, recorded by Electric Storage Resource Metering, by:

- (a) 31 January, in respect of the period 1 October to 31 March; and
- (b) 31 July, in respect of the period 1 April to 30 September,

for the purposes of testing the Facility in accordance with clauses 4.25.2(e) and 4.25.2(f), as applicable.

96.5 Insert the following new clause 4.25.2B:

4.25.2B. AEMO must only:

- (a) subject a Scheduled Facility containing an Electric Storage Resource component to a test under clauses 4.25.2(e)(ii)(1) or 4.25.2(e)(ii)(2); or
- (b) subject a Semi-Scheduled Facility containing an Electric Storage Resource component to a test under clause 4.25.2(f)(ii),

where:

- (c) the Market Participant for the Scheduled Facility or Semi-Scheduled Facility, as applicable, has not provided meter data, recorded by Electric Storage Metering, for the Facility to AEMO in accordance with and by the time specified in clause 4.25.2A;
- (d) AEMO has determined, based on the meter data provided to it under clause 4.25.2A, that the relevant component of the Scheduled Facility or Semi-Scheduled Facility, as applicable, did not operate at the level specified in clauses 4.25.2(e)(i)(2), 4.25.2(e)(ii)(1) or 4.25.2(f)(i), as applicable; or
- (e) AEMO is conducting a re-test in accordance with clause 4.25.6.

96.6 Insert the following new clause 4.25.2C:

4.25.2C. A Market Participant:

- (a) for a Scheduled Facility containing an Electric Storage Resource component that is tested by AEMO in accordance with clauses 4.25.2(e)(ii)(1), 4.25.2(e)(ii)(2) or 4.25.4; or

(b) for a Semi-Scheduled Facility containing an Electric Storage component that is tested by AEMO in accordance with clauses 4.25.2(f)(ii) or 4.25.4, must provide meter data, recorded by Electric Storage Resource Metering, for the Reserve Capacity Test period to AEMO within five Business Days of the Reserve Capacity Test.

96.7 Insert the following new clause 4.25.2D:

4.25.2D. Where the Market Participant for a Scheduled Facility containing an Electric Storage Resource component or a Semi-Scheduled Facility containing an Electric Storage Resource component 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 Electric Storage Resource component of the Scheduled Facility or Semi-Scheduled Facility, as applicable, 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.

96.8 Insert the following new clause 4.25.2E:

4.25.2E. AEMO must, in assessing the performance of:

- (a) a Scheduled Facility comprising only an Electric Storage Resource operating at the level specified in clause 4.25.2(d)(i), or in respect of a test or re-test, as applicable, under clauses 4.25.2(d)(ii), 4.25.4 or 4.25.6(c);
- (b) an Electric Storage Resource component of a Scheduled Facility operating at the level specified in clause 4.25.2(e)(i)(2), or in respect of a test or re-test, as applicable, under clauses 4.25.2(e)(ii)(2), 4.25.4 or 4.25.6(d); or
- (c) an Electric Storage Resource component of a Semi-Scheduled Facility operating at the level specified in clause 4.25.2(f)(i), or in respect of a test or re-test under clauses 4.25.2(f)(ii), 4.25.4 or 4.25.6(e),

measure the average performance across the Electric Storage Resource Obligation Duration based on the average performance across the eight Trading Intervals, based on the average performance across each Dispatch Interval in each Trading Interval.

96.9 Clause 4.25.3 is amended by deleting the word 'clause' and replacing it with 'section'.

96.10 Clause 4.25.3A is deleted and replaced with the following:

4.25.3A. AEMO must not subject a Facility to a Reserve Capacity Test if:

- (a) that Facility is undergoing a Planned Outage or Opportunistic Maintenance which has been approved in accordance with section 3.18E, 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.

96.11 Clause 4.25.4 is deleted and replaced with the following:

4.25.4. Subject to clause 4.25.4G, if a Facility, or a component of a Facility, fails a Reserve Capacity Test requested by AEMO under clause 4.25.2, AEMO must re-test that Facility, or component of that Facility, as applicable, 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 Facility, or component of that Facility, as applicable, 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 Scheduled Facility containing only an Non-Intermittent Generating System, reduce the number of Capacity Credits held by the relevant Market Participant for that Facility to reflect the maximum capabilities achieved in either Reserve Capacity Test performed (after adjusting these results to the equivalent values at a temperature of 41°C and allowing for the capability provided by operation on different types of fuels);
- (b) if the Reserve Capacity Test related to a Demand Side Programme or Interruptible Load, reduce the number of Capacity Credits held by the relevant Market Participant for that Facility to the maximum level of reduction achieved in either of the two Reserve Capacity Tests; or
- (c) if the Reserve Capacity Test related to a Scheduled Facility comprising only an Electric Storage Resource, reduce the number of Capacity Credits held by the relevant Market Participant for that Facility to reflect the higher average performance achieved over the Electric Storage Resource Obligation Duration in either Reserve Capacity Test (after adjusting these results to performance at a temperature of 41°C) as determined from Meter Data Submissions;
- (d) if the Reserve Capacity Test related to a Scheduled Facility containing an Electric Storage Resource and, based on Meter Data Submissions, and meter data recorded by Electric Storage Resource Metering provided to AEMO under clause 4.25.2C, for the Facility, AEMO determines that:
 - i. the Electric Storage Resource component has failed the test, reduce the number of Capacity Credits held by the relevant Market Participant for that component to reflect the higher average

- performance achieved over the Electric Storage Resource Obligation Duration in either Reserve Capacity Test (after adjusting these results to performance at a temperature of 41°C) as determined from meter data recorded by Electric Storage Resource Metering provided to AEMO under clause 4.25.2C; or
- ii. the Non-Intermittent Generating System component has failed the test, reduce the number of Capacity Credits held by the relevant Market Participant for that component to reflect the maximum capabilities achieved in either Reserve Capacity Test performed (after adjusting these results to the equivalent values at a temperature of 41°C and allowing for the capability provided by operation on different types of fuels); or
 - iii. both components of the Facility referred to in clauses 4.25.4(d)(i) and 4.25.4(d)(ii) have failed the test, reduce the number of Capacity Credits held by the relevant Market Participant for each component in accordance with clauses 4.25.4(d)(i) and 4.25.4(d)(ii), as applicable; and
- (e) if the Reserve Capacity Test related to an Electric Storage Resource component of a Semi-Scheduled Facility, if the Electric Storage Resource component has failed the test, reduce the number of Capacity Credits held by the relevant Market Participant for that component to reflect the higher average performance achieved over the Electric Storage Resource Obligation Duration in either Reserve Capacity Test (after adjusting these results to performance at a temperature of 41°C) as determined from meter data recorded by Electric Storage Resource Metering provided to AEMO under clause 4.25.2C.

96.12 Insert the following new clause 4.25.4B(cA):

- (cA) where the Facility is a Scheduled Facility containing an Electric Storage Resource component or a Semi-Scheduled Facility containing an Electric Storage Resource component, specify whether the reduction in the number of Capacity Credits relates to:
- i. the Electric Storage Resource component;
 - ii. the component of the Facility that is not the Electric Storage Resource component; or
 - iii. both components specified in clauses 4.25.4B(cA)(i) and 4.25.4B(cA)(ii), in which case, specify the reduction in the number of Capacity Credits for each component; and

96.13 Clause 4.25.4C(c) is amended by inserting ', or a component of the Facility,' after the word 'Facility'.

96.14 Clause 4.25.4CA is amended by replacing the word 'Month' with the word 'Day' in both instances where it occurs.

96.15 Clause 4.25.4E is deleted and replaced with the following:

4.25.4E. Where the Capacity Credits associated with a Demand Side Programme are reduced in accordance with clauses 4.25.4C or 4.25.4I the Market Participant, that the Demand Side Programme is currently registered to, must pay a refund of an amount equal to all Reserve Capacity payments associated with the reduced Capacity Credits minus the prorated amount of all Capacity Cost Refunds already paid by the Market Participant for the relevant Capacity Year to AEMO calculated in accordance with the provisions of section 4.26. AEMO must distribute any refunds collected under this clause 4.25.4E to Market Participants in accordance with clause 4.26.6.

96.16 Clause 4.25.5 is amended by inserting the words 'for the Facility, or a component of the Facility,' after the word 'conducted'.

96.17 Clause 4.25.6 is deleted and replaced with the following:

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 Scheduled Facility comprising only a Non-Intermittent Generating System, AEMO must conduct such a re-test in accordance with clause 4.25.2(a)(ii) and, following the re-test, set the number of Capacity Credits held by the relevant Market Participant for the Facility to reflect the maximum capabilities achieved in the re-test (after adjusting these results to the equivalent values at a temperature of 41oC and allowing for the capability provided by operation on different types of fuel) as determined from Meter Data Submissions, but not to exceed the number of Capacity Credits originally assigned by AEMO to the Facility under clause 4.20.5A(a) in respect of the relevant Reserve Capacity Cycle;
- (b) if the re-test relates to a Demand Side Programme, AEMO must conduct such a re-test in accordance with clause 4.25.2(b)(ii) and, following the re-test, set the number of Capacity Credits held by the relevant Market Participant for the Facility to reflect the maximum reduction in its consumption achieved in the re-test as measured in metered consumption, but not to exceed the number of Capacity Credits originally assigned by AEMO to the Facility under clause 4.20.5A(a) in respect of the relevant Reserve Capacity Cycle;

- (c) if the re-test relates to a Scheduled Facility comprising only an Electric Storage Resource, AEMO must conduct such a re-test in accordance with clause 4.25.2(d)(ii) and, following the re-test, set the number of Capacity Credits held by the relevant Market Participant for the Facility to higher average performance achieved over the Electric Storage Resource Obligation Duration in the re-test (after adjusting these results to performance at a temperature of 41oC) as determined from Meter Data Submissions, but not to exceed the number of Capacity Credits originally assigned by AEMO to the Facility under clause 4.20.5A(a) in respect of the relevant Reserve Capacity Cycle;
- (d) if the re-test relates to a Scheduled Facility containing an Electric Storage Resource component, AEMO must conduct such a re-test in accordance with clause 4.25.2(e)(ii) and, following the re-test, set the number of Capacity Credits held by the relevant Market Participant for the Facility to reflect:
 - i. for the Electric Storage Resource component of the Facility, the higher average performance achieved over the Electric Storage Resource Obligation Duration in the re-test (after adjusting these results to performance at a temperature of 41oC) as determined from meter data, recorded by Electric Storage Resource Metering, provided to AEMO under clause 4.25.2C; or
 - ii. for the component of the Facility that is not the Electric Storage Resource component, the maximum capabilities achieved in the re-test (after adjusting these results to the equivalent values at a temperature of 41oC and allowing for the capability provided by operation on different types of fuels) as determined from Meter Data Submissions and Electric Storage Resource Metering,but, in both cases, not to exceed the number of Capacity Credits originally assigned by AEMO to the Facility under clause 4.20.5A(a) in respect of the relevant Reserve Capacity Cycle; and
- (e) if the re-test relates to a Semi-Scheduled Facility containing an Electric Storage Resource component, AEMO must conduct such a re-test in accordance with clause 4.25.2(f)(ii) and, following the re-test, set the number of Capacity Credits held by the relevant Market Participant for the Electric Storage Resource component to reflect the higher average performance achieved over the Electric Storage Resource Obligation Duration in the re-test (after adjusting these results to performance at a temperature of 41°C) as determined from meter data, recorded by Electric Storage Resource Metering, provided to AEMO under clause 4.25.2C, but

not to exceed the number of Capacity Credits originally assigned by AEMO to the Facility under clause 4.20.5A(a) in respect of the relevant Reserve Capacity Cycle.

96.18 Clause 4.25.9(a) is deleted and replaced with the following:

- (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;

96.19 Clause 4.25.9(f) is amended by inserting the words 'including the level of Injection or Withdrawal required during the Reserve Capacity Test' after the word 'results,'

96.20 Clause 4.25.9(h) is deleted and replaced with the following:

- (h) notify the Market Participant of the time that the Reserve Capacity Test must be performed and the level of Injection or Withdrawal required by the Reserve Capacity Test for the relevant component, if applicable.

97. Section 4.26 amended

97.1 Clauses 4.26.1 is deleted and replaced with the following:

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 Trading Interval Refund Rate for a Facility f in the Trading Interval t is determined as follows:

$$\text{Trading Interval Refund Rate}(f,t) = RF(f,t) \times Y(f,t)$$

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 Capacity Credits or is an Intermittent Load, in the Trading Interval t , $Y(f,t)$ is determined as follows:
 - i. where Facility f is not a Registered Facility in Trading Interval t , $Y(f,t)$ equals the Facility Monthly Reserve Capacity Price for the

Facility divided by the number of Trading Intervals in the Trading Month in which Trading Interval t falls;

- ii. where 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, $Y(f,t)$ equals the Facility Monthly Reserve Capacity Price for the Facility divided by the number of Trading Intervals in the Trading Month in which Trading Interval t falls;
- iii. where AEMO has determined that in Trading Interval t Facility f is in Commercial Operation and is either a Scheduled Facility or Semi-Scheduled Facility, $Y(f,t)$ is defined as:

$$Y(f, t) = \frac{CCESR(f, t)}{CC(f, t)} \times \frac{FMRCP(f, t)}{8 \times TDTM(t)} + \frac{CC(f, t) - CCESR(f, t)}{CC(f, t)} \times \frac{FMRCP(f, t)}{TITM(t)}$$

where:

- 1. $CCESR(f,t)$ is the number of Capacity Credits held by Facility f associated with Separately Certified Components of Facility f which are Electric Storage Resources if Trading Interval t is within the Electric Storage Resource Obligation Intervals for the Trading Day, and 0 otherwise;
 - 2. $CC(f,t)$ is the total Capacity Credits held by Facility f in Trading Interval t;
 - 3. $FMRCP(f,t)$ is the Facility Monthly Reserve Capacity Price for Facility f in Trading Interval t;
 - 4. $TDTM(t)$ is the number of Trading Days in the Trading Month in which Trading Interval t falls; and
 - 5. $TITM(t)$ is the number of Trading Intervals in the Trading Month in which Trading Interval t falls;
- iv. where Facility f is a Non-Scheduled Facility, $Y(f,t)$ equals the Facility Monthly Reserve Capacity Price for the Facility divided by the number of Trading Intervals in the relevant Trading Month in which Trading Interval t falls;
 - v. where Facility f is a Demand Side Programme, $Y(f,t)$ equals the Reserve Capacity Price for the Facility divided by 400; and

- vi. where Facility f is an Intermittent Load, $Y(f,t)$ equals the Reserve Capacity Price divided by 12 then divided by the number of Trading Intervals in the relevant Trading Month in which Trading Interval t falls.
- (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 $RF_{floor}(f,t)$ as determined under clauses 4.26.1(f) or 4.26.1(g) as appropriate.
- (d) The dynamic refund factor $RF\ dynamic(t)$ in the Trading Interval t is determined as follows:

$$RF\ dynamic(t) = 11.75 - \left(\frac{5.75}{750} \right) \times \sum_{f \in F} Spare(f,t)$$

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 a Registered Facility f in the Trading Interval t, $Spare(f,t)$ is determined as follows:
- i. where Facility f is a Scheduled Facility, the greater of zero and:
 1. the Reserve Capacity Obligation Quantity determined for the Facility f in Trading Interval t; less
 2. the Capacity Adjusted Forced Outage Quantity for Facility f in Trading Interval t calculated in 3.21.7B; less
 3. the Sent Out Metered Schedule for Facility f in Trading Interval t multiplied by two so as to be a MW quantity;
 - iA. where Facility f is a Semi-Scheduled Facility, the greater of zero and:
 1. the Reserve Capacity Obligation Quantity determined for Facility f in Trading Interval t; less

2. the Capacity Adjusted Forced Outage Quantity for Facility f in Trading Interval t calculated in 3.21.7B; less
 3. the Sent Out Metered Schedule for Facility f in Trading Interval t multiplied by two so as to be a MW quantity;
- ii. where Facility f is a Non-Scheduled Facility, zero; and
- iii. where Facility f is a Demand Side Programme in the Trading Interval t, Spare(f,t) is equal to:

$$\max\{0, \min\left(\text{RCOQ}(f,t), (\text{DSP Load}(f,t) - \text{DSP MinLoad}(f,t))\right)\}$$

where:

1. [Blank]
2. RCOQ(f,t) is the Reserve Capacity Obligation for the Demand Side Programme f in the Trading Interval t;
3. DSP Load(f,t) is the Demand Side Programme Load for the Demand Side Programme f in the Trading Interval t as determined under clause 9.5.4 multiplied by two so as to be a MW quantity; and
4. DSP MinLoad(f,t) is the sum of the Minimum Consumption of each Associated Load of the Demand Side Programme f in MW in the Trading Interval t.

- (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:

$$\text{RF floor}(f,t) = 1 - 0.75 \times \text{Dispatchable}(f,t)$$

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:

$$\text{Dispatchable}(f,t) = 1 - \left(\frac{\sum_{pt \in \text{PT}} \text{CAFO}(f,pt)}{\sum_{pt \in \text{PT}} \text{CC}(f,pt)} \right)$$

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) 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;
 - ii. [Blank]
 - iii. the Facility f is an Intermittent Load; or
 - iv. 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.

97.2 Clauses 4.26.1A is deleted and replaced with the following:

4.26.1A. AEMO must calculate the Reserve Capacity Deficit refund for each Facility f, for which a Market Participant holds Capacity Credits, (“**Facility Reserve Capacity Deficit Refund**”) in each Trading Interval t as the lesser of:

- (a) the product of:
- i. the Trading Interval Refund Rate, calculated under clause 4.26.1(a), applicable to Facility f in Trading Interval t; and
 - ii. the Reserve Capacity Deficit for Facility f in Trading Interval t, where the 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 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 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, a Semi-Scheduled Facility or a Non-Scheduled Facility, the Reserve Capacity Deficit (RCD) for Facility f in Trading Interval t is calculated as:

$$RCD = RCDIG(f, t) + OutagesnonIG(f, t) + OutagesESR(f, t)$$

where:

$$RCDIG(f, t) = \min(\text{CCIG}(f, t), \max(0, \min(\text{RL}(f, t) - 2 \times \text{MAX2}(f, t), \text{RL}(f, t) - A(f, t))))$$

where:

- i. CCIG(f,t) is the number of 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 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;
- v. OutagesnonIG(f,t) is the sum of the Capacity Adjusted Forced Outage Quantity and Refund Payable Planned Outage quantity associated with the Separately Certified Component of Facility f which are Non-Intermittent Generating Systems of the Facility in Trading Interval t as determined

under 3.21.7A and 4.26.1C;

- vi. OutagesESR(f,t) is the sum of the Capacity Adjusted Forced Outage Quantity and Refund Payable Planned Outage quantity associated with the Separately Certified Component of Facility f which are Electric Storage Resources of the Facility in Trading Interval t as determined under 3.21.7A and 4.26.1CA;

- 4. if Facility f is a Demand Side Programme, the capacity shortfall calculated as:

$\max(0, \text{RCOQ}(f,t) - \max(0, (\text{RD}(f,t) - \text{DSPMinLoad}(f,t))))$

where:

- i. RCOQ(f,t) is the Reserve Capacity Obligation Quantity determined for Facility f in Trading Interval t;
- ii. RD is the Relevant Demand for Facility f in Trading Interval t as determined in accordance with clause 4.26.2CA; and
- iii. DSPMinLoad is the sum of the MW quantities of Minimum Consumption for Facility f's Associated Loads in Trading Interval t; and

- (b) the Maximum Facility Refund for the Facility in the relevant Capacity Year, less all Facility Reserve Capacity Deficit Refunds applicable to the Facility in previous Trading Intervals falling in the same Capacity Year.

97.3 Clauses 4.26.1C is deleted and replaced with the following:

4.26.1C. Where AEMO has calculated a Capacity Adjusted Planned Outage Quantity for a Scheduled Facility or Semi-Scheduled Facility in a Trading Interval under clause 3.21.8B, excluding any Capacity Adjusted Planned Outage Quantity calculated for any Separately Certified Component of the Facility which are Electric Storage Resources of that Facility under 3.21.8A, AEMO must determine that Capacity Adjusted Planned Outage Quantity to be—

- (a) if the Refund Exempt Planned Outage Count for the Facility, 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; or

(b) otherwise—a Refund Payable Planned Outage.

97.4 Insert the following new clause 4.26.1CA:

4.26.1CA. Where AEMO has calculated a Capacity Adjusted Planned Outage Quantity under clause 3.21.8A in a Trading Interval for a Separately Certified Component of a Scheduled Facility or a Semi-Scheduled Facility which is an Electric Storage Resource, AEMO must determine that Planned Outage to be:

(a) if the Refund Exempt Planned Outage Count for the Facility, calculated over the 1000 Trading Days preceding the Trading Day in which the Electric Storage Resource Obligation Interval falls, is less than 1400, a Refund Exempt Planned Outage; or

(b) otherwise, a Refund Payable Planned Outage.

97.5 Clause 4.26.1D(a) is amended by deleting the word 'Generators' and replacing it with 'Facilities'.

97.6 Clause 4.26.1D(b) is amended by deleting the word 'Generator' and replacing it with 'Facility'.

97.7 Clause 4.26.1D(c) is amended by deleting the word 'Generators' and replacing it with 'Facilities'.

97.8 Clause 4.26.1D(d) is amended by deleting the word 'Generators' and replacing it with the word 'Facilities'.

97.9 Insert the following new clause 4.26.1F:

4.26.1F. Where a Scheduled Facility, that has a Reserve Capacity Obligation Quantity greater than zero for a Dispatch Interval, did not comply with the Dispatch Target in a Dispatch Instruction for that 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:

(a) submit a Forced Outage in accordance with section 3.21; and

(b) the quantity of the Forced Outage to be submitted must be equal to the difference between the Injection of the Facility for the Dispatch Interval and the Dispatch Target.

97.10 Insert the following new clauses 4.26.2AA to 4.26.2AM:

4.26.2AA. AEMO must determine the shortfall (“Net Offer Shortfall”) in Reserve Capacity supplied by each Market Participant p holding Capacity Credits in each Trading Interval t in accordance with clauses 4.26.2AB to 4.26.2AM (inclusive).

4.26.2AB. The Net Offer Shortfall for Market Participant p in Trading Interval t is:

$$\text{NetOfferShortfall}(p, t) = \text{Max}(\text{RTMSF}(p, t), \text{STEMSF}(p, t))$$

where:

- (a) RTMSF(p,t) is the shortfall in the Real-Time Market for Market Participant p in Trading Interval t, which is equal to the average of RTMSF(p,DI) for all Dispatch Intervals in Trading Interval t as calculated in accordance with clause 4.26.2AC; and
- (b) STEMSF(p,t) is the shortfall in STEM for Market Participant p in Trading Interval t as calculated in accordance with clause 4.26.2AG.

4.26.2AC. The shortfall in the Real-Time Market for Market Participant p in Trading Interval t is:

$$\text{RTMSF}(p, t) = \frac{\sum_{\text{DI in } t} \text{RTMSF}(p, \text{DI})}{6}$$

where:

- (a) RTMSF(p,DI) is determined for Market Participant p in Dispatch Interval DI as calculated in accordance with clause 4.26.2AD; and
- (b) DI in t denotes all Dispatch Intervals in Trading Interval t.

4.26.2AD. RTMSF(p,DI) for Market Participant p in Dispatch Interval DI is:

$$\text{RTMSF}(p, \text{DI}) = \sum_{f \in \text{SFFacilities}(p, \text{DI})} \text{RTMFSF}(f, \text{DI})$$

where:

- (a) RTMFSF(f,DI) is the shortfall in the Real-Time Market for Registered Facility f in Dispatch Interval DI as calculated in accordance with clause 4.26.2AE; and
- (b) SFFacilities(p,DI) is the set of all Registered Facilities registered to Market Participant p in Dispatch Interval DI, for which Market Participant p holds Capacity Credits in Dispatch Interval DI, excluding Demand Side Programmes, and f is a Facility within that set.

4.26.2AE. RTMFSF(f,DI) for Registered Facility f in the set SFFacilities(p,DI) in Dispatch Interval DI is:

$$\text{RTMFSF}(f, \text{DI}) = \text{Max} (0, \text{RTMREQ}(f, \text{DI}) - \text{OfferAvail}(f, \text{DI}))$$

where:

- (a) RTMREQ(f,DI) is calculated in accordance with clause 4.26.2AF; and
- (b) OfferAvail(f,DI) is the total MW quantity included in Real-Time Market Offers for energy from Registered 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 less Not-In Service Capacity for Registered Facility f in Dispatch Interval DI is:

- i. for a Demand Side Programme, zero; and
 - ii. for a Registered Facility other than a Demand Side Programme, the total MW quantity included in Real-Time Market Offers for energy from Registered Facility f in Dispatch Interval DI (whether offered as Available Capacity or In-Service Capacity) that were used in the final Dispatch Schedule for that Dispatch Interval less Not In-Service Capacity; and
- (c) BidAvail(f,DI) for Registered Facility f in Dispatch Interval DI is:
- i. for a Demand Side Programme, the total MW quantity included in Real-Time Market Bids for energy from Registered Facility f in Dispatch Interval DI (whether offered as Available Capacity or In-Service Capacity) that were used in the final Dispatch Schedule for that Dispatch Interval; and
 - ii. for a Registered Facility other than a Demand Side Programme, zero.

4.26.2AF. RTMREQ(f,DI) for Registered Facility f in Dispatch Interval DI under any Outage is:

$$RTMREQ(f, DI) = \min \left(RCOQ(f, DI), \min_{o \in \text{Outages}(f, DI)} (\text{OutageAvail}(o)) \right)$$

where:

- (a) RCOQ(f,DI) is the Reserve Capacity Obligation Quantity for Registered Facility f in Dispatch Interval DI;
- (b) OutageAvail(o) is the Remaining Available Capacity for energy under Outage o; and
- (c) Outages(f, DI) is the set of all Forced Outages and Outage Plans for energy for Registered Facility f which include Dispatch Interval DI that have not been rejected or subject to an Outage Recall Direction, and o is an Outage within that set.

4.26.2AG. STEMSF is the shortfall in STEM for Market Participant p in Trading Interval t calculated as:

$$STEMSF(p, t) = \text{Max}(0, \text{STEMREQ}(p, t) - \text{CAPASTEM}(p, t))$$

where:

- (a) STEMREQ(p,t) is for Market Participant p in Trading Interval t, the average of STEMREQ(p,DI) for Market Participant p for all Dispatch Intervals in Trading Interval t calculated in accordance with clause 4.26.2AH;
- (b) CAPASTEM(p,t) for Market Participant p in Trading Interval t is calculated in accordance with clause 4.26.2AK.

4.26.2AH. STEMREQ(p,t) for Market Participant p in Trading Interval t is:

$$\text{STEMREQ}(p, t) = \frac{\sum_{di \in DI(t)} \text{STEMREQ}(p, DI)}{6}$$

where:

- (a) STEMREQ(p,di) is for Market Participant p in Dispatch Interval DI equal to the sum of STEMREQ(f,DI) calculated in accordance with clause 4.26.2AI; and
- (b) DI(t) is the set of all Dispatch Intervals in Trading Interval t and di is a Dispatch Interval within that set.

4.26.2AI. STEMREQ(p,DI) for Market Participant p in Dispatch Interval DI is:

$$\text{STEMREQ}(p, DI) = \sum_{f \in \text{SFFacilities}(p, DI)} \text{STEMFREQ}(f, DI)$$

where:

- (a) STEMFREQ(f,DI) for Registered Facility f in the set SFFacilities in Dispatch Interval DI is calculated in accordance with clause 4.26.2AJ; and
- (b) SFFacilities(p,DI) is the set of all Registered Facilities registered to Market Participant p in Dispatch Interval DI, for which Market Participant p holds Capacity Credits in Dispatch Interval DI, excluding Demand Side Programmes, and f is a Facility within that set.

4.26.2AJ. STEMFREQ(f,DI) for Registered Facility f in Dispatch Interval DI is:

$$\text{STEMFREQ}(f, DI) = \min \left(\text{RCOQ}(f, DI), \min_{o \in \text{OutagesBS}(f, DI)} (\text{OutageAvail}(o)) \right)$$

where:

- (a) RCOQ(f,DI) is the Reserve Capacity Obligation Quantity for Registered Facility f in Dispatch Interval DI;
- (b) OutageAvail(f,DI,o) is the Remaining Available Capacity for energy for Registered Facility f in Dispatch Interval DI under Outage o; and
- (c) OutagesBS(f, DI) is the set of all Forced Outages and Outage Plans for energy for Registered Facility f which include Dispatch Interval DI that had

not been rejected or the subject of an Outage Recall Direction, as at the Bilateral Submission Cutoff.

4.26.2AK. CAPASTEM(p,t) for Market Participant p in Trading Interval t is STEMREQ(p,t), as determined under clause 4.26.2AH where the STEM Auction has been suspended by AEMO in accordance with section 6.10 or where STEMREQ(p,t)=0. Otherwise is:

$$\text{CAPASTEM}(p, t) = \left(\frac{\text{NCP}(p, t) + \text{UnclearedSTEMOffers}(p, t) + \text{ClearedSTEMBids}(p, t)}{\text{LF}(p, t) \times \frac{30}{60} \text{h}} \right)$$

where:

- (a) NCP(p,t) is Market Participant p's Net Contract Position for Trading Interval t in MWh;
- (b) 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;
- (c) 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
- (d) LF(p,t) is calculated in accordance with clause 4.26.2AL.

4.26.2AL. LF(p,t) for Market Participant p for Trading Interval t is:

$$\text{LF}(p, t) = \frac{\sum_{di \in \text{DI}(t)} \text{LF}(p, di)}{6}$$

where:

- (a) LF(p,DI) is the capacity obligation weighted average of the Loss Factors for the Market Participant p's Registered Facilities which are not Demand Side Programmes in Dispatch Interval DI calculated in accordance with clause 4.26.2AM; and
- (b) DI(t) is the set of all Dispatch Intervals in Trading Interval t and di is a member within that set.

4.26.2AM. LF(p,DI) for Market Participant p in Dispatch Interval DI is:

$$\text{LF}(p, \text{DI}) = \frac{\sum_{f \in \text{SFFacilities}(p, \text{DI})} (\text{LossFactor}(f, \text{DI}) \times \text{RCOQ}(f, \text{DI}))}{\sum_{f \in \text{SFFacilities}(p, \text{DI})} \text{RCOQ}(f, \text{DI})}$$

where:

- (a) LossFactor(f,DI) is the Loss Factor for Registered Facility f in Dispatch Interval DI;
- (b) RCOQ(f,DI) is the Reserve Capacity Obligation Quantity for Registered Facility f in Dispatch Interval DI; and
- (c) SFFacilities(p,DI) is the set of all Registered Facilities registered to Market Participant p in Dispatch Interval DI, for which Market Participant p holds Capacity Credits in Dispatch Interval DI, excluding Demand Side Programmes, and f is a Facility within that set.

97.11 Clause 4.26.2CH is amended by deleting the words 'and time'.

97.12 Clause 4.26.2D is deleted and replaced with the following:

4.26.2D. AEMO must determine the capacity shortfall in Reserve Capacity (“Capacity Shortfall”) supplied by each Market Participant holding Capacity Credits associated with a Demand Side Programme f in each Trading Interval t relative to its Reserve Capacity Obligation Quantity as:

- (a) where AEMO has issued a Dispatch Instruction under section 7.6 to the Demand Side Programme f for the Trading Interval:

$$\max(0, \min(\text{RCOQ}(f,t), \text{DIMW}(f,t)) - \max(0, \text{RD}(f,t) - \text{DSPLMW}(f,t)))$$

where

RCOQ(f,t) is the Reserve Capacity Obligation Quantity of the Demand Side Programme f for Trading Interval t (in MW);

DIMW(f,t) is the quantity by which the Demand Side Programme f was instructed by AEMO to reduce its consumption in Trading Interval t as specified by AEMO in accordance with clause 7.13.1E(d), multiplied by two to convert to units of MW;

RD(f,t) is the Relevant Demand of the Demand Side Programme f for the Trading Day the Trading Interval t falls on, determined by AEMO in accordance with clause 4.26.2CA; and

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, where AEMO has not issued a Dispatch Instruction under section 7.6 to the Demand Side Programme f for Trading Interval t.

97.13 Clause 4.26.2E is deleted and replaced with the following:

4.26.2E. For each Market Participant holding Capacity Credits, AEMO must determine the amount of the refund (“Capacity Cost Refund”) to be applied for Trading Day d as

the sum of the Trading Interval Capacity Cost Refunds of every Trading Interval in the Trading Day d, as calculated in accordance with clause 4.26.2F.

97.14 Clause 4.26.2F(a)(i) is amended by deleting the words 'a generation system' and replacing them with 'an Energy Producing System or an Electric Storage Resource'.

97.15 Clause 4.26.3 is deleted and replaced with the following:

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 or an Electric Storage Resource 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 Offer Refund in Trading Interval t for Market Participant p,

where the Net Offer Refund is calculated as follows:

$$N \text{ Offer Refund}(p, t) = \text{TIRR weighted}(p, t) \times N \text{ Offer Short}(p, t)$$

where:

- i. N Offer Refund(p, t) is the Net Offer 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:

$$\text{TIRR weighted}(p, t) = \sum_{f \in F} \frac{\text{TIRR}(f, t) \times \text{CC}(f, t)}{\sum_{f \in F} \text{CC}(f, t)}$$

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 Offer Short(p, t) is the Net Offer Shortfall for Market Participant p in Trading Interval t .

97.16 Clause 4.26.4 is amended by deleting the word 'Generator' and replacing it with the words 'Facility, Semi Scheduled Facility'.

97.17 Clause 4.26.6 is deleted and replaced with the following:

4.26.6. The Facility Capacity Rebate in Trading Interval t for Facility f , being a Scheduled Facility, Semi-Scheduled Facility or a Demand Side Programme for which a Market Participant holds Capacity Credits:

$$FCR(f, t) = \frac{Cshare(f, t) \times E(f, t)}{\sum_{f \in F} CShare(f, t) \times E(f, t)} \times TAR(t)$$

where:

(a) $FCR(f, t)$ is the Facility Capacity Rebate for Facility f in the Trading Interval t ;

(b) $TAR(t)$ is the sum of all Trading Interval Capacity Cost Refunds and any amounts collected in accordance with 4.25.4E, for all Market Participants in Trading Interval t ;

(c) F is the set of Facilities, being Scheduled Facilities, Semi-Scheduled Facilities and Demand Side Programmes and f is a Facility within that set;

(d) $CShare(f,t)$ for a Facility f in a Trading Interval t is the Facility's Reserve Capacity Obligation Quantity less any Forced Outages in Trading Interval t determined as follows:

i. for a Scheduled Facility or Semi-Scheduled Facility, the greater of zero and:

1. the Reserve Capacity Obligation Quantity for Facility f in Trading Interval t ; less

2. the Capacity Adjusted Forced Outage Quantity for Facility f in Trading Interval t calculated in 3.21.7B; and

ii. for a Demand Side Programme, the lesser of—

1. the Demand Side Programme Load multiplied by two so as to be a MW quantity less the sum of the Minimum Consumptions in MW for each of the Facility's Associated Loads; and

2. the Demand Side Programme's Reserve Capacity Obligation Quantity in t; and
- (e) E(f, t) is the eligibility of Facility f in Trading Interval t, equal to—
- i. one for any Facility which is a Scheduled Facility or Semi-Scheduled Facility and the following applies—
 1. the Facility has a Sent Out Metered Schedule greater than zero in any one of the 1,440 Trading Intervals prior to and including Trading Interval t;
 2. the sum of the Facility Reserve Capacity Deficit Refunds for Facility f, in Capacity Year y that the Trading Interval t falls in, for Trading Intervals prior to and including Trading Interval t, is less than the Maximum Facility Refund for Facility f in Capacity Year y; and
 3. the sum of the Generation Reserve Capacity Deficit Refund in Capacity Year y that the Trading Interval t falls in, for Trading Intervals prior to and including Trading Interval t, is less than the Maximum Participant Generation Refund for the Market Participant p which the Facility is registered to, in Capacity Year y; and
 - ii. one for any Facility which is a Demand Side Programme and the following applies—
 1. the Facility received a Dispatch Instruction to reduce consumption in any one of the 1,440 Trading Intervals prior to and including Trading Interval t;
 2. the Reserve Capacity Obligation Quantity for the Demand Side Programme does not equal zero under clause 4.12.4(c); and
 3. the sum of the Demand Side Programme Capacity Cost Refunds for Facility f, in Capacity Year y that the Trading Interval t falls in, for Trading Intervals prior to and including Trading Interval t, is less than the Maximum Facility Refund for Facility f in Capacity Year y; and
 - iii. zero otherwise.

98. Section 4.27 amended

- 98.1 Clause 4.27.2 is amended by deleting the words 'Generator and Non Scheduled Generator' and replacing them with 'Facility and Semi-Scheduled Facility'.

- 98.2 Clause 4.27.10(a) is amended by deleting the word 'Credit' and replacing it with 'Credits'.
- 98.3 Clause 4.27.11C is amended by deleting the words 'business days' and replacing them with 'Business Days'.

99. Section 4.28 amended

- 99.1 Clause 4.28.1 is deleted and replaced with the following:

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 assigned to Facilities,

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).

- 99.2 Clause 4.28.2(a) is deleted and replaced with the following:

(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;

- 99.3 Clause 4.28.2(cB) is deleted and replaced with the following:

(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 the Excess Allocation Price for that Market Participant in that Trading Day; and

- 99.4 Clause 4.28.2(d) is deleted and replaced with the following:

- (d) the cost of each other Capacity Credit acquired by AEMO from a Facility is the Facility Daily Reserve Capacity Price for that Facility in that Trading Day.

99.5 Clause 4.28.3 is deleted and replaced with the following:

- 4.28.3. For each Trading Day, AEMO must calculate the Targeted Reserve Capacity Cost and must allocate this cost to Market Participants in accordance with section 9.8.

99.6 Clause 4.28.4 is deleted and replaced with the following:

- 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
- (b) the net payments to be made by AEMO under Supplementary Capacity Contracts less any amount drawn under a Reserve Capacity Security or a DSM Reserve Capacity Security by AEMO and distributed in accordance with clauses 4.13.11A(a) or 4.13A.16(a) 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
- (d) any amount drawn under a Reserve Capacity Security or a DSM Reserve Capacity Security by AEMO and distributed in accordance with clauses 4.13.11A(b) or 4.13A.16(b) 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.

99.7 Clause 4.28.8(a) is amended by adding the word 'and' at the end of the clause.

99.8 Clause 4.28.8C is deleted and replaced with the following:

- 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.

99.9 Clause 4.28.11A is deleted and replaced with the following:

- 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 publish the recalculated Individual Reserve Capacity Requirements applicable for each Trading Day in that Trading Month by the Relevant Settlement Statement Date for the Trading Week.

99.10 Clauses 4.28A.1 and 4.28A.2 are deleted and replaced with the following:

- 4.28A.1. AEMO must determine for each Intermittent Load 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 Trading Interval Refund Rate for Trading Interval t for the Intermittent Load as determined in clause 4.26.1; 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) has submitted an Outage Plan that would affect the energy capability of the Energy Producing System, the quantity nominated for that Intermittent Load by its Market Participant in accordance with clauses 4.28.8(c) or 4.28.8A; less
 - iii. 3% of the quantity nominated for that Intermittent Load by its Market Participant in accordance with clauses 4.28.8(c) or 4.28.8A; less
 - iv. for Trading Intervals where the temperature data described in clause 4.28A.2 shows a temperature in excess of 41°C and the Energy Producing System described in clause 2.30B.2(a) has not submitted an Outage Plan or experienced a Forced Outage that would affect the energy capability of the generating system, the capacity reduction, if any, specified in accordance with clause 2.30B.3(b)(i).
- 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 clause 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]

99.11 Section 4.28C is deleted and replaced with the following:

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 (“**Early Certified Reserve Capacity**”).

- 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. Where 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.
- 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. Where AEMO has received an application under clause 4.28C.2 prior to the date and time under clause 4.1.5, AEMO must set Early Certified Reserve Capacity for the Facility:
- (a) to that amount 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. Where 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. Where 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 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 4.28C.7B(a) of the amount of Early Certified Reserve Capacity assigned to the Facility 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 Early Certified Reserve Capacity assigned to that Facility 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 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 Early Certified Reserve Capacity assigned to the Facility.
- 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.

100. Section 4.29 amended

100.1 Clause 4.29.1 is deleted and replaced with the following:

4.29.1. The Reserve Capacity Price for a Reserve Capacity Cycle to apply during the period specified in clause 4.1.29 is to equal:

- (a) for the 2018 Reserve Capacity Cycle, the value calculated using the following formula:

$$\text{MIN}\left\{\left(\frac{\text{BRCP} \times 1.141}{1 - ((\text{surplus} + 0.03) \times -4.7)}\right), \text{BRCP} \times 1.1\right\}$$

where:

BRCP is the Benchmark Reserve Capacity Price determined in accordance with section 4.16; and

surplus is the pro rata excess capacity calculated as follows:

$$\text{surplus} = \left[\max\left(0, \left(\frac{\text{CC}-\text{RCR}}{\text{RCR}}\right)\right)\right]$$

where:

CC is the total number of Capacity Credits assigned by AEMO in accordance with clause 4.20.5A for the Reserve Capacity Cycle; and

RCR is the Reserve Capacity Requirement for the Reserve Capacity Cycle;

- (b) for a Reserve Capacity Cycle from the 2019 Reserve Capacity Cycle onwards, the value calculated using the following formula:

$$\max(\text{Segment 1, Segment 2, 0}) * \text{BRCP}$$

where:

$$\text{Segment 1} = \frac{\text{EZ BRCP Factor} - \text{BRCP Cap Factor}}{\text{EZ} + \text{BRCP Cap Factor}} \times (\text{surplus})$$

$$\text{Segment 2} = \frac{\text{EZ BRCP Factor}}{\text{EZ} - \text{AZ}} \times (\text{surplus} - \text{AZ})$$

BRCP is the 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:

$$\text{surplus} = \left[\max\left(0, \left(\frac{\text{CC} - \text{RCR}}{\text{RCR}}\right)\right) \right]$$

where:

CC is the total number of Capacity Credits assigned by AEMO in accordance with clause 4.20.5A for the Reserve Capacity Cycle; and

RCR is the Reserve Capacity Requirement for the Reserve Capacity Cycle.

100.2 Clause 4.29.1A(a) is deleted and replaced with the following:

- (a) for the 2018 Reserve Capacity Cycle, the Reserve Capacity Price for the Reserve Capacity Cycle divided by 12; and

100.3 Clause 4.29.2A is deleted and replaced with the following:

- 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.

100.4 Clause 4.29.2B is deleted and replaced with the following:

4.29.2B. For each Reserve Capacity Cycle AEMO must determine the following information in accordance with this section 4.29:

- (a) the Facility Monthly Reserve Capacity Price for a Transitional Facility if the Reserve Capacity Cycle is a Transitional Reserve Capacity Cycle;
- (b) the Facility Monthly Reserve Capacity Price for each Fixed Price Facility for which the Reserve Capacity Cycle is a Fixed Price Reserve Capacity Cycle; and
- (c) the Facility Monthly Reserve Capacity Price for all other Facilities.

100.5 Clause 4.29.3 is deleted and replaced with the following:

4.29.3. AEMO must determine the following information in time for settlement of each Trading Day d:

- (a) the Facility Monthly Reserve Capacity Price for each Facility applying during that Trading Month;
- (aA) the Facility Daily Reserve Capacity Price for each Facility applying during that Trading Day;
- (b) the Targeted Reserve Capacity Cost for that Trading Day as defined in clause 4.28.3;
- (c) the Shared Reserve Capacity Cost for that Trading Day as defined in clause 4.28.4;
- (d) for each Market Participant p and for Trading Day d:
 - i. the quantity of Capacity Credits (including Capacity Credits from Facilities subject to Network Control Service Contracts) for each Facility acquired by AEMO which are not covered by a Special Price Arrangement;
 - ii. the quantity of Capacity Credits for each Demand Side Programme for Trading Day d;
 - iii. [Blank]
 - iv. the quantity of Capacity Credits for each Facility traded bilaterally in accordance with section 4.30;
 - v. the Individual Reserve Capacity Requirement for each Market Participant for that Trading Month in which Trading Day d falls;
 - vi. the total Capacity Cost Refund to be paid by the Market Participant to AEMO for all Trading Intervals in Trading Day d; and

- vii. the total Participant Capacity Rebate to be paid to the Market Participant by 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 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; and
 - ii. to whom the payment is to be made.

100.6 Clause 4.29.5 is deleted and replaced with the following:

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 Facility Monthly Reserve Capacity Price for the Facility for that period is equal to the Reserve Capacity Price for the Capacity Year immediately preceding 1 October of Year 3 of that Reserve Capacity Cycle divided by 12.

101. Sections 4.30, 4.31 and 4.32 added

101.1 Insert the following new sections 4.30, 4.31 and 4.32:

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 by 5:00PM on the Scheduling Day for the respective 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 if the sum of the 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 by that Market Participant for the relevant Trading Day,
- exceeds the number of Capacity Credits that are able to be traded bilaterally for that Facility by that Market Participant under the WEM 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 clause 4.30.4.
- 4.30.6. A Market Participant may withdraw or revise a Capacity Credit Allocation Submission in respect of a Facility at any time before 5:00 PM on the Scheduling Day for the respective 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 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 has been withdrawn.
- 4.30.9. If the termination of a Capacity Credit in respect of a Facility results in the number of Capacity Credits allocated by a Market Participant in Capacity Credit Allocations for that Facility for a Trading Day exceeding the number of Capacity Credits held for that Facility for that Trading Day by the Market Participant that are allowed to be traded bilaterally under the WEM Rules, then AEMO must notify the Market Participant within one Trading Day after the notification of the termination.
- 4.30.10. A Market Participant may, within two Trading Days following receipt of a notice provided under clause 4.30.9, but not later than 5:00 PM on the Scheduling Day, amend one or more of its approved Capacity Credit Allocations in respect of the relevant Facility for the Trading Day to reduce the number of Capacity Credits allocated in respect of the relevant Facility by the quantity needed to eliminate the excess identified by AEMO under clause 4.30.9.

- 4.30.11. If a Market Participant does not make a reduction under clause 4.30.10, AEMO must, by 5:00 PM on the Scheduling Day for which the Capacity Credit Allocation will become effective:
- (a) amend one or more of the Capacity Credit Allocations in respect of the relevant Facility for the Market Participant for the Trading Day to eliminate the excess identified by AEMO under clause 4.30.9 in accordance with the WEM Procedure specified in clause 4.30.12; 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 Capacity Credits;
 - (b) the identity of the Facility 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
 - (d) the number of Capacity Credits to be allocated for settlement purposes from the Market Participant which was the holder of 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 and Capacity Credit Allocation Acceptance timeline for a Financial Year at least one calendar month prior to the commencement of that Financial Year. This Capacity Credit Allocation Submission and Capacity Credit Allocation Acceptance timeline must include:
- (a) the earliest date and time at which Capacity Credit Allocation Submissions and Capacity Credit Allocation Acceptances for a Trading Month can be

submitted, where this is to be not less than 10 Business Days prior to the start of the relevant Trading Month; and

- (b) the latest date and time at which Capacity Credit Allocation Submissions and Capacity Credit Allocation Acceptances for a Trading Month can be submitted, where this is to be no later than 5:00 PM on the day before the start of the relevant Trading Month.

102. Chapter 6 amended

102.1 The chapter 6 heading is amended by inserting the words 'Short Term' immediately after the word 'The'.

103. Section 6.2 amended

103.1 Clauses 6.2.1 – 6.2.3 (inclusive) are deleted and replaced with the following:

6.2.1. A Market Participant may submit Bilateral Submission data for a Trading Day to AEMO at any time before the Bilateral Submission Cutoff for the Trading Day.

6.2.2. Where, at the Bilateral Submission Cutoff for a Trading Day:

- (a) AEMO holds a Standing Bilateral Submission applicable to the Trading Day for a Market Participant; and
- (b) AEMO does not hold a Bilateral Submission applicable to the Trading Day for the Market Participant,

AEMO must make the Standing Bilateral Submission the Bilateral Submission for the Trading Day for the Market Participant.

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 before the Bilateral Submission Cutoff, 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 received after the Bilateral Submission Cutoff 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 (whether from Bilateral Submissions or Standing Bilateral Submissions) for each Trading Interval in the Week-Ahead Schedule Horizon, including the party supplying, or being supplied by, the Market Participant. AEMO must update this information whenever AEMO:
- (a) accepts Bilateral Submission data under clause 6.2.2A(a);
 - (b) accepts Standing Bilateral Submission data under clause 6.2A.2(a);
 - (c) receives cancellation of Bilateral Submission data under clause 6.2.4B that has been previously accepted under clause 6.2.2A(a); or
 - (d) receives cancellation of Standing Bilateral Submission data under clause 6.2A.4 that has been previously accepted under clause 6.2A.2(a).

103.2 Clauses 6.2.4B and 6.2.5 are deleted and replaced with the following:

- 6.2.4B. A Market Participant may cancel Bilateral Submission data accepted by AEMO under clause 6.2.2A(a) for any Trading Interval before the Bilateral Submission Cutoff 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.

103.3 Clauses 6.2.7 and 6.2.8 are deleted and replaced with the following:

- 6.2.7. By submitting Bilateral Submission data, a Market Participant acknowledges that it is acting with the permission of all affected Market Participants.
- 6.2.8. Where AEMO has determined, in accordance with the WEM Procedure referred to in clause 4.11.3A, that the Electric Storage Resource Obligation Intervals for a Trading Day are not the Electric Storage Resource Obligation Intervals published by AEMO under clause 4.11.3A, AEMO must, no later than one hour before the Bilateral Submission Cutoff for a Trading Day, notify each Market Participant to which an Electric Storage Resource or a Facility containing an Electric Storage Resource is registered, of the Trading Intervals in that Trading Day for which a Reserve Capacity Obligation Quantity will apply in respect of its Facility.

104. Section 6.2A amended

104.1 Clause 6.2A.1 and 6.2A.2 are deleted and replaced with the following:

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.

104.2 Insert the following new clause 6.2A.2A:

6.2A.2A. Standing Bilateral Submission data accepted by AEMO under clause 6.2A.2 will apply from the time specified for the Standing Bilateral Submission under clause 6.7.1(b)(ii)(2).

104.3 Clauses 6.2A.4 and 6.2A.5 are deleted and replaced with the following:

6.2A.4. A Market Participant may cancel Standing Bilateral Submission data accepted by AEMO under clause 6.2A.2(a) for any Trading Interval at any time.

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 Interval of the day of the week to which the cancelled Standing Bilateral Submission data relates.

105. Section 6.3A amended

105.1 Clause 6.3A.1 is deleted and replaced with the following:

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 Week-Ahead Schedule Horizon. AEMO must update this information whenever:

- (a) AEMO accepts Bilateral Submission data under clause 6.2.2A(a);
- (b) AEMO accepts Standing Bilateral Submission data under clause 6.2A.2(a);
- (c) AEMO removes cancelled Bilateral Submission data under clause 6.2.5(a);
or
- (d) AEMO removes cancelled Standing Bilateral Submission data under clause 6.2A.5.

105.2 Clauses 6.3A.3 and 6.3A.4 are deleted and replaced with the following:

6.3A.3. AEMO must calculate and make available to each Market Participant the following parameters for information in forming its STEM Submissions for each Trading Interval in the Week-Ahead Schedule Horizon:

- (a) the total quantity of Capacity Credits held by that Market Participant for each Trading Interval;
- (b) the sum of all Capacity-Adjusted Planned Outage Quantities for that Market Participant for the Trading Interval, where the quantity for a Trading Interval of a Capacity-Adjusted Planned Outage Quantity is the average of all Capacity-Adjusted Planned Outage Quantities in each Dispatch Interval within that Trading Interval;
- (c) the total quantity specified in any Portfolio Supply Curve from that Market Participant that has been accepted by AEMO for that Trading Interval, represented in units of MW by multiplying by the number of minutes in an hour divided by the number of minutes in a Trading Interval;
- (d) the Maximum Consumption Capability where this equals the maximum Loss Factor adjusted quantity of energy, in units of MWh, that could be consumed during a Trading Interval by that Market Participant's Registered Facilities and Non-Dispatchable Loads based on the Standing Data maximum consumption quantities for those Facilities and Non-Dispatchable Loads, less an allowance for Outages in the schedule maintained in accordance with section 3.23;
- (e) the sum of the Loss Factor adjusted Available Capacity and In-Service Capacity offered into the Real-Time Market in accordance with section 7.4 for the Market Participant's Registered Facilities, represented in units of

MWh by multiplying by the number of minutes in a Trading Interval divided by the number of minutes in an hour;

- (f) the sum of the Loss Factor adjusted Available Capacity and In-Service Capacity offered into the Real-Time Market in accordance with section 7.4 for each of the Market Participant's Registered Facilities, represented in units of MWh by multiplying by the number of minutes in a Trading Interval divided by the number of minutes in an hour; and
- (g) the sum of the Forecast Operational Demand and scheduled Loss-Factor adjusted Withdrawals for Registered Facilities as published in the most recent Pre-Dispatch Schedule or Week-Ahead Schedule, in both MW and MWh.

6.3A.4. AEMO must update the information under clause 6.3A.3 whenever there is a change in the data used to calculate that information.

105.3 Insert the following new clause 6.3A.5:

6.3A.5 Where the Bilateral Submission Cutoff for a Trading Day has passed, AEMO must make available to each Market Participant the information in clause 6.4A.3 as at the Bilateral Submission Cutoff for that Trading Day.

106. Section 6.3B amended

106.1 Clauses 6.3B.1 to 6.3B.81B (inclusive) are deleted and replaced with the following:

6.3B.1. A Market Participant may submit STEM Submission data to AEMO for any Trading Day covered by a published Week-Ahead Schedule at any time before the STEM Submission Cutoff.

6.3B.1A. Where, at the STEM Submission Cutoff for a Trading Day:

- (a) AEMO holds a Standing STEM Submission applicable to the Trading Day for a Market Participant; and
- (b) AEMO does not hold a STEM Submission applicable to the Trading Day for the Market Participant,

AEMO must, subject to clause 6.3B.1B, make the Standing STEM Submission the STEM Submission for the Trading Day for the Market Participant.

6.3B.1B. If AEMO is required to use a Standing STEM Submission as the STEM Submission for a Trading Day under clause 6.3B.1A, but the Standing STEM Submission does not comply with section 6.6, AEMO must adjust the Standing STEM Submission data to enable it to make a STEM Submission with respect to the Trading Day that complies with section 6.6. The adjustment will be made as follows:

- (a) if the cumulative MWh quantity over all Price-Quantity Pairs is greater than the quantity calculated under clause 6.3A.3(e), the Price-Quantity Pairs will be adjusted downward so that the cumulative MWh quantity over all Price-Quantity Pairs equals the quantity calculated under clause 6.3A.3(e). This will 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 quantity calculated under clause 6.3A.3(e); and
- (b) available dual fuel generators shall be declared to be using the same fuel as in the existing Standing STEM Submission;

106.2 Clauses 6.3B.3 and 6.3B.4 are deleted and replaced with the following:

- 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 the STEM Submissions associated with the Market Participant (whether from STEM Submission data or Standing STEM Submission data) for each Trading Interval in the Week-Ahead Schedule Horizon. AEMO must update this information whenever:
 - (a) AEMO accepts STEM Submission data under clause 6.3B.3(a);
 - (b) AEMO accepts Standing STEM Submission data under clause 6.3C.3(a);
 - (c) AEMO removes cancelled STEM Submission data under clause 6.3B.7B(a); or
 - (d) AEMO removes cancelled Standing STEM Submission data under clause 6.3C.6C(a).

106.3. Clauses 6.3B.5 and 6.3B.6 are deleted and replaced with the following:

- 6.3B.5. A Market Participant may cancel any STEM Submission data accepted by AEMO under clause 6.3B.3(a) for any Trading Interval of the Trading Day at any time before the STEM Submission Cutoff.
- 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.7A, 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.

107. Clauses 6.3B.7 – 6.3B.8 (inclusive) are deleted.

108. Section 6.3C amended

108.1 Clause 6.3C.1 is deleted and replaced with the following:

6.3C.1. A Market Participant may submit Standing STEM Submission data to AEMO at any time.

60.1 Clauses 6.3C.3 and 6.3C.4 are deleted and replaced with the following: 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 time specified for the Standing STEM Submission under clause 6.6.1(c).

108.2 Clause 6.3C.6B is deleted and replaced with the following:

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.

108.3 Insert the following new clause 6.3C.6C:

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.

108.4 Clause 6.3C.9 is deleted and replaced with the following:

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.

109. Section 6.4 amended

61.1 Clauses 6.4.1 to 6.4.3 (inclusive) are deleted and replaced with the following:

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.

109.1 Clauses 6.4.6 to 6.4.6B (inclusive) are deleted and replaced with the following:

- 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 clause 6.2.3 or clause 6.3A.3, which prevents AEMO from completing the relevant processes, AEMO may extend one or more of the Bilateral Submission Cutoff, the STEM Submission Cutoff or the STEM Results Deadline, subject to:
- (a) any such extension not resulting in more than a two-hour delay to any of the Bilateral Submission Cutoff, the STEM Submission Cutoff or the STEM Results Deadline; and
 - (b) any such extension maintaining a window of at least 110 minutes between:
 - i. publication of the first Pre-Dispatch Schedule that includes all Trading Intervals in the relevant Trading Day and the STEM Submission Cutoff;
 - ii. the Bilateral Submission Cutoff and the STEM Submission Cutoff; and
 - iii. AEMO making available the data referred to in clause 6.3A.3 as at the Bilateral Submission Cutoff and the STEM Submission Cutoff.
- 6.4.6A. If AEMO becomes aware of an error in any of the information contained in a Pre-Dispatch Schedule or made available under clause 6.2.3 or clause 6.3A.3 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.3, 6.3A.4 or 6.3A.5; and
 - (b) extend any of the Bilateral Submission Cutoff, the STEM Submission Cutoff or the STEM Results Deadline to address the error, subject to:
 - i. any such extension not resulting in more than a two-hour delay to any of the Bilateral Submission Cutoff, the STEM Submission Cutoff or the STEM Results Deadline; and

- ii. any such extension maintaining at least a 110 minute window between:
 - 1. publication of the first error-free Pre-Dispatch Schedule that includes all Trading Intervals in the relevant Trading Day and the STEM Submission Cutoff;
 - 2. the Bilateral Submission Cutoff and the STEM Submission Cutoff; and
 - 3. AEMO making available the data referred to in clause 6.3A.3 as at the Bilateral Submission Cutoff and the STEM Submission Cutoff.

6.4.6B. If AEMO extends one or more of the Bilateral Submission Cutoff, the STEM Submission Cutoff or the STEM Results Deadline 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.

109.2 Insert the following new clause 6.4C.6C:

6.4.6C. If AEMO considers that extending one or more of the Bilateral Submission Cutoff, the STEM Submission Cutoff or the STEM Results Deadline 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 1.30pm on the relevant Scheduling Day, AEMO must suspend the STEM auction under clause 6.10.1.

110. Section 6.6 amended

110.1 Clause 6.6.1 is deleted and replaced with the following:

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;
 - iii. a Portfolio Demand Curve; and
 - iv. a Participant Interval Minimum STEM Price and a Participant Interval Maximum STEM Price;

- (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, the date on which the Standing Bilateral Submission data is to take effect, and for each Trading Interval included in the submission:
 - i. a Fuel Declaration;
 - ii. a Portfolio Supply Curve;
 - iii. a Portfolio Demand Curve;
 - iv. a Participant Interval Minimum STEM Price and a Participant Interval Maximum STEM Price; and
 - v. the date on which the Standing STEM Submission is to take effect, where this is for a Trading Day for which the STEM Submission Cutoff has not yet occurred.

110.2 Insert the following new clause 6.6.1A:

6.6.1A. Where:

- (a) a Market Participant has not specified a Participant Interval Minimum STEM Price in the STEM Submission data under clause 6.6.1(b)(iv) or Standing STEM Submission data under clause 6.6.1(c)(iv), AEMO must use the Minimum STEM Price as the Participant Interval Minimum STEM Price for the STEM Submission or Standing STEM Submission; and
- (b) a Market Participant has not specified a Participant Interval Maximum STEM Price in the STEM Submission data under clause 6.6.1(b)(iv) or Standing STEM Submission data under clause 6.6.1(c)(iv), AEMO must use the Alternative Maximum STEM Price as the Participant Interval Maximum STEM Price for the STEM Submission or Standing STEM Submission.

110.3 Clause 6.6.2A(a) is deleted and replaced with the following:

- (a) a Fuel Declaration the Market Participant must declare for each of its dual fuel Facilities whether or not that Facility is assumed to be operating on Liquid Fuel or Non-Liquid Fuel in forming the Portfolio Supply Curve;

110.4 Clause 6.6.2A(d) is deleted and replaced with the following:

- (d) a Portfolio Supply Curve:
 - i. one or more Price-Quantity Pairs may be specified;
 - ii. the cumulative MWh quantity over all Price-Quantity Pairs must not exceed the quantity calculated under clause 6.3A.3(e);

- iii. the cumulative MWh quantity over all Price-Quantity Pairs with prices exceeding the Maximum STEM Price must not exceed the sum over all Registered Facilities declared in the Fuel Declaration to be operating on Liquid Fuel of the MWh quantity specified in clause 6.3A.3(f);

110.5 Clause 6.6.2A(e) is deleted and replaced with the following:

- (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 quantity calculated under clause 6.3A.3(d).

110.6 Clause 6.6.3 is deleted and replaced with the following:

6.6.3. A Market Participant must not, for any Trading Interval, offer prices within its Portfolio Supply Curve that do not reflect the Market Participant's reasonable expectation of the short run marginal cost of generating the relevant electricity when such behaviour relates to market power.

110.7 Clause 6.6.3A is deleted.

110.8 Clause 6.6.4 is deleted and replaced with the following:

6.6.4. The maximum number of Price-Quantity Pairs which a Market Participant may include in a Portfolio Supply Curve is 30.

110.9 Clause 6.6.5(b)(iiA)(2) is deleted and replaced with the following:

- 2. the prices for the Price-Quantity Pairs in the Portfolio Supply Curve to which clause 6.6.5(b)(iiA)(1) does not relate must not exceed the Maximum STEM Price;

110.10 Clause 6.6.5(b)(iii) is deleted and replaced with the following:

110.11 Clause 6.6.7 is deleted and replaced with the following:

6.6.7. The maximum number of Price-Quantity Pairs to be included in a Portfolio Demand Curve is 30.

110.12 Clause 6.6.8(a) is deleted and replaced with the following:

- (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 Participant Interval Maximum STEM Price;
 - iii. greater than or equal to the Minimum STEM Price; and

- iv. set such that no two Price-Quantity Pairs in a Portfolio Demand Curve have the same price;

110.13 Clause 6.6.9 is deleted and replaced with the following:

- 6.6.9. A Market Participant may apply to AEMO for all or part of the capacity of one of its Scheduled Generators that is not Liquid Fuel capable to be treated as if it was dual-fuel capable where one fuel is Liquid Fuel for the purposes of the STEM, the Real-Time Market and settlement. The application must be in a form specified by AEMO, including evidence of the arrangement described in clause 6.6.10(a), and must specify the period to which the application relates.

111. Section 6.7 amended

111.1 Section 6.7.1 is deleted and replaced with the following:

- 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:
 - 1. 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
 - 2. the date on which the Standing Bilateral Submission is to take effect where this is for a Trading Day for which the Bilateral Submission Cutoff has not yet occurred and is not more than 4 weeks in the future; 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 clause 6.7.1(c)(i) and clause 6.7.1(c)(iii) must be zero.

111.2 Clause 6.7.3 is deleted and replaced with the following:

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.

111.3 Clause 6.7.4 is deleted and replaced with the following:

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.

112. Section 6.9 amended

112.1 Clause 6.9.4 is deleted and replaced with the following:

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.

113. Section 6.10 amended

113.1 Clause 6.10.1 is deleted and replaced with the following:

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 clause 6.9 and publish a valid STEM auction result under clauses 6.4.3(b), (c) and (d) for that Trading Interval by the STEM Results Deadline.

114. Sections 6.11A and 6.12 deleted

114.1 Sections 6.11A and 6.12 are deleted.

115. Section 6.13 amended

115.1 The heading immediately above section 6.13 is deleted.

116. Section 6.19 amended

116.1 The heading immediately above section 6.19 is deleted.

117. Chapter 7 amended

117.1 The chapter 7 heading is deleted and replaced with the following:

7 Real-Time Market Operation and Dispatch

117.2 The heading immediately above section 7.1 is deleted.

117.3 Sections 7.1 – 7.11 (inclusive) are deleted and replaced with the following:

7.1. Real-Time Market

7.1.1. AEMO must establish and 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, including any subsequent or replacement submissions;
 - ii. the calculation and publication on the WEM Website 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 publication on the WEM Website of a Dispatch Schedule at least once each Dispatch Interval;
 - iv. the calculation and publication on the WEM Website of a Pre-Dispatch Schedule at least once each Pre-Dispatch Interval; and
 - v. the calculation and publication on the WEM Website of a Week-Ahead Schedule at least once each Trading Day; 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. 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.

- 7.2.3. 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. 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;
 - (d) dispatching sufficient energy to meet the Forecast Operational Demand;
 - (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;
 - (j) energy Injection and Withdrawal capabilities as they vary by Charge Level;

- (k) respecting Oscillation Control Constraints;
- (l) accounting for all relevant Contingency Lower Factors, Contingency Raise Factors 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; and
- (o) arrangements for dispatch of tied Real-Time Market Bids and tied Real-Time Market Offers.

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:

 - iv. sets out the form, scope and construction of each type of Constraint Equation;
 - v. 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
 - vi. 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 Factors;
 - ii. Contingency Lower Factors;

- 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 WEM 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 Operational Demand

- 7.3.1. AEMO must prepare a Forecast 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 Operational Demand must:
- (a) represent AEMO's best estimate of the total demand to be served in the Pre-Dispatch Interval or Dispatch Interval;
 - (b) exclude any Withdrawal quantities in Real-Time Market Submissions for Registered Facilities which do not normally have Withdrawal.
- 7.3.3. AEMO must publish a Forecast Operational Demand at the times specified in section 7.13.
- 7.3.4. AEMO must document in a WEM Procedure the methodology and processes it follows for determining and publishing the Forecast 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 for each of its Scheduled Facilities, Semi-Scheduled Facilities and Interruptible Loads.
- 7.4.2. Subject to clause 7.4.30, a Market Participant must make reasonable endeavours to ensure that its most recently submitted Real-Time Market Submission for each Registered Facility in respect of each Market Service for each Dispatch Interval accurately reflects:
- (a) the Market Participant's reasonable expectation of the capability of its Registered Facility to be dispatched in the Real-Time Market;
 - (b) for Dispatch Intervals in the Week-Ahead Schedule Horizon:
 - i. any applicable tests required under these WEM Rules, including tests for Reserve Capacity under section 4.25;
 - ii. any applicable Outage Plans that have not been rejected or subject to an Outage Recall Direction; and
 - iii. any applicable active or pending Forced Outages;
 - (c) 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 and decommitment;
 - ii. the Market Participant's intentions for providing Frequency Co-Optimised Essential System Services;

- iii. in the case of a Semi-Scheduled Facility, if the Unadjusted Semi-Scheduled Injection Forecast has changed by more than the Tolerance Range or Facility Tolerance Range applicable to the Registered Facility; and
 - iv. in the case of a Non-Scheduled Facility, if the Market Participants estimate of Injection or Withdrawal has changed significantly; and
 - (d) 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;
- 7.4.2A. In meeting the requirements of 7.4.2, a Market Participant must make reasonable endeavours to take into account information available in Market Schedules published by AEMO, including estimates of cleared energy and Essential System Service Enablement Quantities.
- 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 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,

in Price-Quantity Pairs or, if there are no applicable Outages the relevant maximum accredited quantity of that Frequency Co-optimised Essential System Service for the Facility; and

- ii. specify an offer price in Price-Quantity Pairs relating to the Availability Quantity not exceeding the SESSM Offer Cap for the SESSM Award before accounting for Enablement Losses; and

(b) where the Reference Scenario for a Pre-Dispatch Interval projects a shortfall in an awarded Frequency Co-optimised Essential System Service, adjust the Real-Time Market Submission for the Registered Facility for that Pre-Dispatch Interval so that the Registered Facility is:

- i. offering as In-Service Capacity for the relevant Frequency Co-optimised Essential System Service the lesser of:
 - 1. its full accredited quantity of the relevant Frequency Co-optimised Essential System Service; or
 - 2. the lowest Remaining Available Capacity for that Pre-Dispatch Interval for that Frequency Co-optimised Essential System Service for any Forced Outages, or any Outage Plans that have not been rejected or subjected to an Outage Recall Direction; and
- ii. offering sufficient capacity as In-Service for energy to allow the facility to be dispatched for energy between any relevant Enablement Limits.

7.4.6. Where the Reference Scenario for a Pre-Dispatch Interval or Dispatch Interval projects that a Registered Facility will be enabled to provide RoCoF Control Service, and all or part of the relevant Essential System Service Enablement Quantity is included in the Real-Time Market Submissions for the Registered Facility as Available Capacity, the Market Participant for the Registered Facility must submit an updated Real-Time Market Submissions for the Registered Facility for that Pre-Dispatch Interval or Dispatch Interval as soon as practical to:

- (a) present the relevant Essential System Service Enablement Quantity as In-Service Capacity; or
- (b) present the relevant Essential System Service Enablement Quantity such that the Registered Facility is not enabled for RoCoF Control Service in the Reference Scenario for the relevant Pre-Dispatch Interval or Dispatch Interval.

7.4.7. Subject to clause 7.4.30, a Market Participant must make reasonable endeavours to ensure that for Semi-Scheduled Facilities:

- (a) the sum of the quantities in Price-Quantity Pairs for Injection in a Real-Time Market Submission for a Dispatch Interval is equal to the Unadjusted Semi-Scheduled Injection Forecast for that Registered Facility in that Dispatch Interval; and
 - (b) the sum of the quantities in Price-Quantity Pairs for Withdrawal in a Real-Time Market Submission for a Dispatch Interval is equal to the expected Withdrawal capability of that Registered Facility in the Dispatch Interval.
- 7.4.8. A Market Participant must ensure that the prices offered in a Real-Time Market Offer contained in a Real-Time Market Submission for a Non-Scheduled Facility for a Dispatch Interval are:
- (a) for the quantity of the Market Participant's forecast of the Injection of the Non-Scheduled Facility for the Dispatch Interval, equal to the Energy Offer Price Floor when converted into a Loss Factor Adjusted Price; and
 - (b) for any additional quantity of Injection that the Facility is capable of providing, equal to the Energy Offer Price Ceiling when converted into a Loss Factor Adjusted Price.
- 7.4.9. A Market Participant must ensure that the prices offered in a Real-Time Market Bid contained in a Real-Time Market Submission for a Non-Scheduled Facility for a Dispatch Interval are:
- (a) for the quantity of the Market Participant's forecast of the Withdrawal of the Non-Scheduled Facility for the Dispatch Interval, equal to the Energy Offer Price Ceiling when converted into a Loss Factor Adjusted Price; and
 - (b) for any additional greater magnitude of Withdrawal that the Facility is capable of consuming, equal to the Energy Offer Price Floor when converted into a Loss Factor Adjusted Price.
- 7.4.10. A Market Participant must ensure that a Real-Time Market Offer in 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 non-zero Dispatch Instruction 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 Offers for Contingency Reserve Raise in a Real-Time Market Submission

for the Registered Facility must not exceed the applicable Maximum Contingency Reserve Block Size.

Real-Time Market Submissions for Demand Side Programmes

- 7.4.12. A Market Participant must submit a Standing Withdrawal Profile for each of its Demand Side Programmes.
- 7.4.13. A Market Participant may submit a Withdrawal Profile for one or more Dispatch Intervals at least two hours prior to the first Dispatch Interval included in that Withdrawal Profile.
- 7.4.14. A subsequent Withdrawal Profile submitted in respect of the same Demand Side Programme covering the same Dispatch Interval as an earlier Withdrawal Profile replaces the earlier Withdrawal Profile for, and has effect in relation to, the Dispatch Interval.
- 7.4.15. A Market Participant must ensure that a Withdrawal Profile represents its reasonable estimate of the Withdrawal associated with the Demand Side Programme in each applicable Dispatch Interval.
- 7.4.16. If any Pre-Dispatch Schedule Scenario includes the Dispatch of a Demand Side Programme, AEMO must request that Market Participants submit revised Withdrawal Profiles for the relevant Dispatch Intervals for all Demand Side Programmes.
- 7.4.17. If AEMO reasonably believes that it may need to dispatch a Demand Side Programme in the next 48 hours other than for the reasons set out in clause 7.4.16, AEMO may request that Market Participants submit revised Withdrawal Profiles for the relevant Dispatch Intervals for all Demand Side Programmes.
- 7.4.18. A Market Participant must submit a Withdrawal Profile for the next 48 hours for all its Demand Side Programmes when:
 - (a) AEMO issues a Low Reserve Condition Declaration relating to an actual or projected shortfall in energy;
 - (b) AEMO issues a request under clause 7.4.16 or 7.4.17;
 - (c) it receives a Dispatch Instruction that permits a Demand Side Programme to no longer restrict its Withdrawals
 - (d) it receives notification under clause 4.25.9(j).
- 7.4.19. AEMO must construct an effective Real-Time Market Submission with a single Price-Quantity Pair for each Demand Side Programme covering each Dispatch Interval in the Week-Ahead Schedule Horizon where:

- (a) the quantity in the Price-Quantity Pair is zero if the Reserve Capacity Obligation Quantity is zero, and otherwise the minimum of:
 - i. zero; and
 - ii. the quantity for the Dispatch Interval in the relevant Withdrawal Profile or Standing Withdrawal Profile plus the absolute value of the difference between the Reserve Capacity Obligation Quantity for the Dispatch Interval and the Relevant Demand for the Demand Side Programme;
- (b) the price in the Price-Quantity Pair is the Energy Offer Price Ceiling.

7.4.20. AEMO must document in a WEM Procedure the format and process to be followed by Market Participants for submitting and revising Standing Withdrawal Profiles and Withdrawal Profiles.

Real-Time Market Submissions: Timing

7.4.21. Subject to any applicable Real-Time Market Submission Acceptance Horizon and Gate Closure, a Market Participant may submit Real-Time Market Submissions for any Dispatch Interval that falls after the current Dispatch Interval.

7.4.22. AEMO may specify a Real-Time Market Submission Acceptance Horizon in a WEM Procedure.

7.4.23. Where a Real-Time Market Submission Acceptance Horizon is specified in a WEM Procedure, AEMO:

- (a) must reject a Real-Time Market Submission for Dispatch Intervals after the Real-Time Market Submission Acceptance Horizon; and
- (b) may reject a Real-Time Market Submission for a Dispatch Interval that is submitted before the Real-Time Market Submission Acceptance Horizon for that Dispatch Interval.

7.4.24. A Real-Time Market Submission Acceptance Horizon must not be less than four weeks before the relevant Dispatch Interval.

7.4.25. A subsequent Real-Time Market Submission made in respect of the same Registered Facility covering the same Dispatch Interval as an earlier Real-Time Market Submission in accordance with the Real-Time Market Timetable, replaces the earlier Real-Time Market Submission, for, and has effect in relation to, the Dispatch Interval.

7.4.26. Where a subsequent Real-Time Market Submission is made under this section 7.4, a Market Participant must:

- (a) specify the reason for the revision in the subsequent Real-Time Market Submission, and
- (b) where the Real-Time Market Submission relates to Dispatch Intervals within the Pre-Dispatch Schedule Horizon, create and maintain a record of the reasons for submitting the subsequent Real-Time Market Submission, including details of any 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) where the Real-Time Market Submission relates to Dispatch Intervals within the Pre-Dispatch Schedule Horizon, create and maintain a record 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 subsequent Real-Time Market Submission and, in respect to the parameters for Enablement Minimum, Enablement Maximum, Low Breakpoint, High Breakpoint, Maximum Upwards Ramp Rate or Maximum Downwards Ramp Rate:

- (a) the value in the Real-Time Market Submission or a subsequent Real-Time Market Submission for the parameter is not the same as 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, in the Standing Data for the Registered Facility; or
- (b) a value in a subsequent Real-Time Market Submission for the parameter is not the same as the corresponding value in an earlier Real-Time Market Submission in respect of the same Dispatch Interval,

the Economic Regulation Authority may request the Market Participant to provide further information about the reasons for the revised value including any records created under 7.4.26(b) or 7.4.27(b).

- 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 within the Gate Closure, except where the Real-Time Market Submission is made for the sole purpose of adjusting Available Capacity, In-Service Capacity, Dispatch Inflexibility Profiles, and quantities in Price-Quantity Pairs for:
- (a) a Semi-Scheduled Facility to reflect a revision to the Unadjusted Semi-Scheduled Injection Forecast;

- (b) a Non-Scheduled Facility to reflect a change in the expected Injection or Withdrawal;
- (c) a Registered Facility that has suffered a Forced Outage, to reflect the Registered Facility's Remaining Available Capacity under that Outage; or
- (d) a Fast Start Facility that has received a Dispatch Instruction, to reflect a delay in starting that facility.

7.4.36. AEMO must use the most recently submitted Real-Time Market Submissions in the scheduling and dispatch of Registered Facilities in accordance with this Chapter 7.

7.4.37. A Market Participant:

- (a) is not required to review and update Real-Time Market Submissions for Dispatch Intervals outside the Pre-Dispatch Schedule Horizon more frequently than once daily;
- (b) in the case of Real-Time Market Submissions for a Semi-Scheduled Facility or Non-Scheduled Facility, is required to review and update Real-Time Market Submissions for Dispatch Intervals in Trading Days outside the Pre-Dispatch Schedule Horizon at least once per day; and
- (c) 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 clause 7.4.35(c) or 7.4.35(d).

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 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 for a Registered Facility must specify:

- (a) the Registered Facility;
- (b) each Market Service;
- (c) each Dispatch Interval covered by the Real-Time Market Submission;
- (d) if the Real-Time Market Submission is replacing an earlier Real-Time Market Submission:
 - i. the reason for the revisions in accordance with clause 7.4.26(a); and

- ii. if an Enablement Minimum, Enablement Maximum, Maximum Upwards Ramp Rate or Maximum Downwards Ramp Rate is different to the Standing Enablement Minimum, Standing Enablement Maximum, Standing Maximum Upwards Ramp Rate or Standing Maximum Downwards Ramp Rate value, as applicable, for the parameter specified in the Standing Data for the Registered Facility, the reason for the difference in accordance with clause 7.4.27(a);
- (e) the information specified in clauses 7.4.40 to 7.4.42 as applicable; and
- (f) 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 Injection or Withdrawal by a Registered Facility 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. the prices are to be stated in dollars and whole cents per MWh;
 - ii. the sum of all positive MW quantities is to equal the total of Available Capacity and In-Service Capacity for Injection;
 - iii. the sum of all negative MW quantities is to equal the total of Available Capacity and In-Service Capacity for Withdrawal;
 - iv. where the Enablement Minimum is an Injection quantity greater than zero for an Essential System Service, the quantity of that Enablement Minimum is to be in a single Price-Quantity Pair; and
 - v. where the Enablement Maximum is a Withdrawal quantity less than zero for an Essential System Service, the quantity of that Enablement Maximum is to be in a single Price-Quantity Pair; and
- (h) if the Registered Facility is Inflexible.

- 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 total 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 maximum available quantity of the Regulation or Contingency Reserve 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 total 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 maximum available quantity of 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 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 represents sent-out quantities, and 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.
- 7.4.47. The prices in Price-Quantity Pairs in a Real-Time Market Submission:

- (a) apply at the network connection 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 a Real-Time Market Submission in accordance with this section 7.4, AEMO must as soon as practicable:

- (a) acknowledge receipt of the Real-Time Market Submission to the submitting Market Participant; and
- (b) validate the Real-Time Market Submission by verifying that it complies 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 clauses 7.4.8 and 7.4.9;
 - iii. the quantity requirements in clause 7.4.11; and
 - iv. the timing requirements in clauses 7.4.23 and 7.4.35.

7.4.49. Where AEMO:

- (a) determines that the Real-Time Market Submission complies with the requirements in clause 7.4.48(b), AEMO must:
 - i. accept the Real-Time Market Submission and notify the submitting Market Participant that it has been accepted, and
 - ii. make available to the Market Participant the data contained in the Real-Time Market Submission as it 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 Real-Time Market Submission, or any part of it, does not comply with the requirements referred to in clause 7.4.48(b), as applicable, AEMO must:
 - i. reject the Real-Time Market Submission and notify the submitting Market Participant that it has been rejected, and
 - ii. provide details of the reasons the Real-Time Market 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 use those Loss Factor Adjusted Prices in the Dispatch Algorithm.
- 7.4.51. Where a Loss Factor Adjusted Price in accordance with clause 7.4.50 is outside the relevant Energy Offer Cap, AEMO must use the relevant Energy Offer Cap for the Real-Time Market Submission 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 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; and
 - (d) High Breakpoint.
- 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. Market Participants may, at any time, submit a Standing Real-Time Market Submission for a Registered Facility.
- 7.4.55. A Standing Real-Time Market Submission must comply with the following requirements for each Market Service, as applicable:
- (a) content requirements in clauses 7.4.39, 7.4.40, 7.4.41, 7.4.42, 7.4.44, 7.4.45, 7.4.46, and 7.4.47;
 - (b) pricing requirements in clauses 7.4.8 and 7.4.9; and
 - (c) quantity requirements in clauses 7.4.10(a) and 7.4.11,

and must also specify:

- (d) the Dispatch Interval from which the Standing Real-Time Market Submission will take effect; and
 - (e) which day of the week the Standing Real-Time Market Submission applies.
- 7.4.56. A subsequent Real-Time Market Submission or Standing Real-Time Market Submission will override an earlier Standing Real-Time Market Submission.
- 7.4.57. Unless a Standing Real-Time Market Submission is replaced by a subsequent Real-Time Market Submission or Standing Real-Time Market Submission, the Standing Real-Time Market Submission will apply for the same Dispatch Interval on all future days of the same type, which must be a type of day specified in the WEM Procedure referred to in clause 7.4.62(b), after the Dispatch Interval from which it takes effect.
- 7.4.58. On receipt of a Standing Real-Time Market Submission, AEMO must, as soon as practicable:
- (a) acknowledge receipt of the Standing Real-Time Market Submission to the submitting Market Participant; and
 - (b) validate the Standing Real-Time Market Submission by verifying that it complies with the following requirements, as applicable:
 - i. the content requirements in clauses 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 clauses 7.4.8 and 7.4.9; and
 - iii. the quantity requirements in clause 7.4.11.
- 7.4.59. Where AEMO:
- (a) validates the Standing Real-Time Market Submission in accordance with clause 7.4.58(b), AEMO must:
 - i. accept the Standing Real-Time Market Submission and notify the submitting Market Participant that it has been accepted, and
 - ii. make available to the Market Participant the data contained in the Standing Real-Time Market Submission as it will be used by AEMO in the Central Dispatch Process; or
 - (b) determines that the Standing Real-Time Market Submission, or any part of it, does not comply with the requirements referred to in clause 7.4.58(b), as applicable, AEMO must:
 - i. reject the Standing Real-Time Market Submission and notify the submitting Market Participant that it has been rejected, and

- ii. provide details of the reasons the Standing Real-Time Market Submission was rejected.
- 7.4.60. When AEMO uses a Standing Real-Time Market Submission in the Dispatch Algorithm, AEMO must first convert the prices in a Standing Real-Time Market Submission for energy into Loss Factor Adjusted Prices, and must use those Loss Factor Adjusted Prices 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 Submission as it will be used by AEMO in the Central Dispatch Process is correct.
- 7.4.62. AEMO must document in a WEM Procedure:
 - (a) the processes it must follow when:
 - i. 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);
 - ii. 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
 - iii. 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; and
 - (b) the types of day that can be nominated in a Standing Real-Time Market Submission, which must include at least one type for each Business Day and Non-Business Day of each week.

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 Alternate 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 Central Dispatch Process, 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 Central Dispatch Process, 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.

Storage Constraints

- 7.5.9. For a Scheduled Facility that comprises only Electric Storage Resources, AEMO may include Constraint Equations relating to restrictions on the simultaneous dispatch of energy and Frequency Co-optimised Essential System Services, 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.
- 7.5.10. For Registered Facilities which the Market Participant notified AEMO that operation of the Registered Facility is subject to Energy Storage Constraints, AEMO must include Constraint Equations 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 Registered 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. Where a Market Participant notifies AEMO that operation of a Registered Facility is not subject to Energy Storage Constraints, AEMO must not include Constraint Equations in the Dispatch Algorithm for that Facility under clause 7.5.10.

Dynamic parameters

7.5.11. AEMO must determine the Contingency Raise Factor and Contingency Lower Factor 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 Factor;
- (e) Contingency Lower Factor; 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 the RoCoF Upper Limit for each Dispatch Interval, and must publish the RoCoF Upper Limit:
- (a) where the RoCoF Upper Limit is set in advance of the Dispatch Interval, prior to the start of the Dispatch Interval; or
 - (b) where the RoCoF Upper Limit is determined by the Dispatch Algorithm, in real-time as part of the Dispatch Algorithm for the Dispatch Interval.

7.6. Dispatch

Dispatch Instructions

- 7.6.1. AEMO must centrally dispatch Real-Time Market Bids and Real-Time Market Offers using the Dispatch Algorithm.
- 7.6.2. 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, Demand Side Programme 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 use the Central Dispatch Process to set:
- (a) the Market Clearing Prices for each Dispatch Interval in accordance with sections 7.11A, 7.11B and 7.11C; and
 - (b) the Reference Trading Prices for each Trading Interval in accordance with section 7.11A.1(b).
- 7.6.5. A Dispatch Instruction is an instruction issued by AEMO in respect of a Dispatch Interval to a Market Participant in respect of a Registered Facility, directing the Market Participant to:
- (a) vary the Injection or Withdrawal of the Registered Facility; or

- (b) enable the Registered Facility to provide a quantity of a Frequency Co-optimised Essential System Service.
- 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, 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) the Dispatch Target or Dispatch Cap, as applicable, under clause 7.6.10 or clause 7.6.11 on a sent-out basis;
 - (e) where the Registered Facility is a Semi-Scheduled Facility or Non-Scheduled Facility, the Dispatch Forecast on a sent-out basis;
 - (f) where AEMO has agreed that the Registered Facility can receive Dispatch Instructions on an as-generated basis, the Dispatch Target, Dispatch Forecast or Dispatch Cap, as applicable, on an as-generated basis;
 - (g) Essential System Service Enablement Quantities; and
 - (h) the information referred to in clauses 7.6.10 to 7.6.12 (as applicable).
- 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 clause 7.6.8 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, where the Registered Facility has a non-zero Essential System Service Enablement Quantity for Contingency Reserve or Regulation.
- 7.6.12. AEMO is not required to issue Dispatch Instructions to Non-Scheduled Facilities, but must record the information in clause 7.6.8 for Non-Scheduled Facilities which have made a Real-Time Market Submission for the relevant Dispatch Interval.
- 7.6.13. Where a Dispatch Instruction for a Demand Side Programme:
- (a) specifies a non-zero Dispatch Target, the Dispatch Target represents a required reduction in the absolute value of Withdrawal from the Relevant Demand for the Demand Side Programme; or
 - (b) specifies a zero Dispatch Target, the Dispatch Target indicates that the Demand Side Programme is no longer required to restrict its Withdrawal.
- 7.6.13A. Where the Dispatch Algorithm calculates a required reduction for a Demand Side Programme, AEMO must convert that reduction into a non-zero Dispatch Target, regardless of whether the magnitude of the Demand Side Programme's Withdrawal would otherwise have been greater or less than its Relevant Demand.
- 7.6.14. Subject to clause 7.10.14, unless the Dispatch Instruction is issued to implement a direction under clause 3.4.4 or section 7.7, AEMO must determine the ramp rate in a Dispatch Instruction using a linear profile between the Registered Facility's 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 before the Dispatch Interval in which the Dispatch Target in the Dispatch Instruction is to be achieved, in accordance with the standing data minimum response time specified for the Facility under Appendix 1(h)(vii).
- 7.6.16. AEMO may issue a Dispatch Instruction to a Demand Side Programme for quantities identified in the Pre-Dispatch Schedule Reference Scenario for any future Dispatch Interval.

- 7.6.17. Where AEMO issues a Dispatch Instruction specifying a non-zero Dispatch Target to a Demand Side Programme, AEMO must record the Demand Side Programme as Inflexible in the Market Schedules for each subsequent Dispatch Interval and Pre-Dispatch Interval until AEMO has issued a Dispatch Instruction specifying a zero Dispatch Target for the Demand Side Programme.
- 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. 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.

Tiebreaking

- 7.6.23. Where the Dispatch Algorithm determines a Degenerate Solution, AEMO may issue Dispatch Instructions that override the output of the Dispatch Algorithm to the extent required to adjust the Dispatch Target of one or more Registered Facilities with tied Price-Quantity-Pairs, and in doing so must seek to, in the following priority order:

- (a) ensure that Dispatch Targets can be met by Registered Facilities;
- (b) maintain consistency of Dispatch Targets and Essential System Service Enablement Quantities between Dispatch Intervals;
- (c) prefer dispatch of Demand Side Programmes to dispatch of other types of Registered Facilities;
- (d) prefer dispatch of Demand Side Programmes which do not have an Associated Load which is also an Associated Load of an Interruptible Load, to dispatch of Demand Side Programmes which share an Associated Load with an Interruptible Load; and
- (e) ensure pro-rata loading of tied Price-Quantity Pairs.

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 Constraints, which determine the extent to which Oscillation Control Constraints will bind, AEMO must consider the historic cost of binding Oscillation Control Constraints as published in the Congestion Information Resource and the benefits to Power System Security and Power System Reliability of those Oscillation Control Constraints.

7.6.27. AEMO must document in a WEM Procedure:

- (a) the process to be followed by AEMO when issuing Dispatch Instructions that override the output of the Dispatch Algorithm for Dispatch Intervals

where the Dispatch Algorithm determines a Degenerate Solution pursuant to clause 7.6.23; and

- (b) 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 to provide an Essential System Service, or otherwise by agreement with a Market Participant, control specified operations of a Registered Facility, including:

- (a) the starting, loading and stopping of one or more of the Market Participant's Scheduled Facilities; and
- (b) limiting the Injection 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 WEM 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 Registered 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 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, Withdrawal, or Frequency Co-optimised Essential System Service enablement, at which the Registered Facility must be operated 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. AEMO may direct a Market Participant to vary the reactive power output of a Registered Facility in accordance with Chapter 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 the total quantity of Essential System Service to be offered to reflect 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 the Dispatch Interval.
- 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 Reference 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 Reference 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.
- 7.7.6. 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 Targets that will allow the Registered Facility to comply with those directions.
- 7.7.9. A Dispatch Instruction issued by AEMO as a result of a direction issued by AEMO in accordance with this section 7.7 or under clauses 3.4.4, 3.4.5 or 3.5.5, must be:
- (a) consistent with the Registered Facility's data held by AEMO, including Standing Data, at the time the Dispatch Instruction is determined; and
 - (b) issued at a time that takes into account the Standing Data minimum response time for the Registered Facility specified in Appendix 1(b)(xix).
- 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 the process it will use to determine which Registered Facility to direct under clause 7.7.3, clause 7.7.4, or clause 7.7.5.

7.8. Market Schedules

- 7.8.1. AEMO must determine 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 publish Market Schedules comprising multiple Scenarios.
- 7.8.4. Where AEMO publishes a Market Schedule comprising multiple Scenarios, AEMO must designate a Reference Scenario for 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. approved Planned Outages and Forced Outages; and
 - (c) exclude any Available Capacity in Real-Time Market Submissions from Registered Facilities that are not currently synchronised and, according to start up times specified in Standing Data, could not be synchronised in time to provide a Market Service in the relevant Dispatch Interval.
- 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 from Registered Facilities that are not currently synchronised and, according to start up times specified in Standing Data, could not be synchronised in time to provide a Market Service in the relevant Pre-Dispatch Interval.
- 7.8.6. In determining Week-Ahead Schedules and Pre-Dispatch Schedules, AEMO must include Scenarios that:
- (a) do not take account of:
 - i. Enablement Minimums;
 - ii. Low Breakpoints;
 - iii. High Breakpoints;
 - iv. Enablement Maximums; and
 - v. Dispatch Inflexibility Profiles;
 - (b) include In Service Capacity in Real-Time Market Submissions, and exclude Available Capacity in Real-Time Market Submissions;
 - (c) include In-Service Capacity and Available Capacity in Real-Time Market Submissions;
 - (d) use a higher load forecast than the Reference Scenario; and
 - (e) use a lower load forecast than the Reference Scenario.
- 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 publish any Market Schedule more frequently than specified in clauses 7.1.3(a)(iii), 7.1.3(a)(iv) and 7.1.3(a)(v).

- 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 7.5.9 to each Market Schedule, including:
 - i. for each type of Market Schedule; and
 - ii. Dispatch Intervals or Pre-Dispatch Intervals within each Market Schedule.

7.9. 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 generating 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 generating 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. A Market Participant must not decommit a Registered Facility to such an extent that it will not be available to be synchronised for four hours or more after the time of desynchronisation, unless the Market Participant has been granted permission by AEMO to do so in accordance with section 3.21B or the desynchronisation is in accordance with a Planned Outage or a Forced Outage.
- 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. A Market Participant must comply with the sent-out Dispatch Target or the sent-out Dispatch Cap, Essential System Service Enablement Quantities and Ramp Rate in the most recently issued Dispatch Instruction applicable to its Registered Facility for the 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 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, 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.
- 7.10.3. 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. Where 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; or
 - (b) to provide a required response as part of the Facility's Registered Generator Performance Standard.
- 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 7.10.2B.
- 7.10.6. Where 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; or
 - (b) to provide a required response as part of the Facility's Registered Generator Performance Standard.
- 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 7.10.15 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 instructions from AEMO's centralised control scheme.
- 7.10.20. A Registered Facility that has been accredited in accordance with section 2.34A to provide Contingency Reserve Raise 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 Raise 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 and Status Reports

7.11. Market Advisories

- 7.11.1. A Market Advisory is a notification published by AEMO 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 inform 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 WEM 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;
- (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 7.11.10.

unless the situation has already been signalled through a Low Reserve Condition Declaration, Pre-Dispatch Schedule, or in the information published under section 3.23, 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;
- (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 7.11.10, 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.

117.4 Insert the following new clauses 7.11A to 7.11C (inclusive):

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, a Market Clearing Price at the Reference Node is determined by AEMO using the Central Dispatch Process 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 Central Dispatch Process, 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 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. If AEMO fails to run the Dispatch Algorithm to determine Market Clearing Prices for any Dispatch Interval, then the Market Clearing Prices for that Dispatch Interval are:

- (a) if the Dispatch Interval has been included in a previous Dispatch Schedule, the Market Clearing Prices determined for the Dispatch Interval in the most recent Dispatch Schedule that includes the Dispatch Interval; or
- (b) if the Dispatch Interval has not been included in a previous Dispatch Schedule, the Market Clearing Prices determined for the Pre-Dispatch Interval containing the Dispatch Interval in the Reference Scenario for the most recent Pre-Dispatch Schedule that includes the Dispatch Interval.

7.11B.2. Subject to clauses 7.11B.3, 7.11B.4 and 7.11B.5, 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. If, for any Dispatch Interval:

- (a) the Market Clearing Prices for the Dispatch Interval have not already been determined by the Central Dispatch Process;
- (b) AEMO reasonably determines that 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 3.6.6A, or has issued a non-zero Dispatch Instruction to a Demand Side Programme,

then AEMO must set the Market Clearing Price for energy for the Dispatch Interval to equal the Alternative Maximum STEM Price.

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.

7.11B.5. If, for any Dispatch Interval, the Market Clearing Price for a Frequency Co-optimised Essential System Service determined using the Dispatch Algorithm is less than zero, then AEMO must set the Market Clearing Price for the Frequency Co-optimised Essential System Service in that Dispatch Interval to zero.

7.11C. Corrections to Price Determinations and Intervention Pricing

7.11C.1. AEMO must develop procedures for the automatic identification of Affected Dispatch Intervals, and must document in a WEM Procedure the conditions or circumstances that would identify a Dispatch Interval as an Affected Dispatch Interval.

7.11C.1A. AEMO must use the procedures developed under clause 7.11.C1 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, and no more than 30 minutes have passed since the publication of the Market Clearing Prices for the Affected Dispatch Interval, AEMO must:

- (a) replace all Market Clearing Prices with the corresponding prices for the Last Correct Dispatch Interval; and

- (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).
- 7.11C.3. As soon as reasonably practicable after the action referred 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 automated 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 months' 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. 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 WEM Rules.

118. Section 7.13 amended

118.1 Clauses 7.13.1 to 7.13.1G (inclusive) are deleted and replaced with the following:

7.13.1. AEMO must publish:

- (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. AEMO must publish:

- (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 Operational Demand;
- (d) 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 for each Registered Facility. To avoid doubt, AEMO must identify which Facility each quantity is associated with;
- (h) binding Constraint Equations;
- (i) Constraint Equations where the value of the left hand side and the value of the right hand side of the Constraint Equation have a percentage difference of less than 10%;
- (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 Factor;
- (o) the Contingency Lower Factor;
- (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 publish:

- (a) Dispatch Targets, Dispatch Caps, Dispatch Forecasts as applicable for each Facility;

- (b) Essential System Service Enablement Quantities for each Registered Facility and each Frequency Co-optimised Essential System Service;
 - (c) the Market Clearing Price for each Market Service for the relevant Dispatch Interval;
 - (d) binding Constraint Equations;
 - (e) Constraint Equations within 10% of binding;
 - (f) the Minimum RoCoF Control Requirement;
 - (g) the Additional RoCoF Control Requirement;
 - (h) the RoCoF Control Requirement;
 - (i) the Contingency Raise Factor;
 - (j) the Contingency Lower Factor; and
 - (k) Facility Performance Factors.
- 7.13.1C. Within 5 minutes of the end of a Trading Interval, AEMO must publish the Reference Trading Price for that Trading Interval.
- 7.13.1D. For each Pre-Dispatch Interval or Dispatch Interval in each Scenario in each 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 Enablement Losses for each of its Registered Facilities.
- 7.13.1E. AEMO must prepare and publish the following data for a Trading Day by noon on the first Business Day following the day on which the Trading Day ends:
- (a) SCADA data used in the Central Dispatch Process for each Dispatch Interval of the Trading Day:
 - i. the MWh Injection or Withdrawal of each Registered Facility monitored by AEMO's SCADA system;
 - ii. an estimate of the MWh Injection or Withdrawal of each Registered Facility not monitored by AEMO's SCADA System;
 - iii. where it is available to AEMO for use in the Central Dispatch Process, the Unadjusted Semi-Scheduled Injection Forecast for each Semi Scheduled Facility;

- iv. the Charge Level at the end of the Dispatch Interval of each Electric Storage Resource monitored by AEMO's SCADA system;
 - v. the MWh output or consumption of each non-registered behind the meter generating facility or storage facility monitored by AEMO's SCADA system; and
 - vi. the EOI Quantity of each Registered Facility.
- (b) the maximum daily ambient temperature at the site of each Registered Facility recorded in accordance with clause 4.10.1(e)(iv);
- (c) details of each Real-Time Market Submission received for Dispatch Intervals in that Trading Day, including:
- i. the Registered Facility IDs;
 - ii. Price-Quantity Pairs for Market Services;
 - iii. In-Service Capacity for Injection;
 - iv. Available Capacity for Injection;
 - v. In-Service Capacity for Withdrawal;
 - vi. Available Capacity for Withdrawal;
 - vii. Maximum Upwards Ramp Rates;
 - viii. Maximum Downwards Ramp Rates;
 - ix. Enablement Minimums;
 - x. Enablement Maximums;
 - xi. Low Breakpoints;
 - xii. High Breakpoints;
 - xiii. Dispatch Inflexibility Profiles; and
 - xiv. any reasons for revisions in accordance with clauses 7.4.26(a) or 7.4.27(a);
- (d) for each Trading Interval of the Trading Day, the requested decrease in consumption for each Demand Side Programme calculated under clause 7.13.5(a);
- (e) for each Registered Facility and each Dispatch Interval of the Trading Day, the Congestion Rental in respect of the full set of Network Constraints, calculated under clause 7.14.1;
- (f) for each Registered Facility and each Dispatch Interval, the value of any Energy Uplift Payment paid to that Facility, including the Energy Uplift

Price and Energy Uplift Quantity and value of the Congestion Rental that triggered the Energy Uplift Payment;

- (g) for each Dispatch Interval of the Trading Day:
 - i. all Facility Risks for that Dispatch Interval; and
 - ii. for each Network Contingency which is a Credible Contingency Event that is taken into account when setting the Contingency Reserve Raise requirement under clause 7.2.5(n) in that Dispatch Interval:
 - 1. the Network Risk associated with that Network Contingency; and
 - 2. the Registered Facilities whose Facility Risks are included in the Network Risk associated with that Network Contingency; and
- (h) for each Trading Interval of the Trading Day, the maximum quantity of sent out energy in MWh which the intermittent component of each Semi-Scheduled Facility could have potentially generated in the Trading Interval had AEMO issued Dispatch Instructions that did not restrict the Facility's output, as determined in accordance with clause 7.13.6.

7.13.F. If AEMO is prevented from completing the relevant processes that enable the recording of the data described in clause 7.13.1, 7.13.1A, 7.13.1B, 7.13.1C, 7.13.D and 7.13.1E, AEMO may delay the preparation and publication of the data by up to two Business Days.

7.13.1G. AEMO must prepare and publish, 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); and
- (b) an estimate of the change in Withdrawal (in MWh) of any Interruptible Loads in the provision of Contingency Reserve Raise.

7.13.1H. 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 7.13.1G(a), request information from Rule Participants in respect to any involuntary load shedding. A Rule Participant must comply with a request under this clause 7.13.1H within the time specified in the request.

118.2 Clauses 7.13.4 and 7.13.5 are deleted and replaced with the following:

7.13.4. AEMO must maintain SCADA data by Registered Facility and the Operational System Load Estimate.

7.13.5. AEMO must:

- (a) for the purposes of clause 7.13.1E(d), calculate, for each Demand Side Programme for each Trading Interval, the amount, in MWh, by which the Facility was requested by the applicable Dispatch Instruction to decrease its Withdrawal for the Trading Interval, which amount:
 - i. must be measured as a requested decrease from the Facility's Relevant Demand (and so must not include any amount above the Relevant Demand);
 - ii. must not assume a ramp rate faster than was requested in the Dispatch Instruction; and
 - iii. must not take account of the Facility's actual performance in response to the Dispatch Instruction; and
- (b) develop a WEM Procedure that details how it will calculate the amount in clause 7.13.5(a).

118.3 Insert the following new clauses 7.13.6 to 7.13.8 (inclusive):

7.13.6. AEMO must, for the purposes of clause 7.13.1E(e), estimate, for each Semi-Scheduled Facility for each Trading Interval, the maximum quantity of sent out energy in MWh which the intermittent component of the Facility could have potentially generated in the Trading Interval had AEMO issued a Dispatch Instruction that did not restrict the Facility's output.

7.13.7. If AEMO reasonably believes that the estimate determine under clause 7.13.6 was incorrect, it must revise the estimate for use in the Relevant Level Methodology.

7.13.8. AEMO must develop a WEM Procedure specifying:

- (a) one or more methods that may be used to determine estimates under 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 Semi-Scheduled Facilities for each Trading Interval to support the preparation of estimates under clause 7.13.6 and clause 7.13.7.

119. Section 7.14 added

119.1 Insert the following new section 7.14:

Congestion Rental

7.14. Calculation of Congestion Rental

7.14.1. AEMO must calculate for each Registered Facility and each Dispatch Interval of a Trading Day, the Congestion Rental in respect of the full set of Network Constraints. The Congestion Rental for Registered Facility f in Dispatch Interval DI is:

$$\text{CongestionRental}(f,DI)=\sum_{n\in N} \text{CongestionCoefficient}(f,n,DI) \times \text{MarginalConstraintValue}(n,DI)$$

Where:

- (a) $\text{ConstraintCoefficient}(f,n,DI)$ 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) $\text{MarginalConstraintValue}(n,DI)$ is the marginal value of Network Constraint n in Dispatch Interval DI as provided under clause 7.13.1E(e) / section 9.4; and
- (c) $n\in N$ denotes all Network Constraints applied in Dispatch Interval DI .

120. Chapters 7A and 7B deleted

120.1 Chapters 7A and 7B are deleted.

121. Section 8.4 amended

121.1 Clause 8.4.1 is deleted and replaced with the following:

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.

122. Section 8.6 amended

122.1 Clauses 8.6.1 and 8.6.2 are deleted and replaced with the following:

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 paragraph (b):
 - i. the identity of the meter;
 - ii. the MWh quantity measured by the meter; and

- iii. whether the quantity described in paragraph (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 MWh quantity for that meter;
 - 2. whether the quantity described in paragraph (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 MWh 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

123. Section 8.6A added

123.1 Insert the following new section 8.6A:

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.

124. Chapter 9 amended

124.1 Chapter 9 is deleted and replaced with the following:

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 WEM 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 WEM 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 WEM 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 WEM 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 clause 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 WEM Rules (other than Market Participant Regulator 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 WEM 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 clause 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, including the application of taxes and interest, and the processes to be followed in relation to Notices of Disagreement and Notices of Dispute in a WEM Procedure.

- 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 WEM 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 WEM 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 Invoice 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 WEM 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 WEM 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. Data Collection

9.5. The Metered Schedule

9.5.1. AEMO must determine the Metered Schedule for each of the following facility types for each Trading Interval in accordance with clause 9.5.2:

- (a) Scheduled Facilities;
- (b) Semi-Scheduled Facilities;
- (c) Non-Scheduled Facilities; and
- (d) Non-Dispatchable Loads.

9.5.2. Subject to clause 2.30B.10, the Metered Schedule for a Trading Interval for each of the following type of Registered Facilities:

- (a) Scheduled Facilities;
- (b) Semi-Scheduled Facilities;
- (c) Non-Scheduled Facilities; and
- (d) Non-Dispatchable Loads, excluding those 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(a)(i) where interval meter data is not available.

9.5.3. AEMO must determine a single Metered Schedule for a Trading Interval for those Non-Dispatchable Loads without interval meters or 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;
- (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 consumed by the Associated Loads of that Demand Side Programme during the Trading Interval, determined from Meter Data Submissions and expressed as a positive non-Loss Factor adjusted value.

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.

9.5.6. 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:

$$\text{ConsumptionContributingQuantity}(p,t) = \sum_{f \in P} \text{MeteredSchedule}(f,t)$$

where:

- (a) f_{EP} denotes all facilities including 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 that have a negative Metered Schedule in Trading Interval t;
- (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:

- i. ConsumptionContributingQuantity(p,t) is the Consumption Contributing Quantity for Market Participant p in Trading Interval t as determined in clause 9.5.7; and
- ii. p_{EP} 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:

$$\text{Net_SA}(p,d) = \text{STEM_SA}(p,d) + \text{RC_SA}(p,d) + \text{RTE_SA}(p,d) + \text{ESS_SA}(p,d) + \text{OC_SA}(p,d) + \text{MFP_SA}(p,d)$$

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; and
- (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.

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:

$$\text{STEM_SA}(p,d) = \sum_{t \in d} \text{STEM_SA}(p,t)$$

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:

$$\text{STEM_SA}(p,t) = \text{STEM_Price}(t) \times \text{STEM_Quantity}(p,t) \times \text{STEM_SuspensionFlag}(t)$$

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:

$$\begin{aligned} &RCSA(p, d) \\ &= \text{Capacity_Provider_Payment}(p, d) - \text{Capacity_Purchaser_Payment}(p, d) \end{aligned}$$

where:

- (a) Capacity_Provider_Payment(p,d) is calculated in accordance with clause 9.8.3; and
- (b) Capacity_Purchaser_Payment(p,d) is calculated in accordance with clause 9.8.4.

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:

$$\begin{aligned}
& \text{Capacity_Provider_Payment}(p, d) \\
&= \text{Participant_Capacity_Rebate}(p, d) \\
&+ \text{Capacity_Payments}(p, d) - \text{Intermittent_Load_Refund}(p, d) \\
&+ \text{Supplementary_Capacity_Payment}(p, d) - \text{Capacity_Cost_Refund}(p, d) \\
&+ \text{Over_Allocation_Payment}(p, d)
\end{aligned}$$

where:

- (a) Participant_Capacity_Rebate(p,d) is the Participant Capacity Rebate payable to the Market Participant p for all Trading Intervals in Trading Day d, as determined in accordance with clause 4.29.3(d)(vii);
- (b) $\text{Capacity_Payments}(p, d) = \sum_{f \in F} ((CC(f, d) - \text{Facility_CCA}(f, d)) \times \text{FDRCP}(f, d))$

where:

- i. F is the set of all Facilities registered to Market Participant p in Trading Day d and f is a Facility within the set;
 - ii. CC(f,d) is the number of Capacity Credits assigned to the Facility f, registered to Market Participant p, for the Trading Day d;
 - iii. Facility_CCA(f,d) is the sum of the Capacity Credits associated with the Facility f, registered to Market Participant p, for the Trading Day d that have been allocated in a Capacity Credit Allocation; and
 - iv. FDRCP(f,d) is the Facility Daily Reserve Capacity Price associated with the Facility f in Trading Day d;
- (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 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);
 - (f) $\text{Over_Allocation_Payment}(p, d) = \max(0, \text{Participant_CCA}(p, d) - \text{IRCR}(p, d)) \times \text{Excess_Allocation_Price}(p, d)$;

- (g) Participant_CCA(p,d) is the sum of Capacity Credits allocated to Market Participant p in Trading Day d in a Capacity Credit Allocation;
- (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;
- (i) Excess_Allocation_Price(p,d) =

$$0, \text{ if Participant_CCA}(p,d) = 0; \text{ and}$$

$$\sum_{c \in C} (CCA(c,d) \times FDRCP(f,d)) / \sum_{c \in C} CCA(c) \text{ otherwise;}$$
- (j) C 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; and
- (k) CCA(c,d) is the number of Capacity Credits that have been allocated in a Capacity Credit Allocation associated with the Facility f to Market Participant p in the Trading Day d.

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:

$$\begin{aligned} \text{Capacity_Purchaser_Payment}(p,d) = \\ \text{Targeted_Reserve_Capacity_Cost}(p,d) \\ + \text{Shared_Reserve_Capacity_Cost}(p,d) \end{aligned}$$

where:

- (a) Targeted_Reserve_Capacity_Cost(p,d) =

$$\text{Targeted_Reserve_Capacity_Cost}(d) \times \text{Shortfall_Share}(p,d)$$
- (b) Shared_Reserve_Capacity_Cost(p,d) =

$$\text{Shared_Reserve_Capacity_Cost}(d) \times \text{Capacity_Share}(p,d)$$
- (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) = $(\max(0, \text{IRCR}(p,d) - \text{Participant_CCA}(p,d))) / \sum_{p \in P} (\max(0, \text{IRCR}(p,d) - \text{Participant_CCA}(p,d)))$
- (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) = $\text{IRCR}(p,d) / \sum_{p \in P} \text{IRCR}(p,d)$
- (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.

9.8.5. 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 WEM Rules.

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:

$$RTE_SA(p,t) = \text{EnergyTradingAmount}(p,t) + \text{EnergyUplift_Payable}(p,t) - \text{EnergyUplift_Recoverable}(p,t)$$

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:

$$\text{EnergyTradingAmount}(p,t) = \text{ReferenceTradingPrice}(t) \times \text{NetTradingQuantity}(p,t)$$

where:

- (a) ReferenceTradingPrice(t) is the Reference Trading Price for Trading Interval t as published under clause 7.13.1C; 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:

$$\text{IsMisPriced}(f,DI) = \begin{cases} 1, & \text{if ClearedQuantity}(f,DI) > 0 \\ & \text{and CongestionRental}(f,DI) > 0 \\ & \text{and MarginalOfferPrice}(f,DI) > \text{Energy_MCP}(DI) \\ & \text{and } f \notin \text{FacilitiesInBindingDownRampRate}(DI) \\ & \text{and } f \notin \text{FacilitiesInBindingESSEnablementMinimum}(DI) \\ 0, & \text{otherwise} \end{cases}$$

where:

- (a) 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 calculated in accordance with clause 7.14.1;
- (c) MarginalOfferPrice(f,DI) is the highest price associated with any cleared Price-Quantity Pair in respect of a Market Participant's Real-Time Market

Submission for energy that was dispatched for Registered Facility f in Dispatch Interval DI;

- (d) Energy_MCP(DI) is the Energy Market Clearing Price for Dispatch Interval DI as published by AEMO under clause 7.13.1B(c);
- (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); and
- (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).

9.9.10. The Energy Uplift Price for Registered Facility f in Dispatch Interval DI is:

$$\text{EnergyUpliftPrice}(f,DI) = \text{Max}(0, (\text{MarginalOfferPrice}(f,DI) - \text{ReferenceTradingPrice}(t)))$$

where:

- (a) MarginalOfferPrice(f,DI) is the highest price associated with any cleared (or scheduled) Price-Quantity Pair in respect of a Market Participant's Real-Time Market Submission for energy that was dispatched for Registered Facility f in Dispatch Interval DI;
- (b) ReferenceTradingPrice(t) is the Reference Trading Price for Trading Interval t containing Dispatch Interval DI as published under clause 7.13.1C.

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:

$$\widehat{\text{MeteredQuantity}}(f,DI) = \begin{cases} \frac{\text{SCADAMWh}(f,DI)}{\text{TotalSCADAMWh}(f,t)} \times \text{MeteredSchedule}(f,t), & \text{if TotalSCADAMWh}(f,t) \neq 0 \\ \frac{\text{MeteredSchedule}(f,t)}{6}, & \text{if TotalSCADAMWh}(f,t) = 0 \end{cases}$$

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:

$$\text{EnergyUplift_Recoverable}(p,t) = \text{EnergyUplift_Recoverable}(t) \times$$

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 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:

$$ESS_SA(p,d) = ESS_Payable(p,d) - ESS_Recoverable(p,d)$$

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:

$$ESS_Payable(p,d) = CR_Payable(p,d) + CL_Payable(p,d) + RCS_Payable(p,d) + Regulation_Payable(p,d) + SRS_Payable(p,d)$$

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;and
- (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.

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 Contingency Reserve Raise Market Clearing Price for Dispatch Interval DI as published by AEMO under clause 7.13.1C(c);
- (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 as published under 7.13.1C(b); or
 - ii. if 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 Facility Performance Factor for Registered Facility f in Dispatch Interval DI as published by AEMO under clause 7.13.1C(k);
- (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:

$$CR_Payable(DI) = \sum_{f \in \text{Facilities}} CR_Payable(f,DI)$$

where:

- (a) CR_Payable(f,DI) is the Contingency Reserve Raise amount payable for Facility f in Dispatch Interval DI calculated in accordance with clause 9.10.6; and
- (b) f ∈ Facilities denotes all 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:

$$CL_Payable(f,t) = \sum_{DI \in t} CL_Payable(f,DI)$$

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:

$$CL_Payable(f,DI) = CL_MCP(DI) \times \frac{5}{60} \times CL_EnablementQuantity(f, DI) \times \\ CL_PerformanceFactor(f, DI) + CL_AvailabilityPayment(f,DI) - \\ CL_SESSMRefund(f,DI)$$

where:

- (a) $CL_MCP(DI)$ is the Contingency Reserve Lower Market Clearing Price for Dispatch Interval DI as published by AEMO under clause 7.13.1C(c);
- (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 ; or
 - ii. if 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 Facility Performance Factor for Registered Facility f in Dispatch Interval DI as published by AEMO under clause 7.13.1C(k);
- (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 Trading Interval t is:

$$CL_Payable(t) = \sum_{f \in Facilities} CL_Payable(f,t)$$

where:

- (a) $CL_Payable(f,t)$ is the Contingency Reserve Lower amount payable for Facility f in Trading Interval t as calculated in accordance with clause 9.10.9; and
- (b) $f \in Facilities$ denotes all Facilities f .

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) $\text{RCS_Payable}(f,DI)$ 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) $\text{RCS_MCP}(DI)$ is the RoCoF Control Service Market Clearing Price for Dispatch Interval DI as published by AEMO under clause 7.13.1C(c);

(b) $5/60$ represents the period of a Dispatch Interval in hours;

(c) $\text{RCS_EnablementQuantity}(f,DI)$ is:

- i. subject to clause 9.10.14(c)(ii) the Essential System Service Enablement Quantity for Registered Facility f in Dispatch Interval DI ; or
- ii. if 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) $\text{RCS_PerformanceFactor}(f,DI)$ is the Facility Performance Factor for Registered Facility f in Dispatch Interval DI as published by AEMO under clause 7.13.1C(k);

- (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:

$$RCS_Payable(DI) = \sum_{f \in Facilities} RCS_Payable(f,DI)$$

where:

- (a) $RCS_Payable(f,DI)$ is the RoCoF Control Service amount payable for facility f in Dispatch Interval DI as calculated in accordance with clause 9.10.14; and
- (b) $f \in Facilities$ denotes all 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:

$$MinRCS_Payable(DI) = RCS_Payable(DI) \times \frac{MinRoCoFControlRequirement(DI)}{RoCoFControlRequirement(DI)}$$

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 clause 7.13.1C(f); and
- (c) $RoCoFControlRequirement(DI)$ is the RoCoF Control Requirement in Dispatch Interval DI as published by AEMO under clause 7.13.1C(h).

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) $\text{MinRCS_Payable}(DI)$ 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) $\text{RCS_Payable}(DI)$ is the cost of procuring RoCoF Control Service in Dispatch Interval DI as calculated in accordance with clause 9.10.15; and
- (b) $\text{MinRCS_Payable}(DI)$ 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) $\text{Regulation_Payable}(f,t)$ 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:

$$\text{Regulation_Payable}(f,t) = \sum_{DI \in t} (\text{RR_Payable}(f,DI) + \text{RL_Payable}(f,DI))$$

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:

$$RR_Payable(f,DI) = RR_MCP(DI) \times \frac{5}{60} \times RR_EnablementQuantity(f, DI) \times \\ RR_PerformanceFactor(f, DI) + RR_AvailabilityPayment(f,DI) - \\ RR_SESSMRefund(f,DI)$$

where:

- (a) RR_MCP(DI) is the Regulation Raise Market Clearing Price for Dispatch Interval DI as published by AEMO under clause 7.13.1C(c);
- (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; or
 - ii. if 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 Facility Performance Factor for Registered Facility f in Dispatch Interval DI as published by AEMO under clause 7.13.1C(k);
- (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 Regulation Lower Market Clearing Price for Dispatch Interval DI as published by AEMO under clause 7.13.1C(c);
- (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; or
 - ii. if 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 Facility Performance Factor for Registered Facility f in Dispatch Interval DI as published by AEMO under clause 7.13.1C(k);
- (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:

$$\text{Regulation_Payable}(t) = \sum_{f \in \text{Facilities}} \text{Regulation_Payable}(f,t)$$

where:

- (a) Regulation_Payable(f,t) is the Regulation amount payable for Facility f in Trading Interval t as calculated in accordance with clause 9.10.21; and
- (b) f ∈ Facilities denotes all Facilities f.

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:
 - i. 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; or
 - ii. where no amount is specified payable in accordance with clause 9.10.26(a)(i), the product of the applicable price for that Trading Interval and the applicable quantity for that Trading Interval under the System Restart Service Contract; 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.

9.10.28. The Essential System Service amount recoverable from Rule Participant p for Trading Day d is:

$$\text{ESS_Recoverable}(p,d) = \text{CR_Recoverable}(p,d) + \text{CL_Recoverable}(p,d) + \text{RCS_Recoverable}(p,d) + \text{Regulation_Recoverable}(p,d) + \text{SRS_Recoverable}(p,d)$$

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; and
- (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.

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:

$$CR_Recoverable(p,t) = \sum_{DI \in t} CR_Payable(DI) \times TotalRunwayShare(p,DI)$$

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) TotalRunwayShare(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 5.3 of Appendix 2A; and
- (c) $DI \in t$ denotes all Dispatch Intervals DI in Trading Interval t.

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:

$$CL_Recoverable(p,t) = CL_Payable(t) \times ConsumptionShare(p,t)$$

where:

- (a) CL_Payable(t) is the total cost of procuring Contingency Reserve Lower in Trading Interval t as calculated in accordance with clause 9.10.11; 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.

9.10.33. The RoCoF Control Service amount recoverable from Rule Participant p for Trading Day d is:

$$\text{RCS_Recoverable}(p,d) = \sum_{t \in d} \text{RCS_Recoverable}(p,t)$$

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) $t \in d$ 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:

$$\text{RCS_Recoverable}(p,t) = \text{MinRCS_Recoverable}(p,t) + \sum_{DI \in t} \text{AdditionalRCS_Recoverable}(p,DI)$$

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) $DI \in t$ 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:

$$\text{Regulation_Recoverable}(p,d) = \sum_{t \in d} \text{Regulation_Recoverable}(p,t)$$

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) $t \in d$ 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:

$$\text{Regulation_Recoverable}(p,t) = \text{Regulation_Payable}(t) \times \text{Regulation_Share}(p,t)$$

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:

$$\begin{aligned} & \text{RegulationContributingQuantity}(p,t) \\ = & \sum_{\text{SSF}\epsilon p} |\text{MeteredSchedule}(\text{SSF},t)| + \sum_{\text{NSF}\epsilon p} |\text{MeteredSchedule}(\text{NSF},t)| \\ & + \sum_{\text{NDL}\epsilon p} |\text{MeteredSchedule}(\text{NDL},t)| \end{aligned}$$

where:

- (a) MeteredSchedule(SSF,t) is the Metered Schedule of Semi-Scheduled Facility, SSF, in Trading Interval t;
- (b) SSF ϵ 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 ϵ 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 ϵ 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:

$$\text{RegulationContributingQuantity}(t) = \sum_{p \in P} \text{RegulationContributingQuantity}(p,t)$$

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:

$$\text{SRS_Recoverable}(p,d) = \sum_{t \in d} \text{SRS_Recoverable}(p,t)$$

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 ∈ 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:

$$\text{SRS_Recoverable}(p,t) = \text{SRS_Payable}(t) \times \text{ConsumptionShare}(p,t)$$

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:

$$\text{MinRCS_Recoverable}(p,t) = \text{MinRCS_Payable}(t) \times \text{MinRCSShare}(p,t)$$

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) $\text{MinRCSShare}(p,t)$ 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:

$$\text{AdditionalRCS_Recoverable}(p,DI) = \frac{\text{AdditionalRCS_Payable}(DI) \times \text{TotalRunwayShare}(p,DI)}{\text{TotalRunwayShare}(p,DI)}$$

where:

- (a) $\text{AdditionalRCS_Payable}(DI)$ 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; and
- (b) $\text{TotalRunwayShare}(p,DI)$ 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 5.3 of Appendix 2A.

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) $\text{OC_Payable}(p,d)$ is the Outage Compensation payable to Market Participant p for Trading Day d calculated in accordance with clause 9.11.3; and
- (b) $\text{OC_Recoverable}(p,d)$ 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(a); 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.

9.12. Settlement Calculations - Market Participant Market 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:

$$\text{MPF_SA}(p,d) = \text{MPMF_SA}(p,d) + \text{MPRF_SA}(p,d)$$

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; and
- (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.

9.12.3. The Market Participant Market Fees settlement amount for Market Participant p for Trading Day d is:

$$\text{MPMF_SA}(p,d) = - \text{MarketFeeRate}(d) \times \text{ParticipantContribution}(p,d)$$

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:

$$\text{MPRF_SA}(p,d) = - \text{RegulatorFeeRate}(d) \times \text{ParticipantContribution}(p,d)$$

where:

- (a) RegulatorFeeRate(d) is the charge per MWh for funding the Economic Regulation Authority's and the Rule Change Panel's activities with respect to the Wholesale Electricity Market and other functions under these WEM

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.

9.12.5. 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 ∈ d denotes all Trading Intervals t in Trading Day d; and
- (c) f ∈ 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 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 ∈ 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) $p \in P$ 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 Energy Market Clearing Price;
 - iv. the value of all 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 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) details of any amounts to be distributed to a Market Participant under section 9.21 for the Trading Week;
- (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 WEM Rules and accurate; and
 - vii. other relevant value that has been revised in accordance with the WEM 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.

9.16. 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 WEM 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 WEM 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 WEM 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 WEM 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 WEM 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 WEM Rules.

Default and Settlement in Default Situations

9.19. Default

- 9.19.1. For the purposes of these WEM 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 WEM 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 WEM 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 paragraphs (b), (c), (d) or (e) above;
- (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 WEM 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 WEM 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 WEM 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 take the Repaid Amount into account when calculating the Default Settlement under 9.20.4.

9.20.3. Notwithstanding anything else in these WEM Rules, if at any time the total amount received by AEMO from Rule Participants in cleared funds (“**Total Amount**”) is not sufficient to make the payments which AEMO is required to make under these WEM 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 and the Economic Regulation Authority (including as contemplated by clause 9.18.10);
 - 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; and
 - iii. funds required to be disgorged or repaid by AEMO as contemplated by clause 9.20.2;

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 9.1.3 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 Rule 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 Rule 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.

Financial Penalty Distribution

9.21. Financial Penalty Distribution

9.21.1. For the purpose of Regulation 37(a) of the WEM Regulations, where a Civil Penalty is imposed on a Rule Participant for a breach of these WEM Rules, the amount of that Civil Penalty received by AEMO shall be distributed in accordance with these WEM Rules.

9.21.2. Where a Financial Penalty is issued for a contravention of the clauses listed in Schedule 1 of the WEM Regulations, AEMO must calculate for each Market Participant the Financial Penalty distribution amount. The Financial Penalty distribution amount must be distributed as soon as practicable following receipt of the Financial Penalty by AEMO. The Financial Penalty distribution amount for Market Participant p for a Financial Penalty is:

$$\text{FinancialPenaltyDistribution}(p) = \text{FinancialPenaltyAmount} \times \text{FinancialPenaltyShare}(p)$$

where:

- (a) FinancialPenaltyAmount is the value of the Financial Penalty; and
- (b) FinancialPenaltyShare(p) is calculated in accordance with clause 9.21.3.

9.21.3. The Financial Penalty share for Market Participant p is:

$$\text{FinancialPenaltyShare}(p) = \sum_{d \in \text{DistributionDays}}$$

$$\left[\frac{\text{ParticipantContribution}(p,d)}{\text{TotalParticipantContribution}(d) - \text{ParticipantContribution}(\text{ORP},d)} \right] / n$$

where:

- (a) ParticipantContribution(p,d) for Market Participant p for Trading Day d is calculated in accordance with clause 9.12.5;
- (b) TotalParticipantContribution(d) is calculated in accordance with clause 9.21.4;

- (c) ORP is the Offending Rule Participant;
- (d) $p \in P$ denotes all Market Participants;
- (e) $d \in \text{DistributionDays}$ denotes all Trading Days d in the set DistributionDays (DistributionDays is defined in clause 9.21.3(f));
- (f) DistributionDays denotes the set of all days in the 12 months up to and including the day the Financial Penalty was issued; and
- (g) n is the number of days in the set DistributionDays ,

unless Market Participant p is the Offending Rule Participant, in which case the $\text{FinancialPenaltyShare}(p)$ is to be calculated as 0.

9.21.4. The Total Participant Contribution for Trading Day d is:

$$\text{TotalParticipantContribution}(d) = \sum_{p \in P} \text{ParticipantContribution}(p,d)$$

where:

- (a) $\text{ParticipantContribution}(p,d)$ for Market Participant p for Trading Day d is calculated in accordance with clause 9.12.5; and
- (b) $p \in P$ denotes all Market Participants.

125. Section 10.5 amended

125.1 Clause 10.5.1(f)(x)(2) is amended by deleting the word 'and' at the end of the clause.

125.2 Insert new clauses 10.5.1(f)(xii) to 10.5.1(f)(xv) as follows:

- xii. the Network Access Quantity for each Facility;
- xiii. the Highest Network Access Quantity for each Facility;
- xiv. the CC Uplift Quantity for each applicable Facility; and
- xv. the information provided to AEMO 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 information of the kind described in clause 10.2.3(a);

125.3 Clause 10.5.1(y) and clause 10.5.1(z) are deleted and replaced with the following:

- (y) as soon as practicable after a Trading Interval or Dispatch Interval:
 - i. the total generation in that Trading Interval or Dispatch Interval;
 - ii. the total dispatched quantity of each Frequency Co-optimised Essential System Services in that Dispatch Interval; and
 - iii. an initial value of the Operational System Load Estimate,where these values are to be available from the WEM Website for each Trading Interval or Dispatch Interval in the previous 12 calendar months;
- (z) as soon as practicable after real-time:
 - i. the total generation; and
 - ii. the total offer quantity of each Frequency Co-optimised Essential System Services,where these values are not required to be maintained on the WEM Website after their initial publication;

125.4 Clause 10.5.3 is deleted.

126. Chapter 11 (Glossary) amended

126.1 Insert each of the following new definitions in Chapter 11 (Glossary) in the appropriate alphabetical order:

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.

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 7.7.4(b), or clause 7.7.5.

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.

Alternative Network Constraint Equation: A Constraint Equation formulation for a Network Constraint other than a Fully Co-optimised Network Constraint Equation.

Approval to Generate Notification: Means the notification issued by the Network Operator to a Market Participant in accordance with clause 3A.8.12 granting final approval to a Transmission Connected Generating System to generate electricity.

Automatic Generation Control System (AGC): The system into which Dispatch Targets are entered for Registered Facilities operating on automatic generation control.

Availability Declaration Exemption: Means a condition specified in clause 3.18B.4.

Base ESS Quantity: For a Dispatch Interval and a SESSM Award where there is a non-zero 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 Availability Quantity.

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.

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 3.21.8;
- (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.

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 3.21.78;

- (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.

Capacity Shortfall: Has the meaning given in clause 4.26.2D.

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: For a Facility, and in respect of a Reserve Capacity Cycle, is the quantity of Reserve Capacity that AEMO has assigned to the Facility for the Reserve Capacity Cycle in accordance with clause 4.11, as adjusted under these WEM Rules including clause 4.14.8. Certified Reserve Capacity assigned to a Facility registered by a Market Participant is held by that Facility.

Charge Level: 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 Chapter 2.

Civil Penalty: Means an amount imposed under a provision of these WEM Rules that has been specified in Regulations or falls within a class specified in WEM Regulations as a civil penalty provision as provided for under section 124(2)(h) of the Electricity Industry Act.

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.

Consumption Share: Has the meaning given in clause 9.5.6.

Contingency Lower Factor: For each Dispatch Interval or Pre-Dispatch Interval, the ratio between the Largest Credible Load Contingency and the quantity of Contingency Reserve Lower required to maintain the SWIS frequency in accordance with the Frequency Operating Standards, and where:

- (a) a ratio that is less than one means the Contingency Reserve Lower requirement is less than the Largest Credible Load Contingency;
- (b) a ratio greater than one means the Contingency Reserve Lower requirement is greater than the Largest Credible Load Contingency and
- (c) a ratio of one means the Contingency Reserve Lower requirement is equal to the Largest Credible Load Contingency.

Contingency Raise Factor: For each Dispatch Interval or Pre-Dispatch Interval, the ratio between the Largest Credible Supply Contingency and the quantity of Contingency Reserve Raise required to maintain the SWIS frequency in accordance with the Frequency Operating Standards, and where:

- (a) a ratio less than one means the Contingency Reserve Raise requirement is less than the Largest Credible Supply Contingency;
- (b) a ratio greater than one means the Contingency Reserve Raise requirement is greater than the Largest Credible Supply Contingency; and
- (c) a ratio of one means the Contingency Reserve Raise requirement is equal to the Largest Credible Supply Contingency.

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 Raise: Has the meaning given in clause 3.9.5.

Contingency Reserve Raise Market Clearing Price: The Market Clearing Price for Contingency Reserve Raise.

Contracted 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.

Credible Contingency Event: Has the meaning in given in clause 3.8A.2.

Credible Contingency Event Frequency Band: Has the meaning given in clause 3B.2.3.

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.

Disconnected Microgrid: Means a part of the SWIS that is not an Embedded System, that is designed to be separated from the SWIS at a particular connection point (or connection points) on a Network, and that has disconnected from 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 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:
 - i. with Real-Time Market Offers for Injection, the quantity included in the relevant Real-Time Market Submission Price-Quantity Pair with a price corresponding to the Energy Offer Price Floor;
 - ii. with Real-Time Market Bids for Withdrawal, the quantity included in the relevant Real-Time Market Submission Price-Quantity Pair with a price corresponding to the Energy Offer Price Ceiling;
- (b) for a Semi-Scheduled Facility, the lower of:
 - i. the sum of quantities included in Real-Time Market Submission Price-Quantity Pairs for Injection;
 - ii. the Dispatch Cap;
 - iii. if available to AEMO, the Unadjusted Semi-Scheduled Injection Forecast.

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 Operational Demand;
- (c) Constraint Equations; and
- (d) software setup for the Dispatch Algorithm.

Dispatch Interval: Means each 5 minute period commencing at 0, 5, 10, 15, 20, 30, 35, 40, 45, 50 and 55 minutes past the hour.

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) a Registered Facility other than a Demand Side Programme, the level of Injection or Withdrawal to be reached at the end of the Dispatch Interval; and
- (b) a Demand Side Programme, either:
 - i. if non-zero, the required reduction in the absolute value of Withdrawal from the Relevant Demand for the Demand Side Programme; or
 - ii. if zero, that the Demand Side Programme is no longer required to restrict its Withdrawal.

Droop Response: A fast, automatic and localised control scheme for generation facilities, wherein power output is proportionally adjusted to counteract frequency deviations.

Electrical Location: The zone substation at which the Transmission Loss Factor for a Registered Facility is defined.

Electric Storage Resource: A system or resource capable of receiving electric energy from a Network and storing it for later injection of electric energy back to a Network.

Electric Storage Resource: A system or resource capable of receiving electric energy from a Network and storing it for later injection of electric energy back to a Network. **Electric Storage Resource Obligation Duration:** The eight contiguous Electric Storage Resource Obligation Intervals which apply each Trading Day and commence at the time published by AEMO in accordance with clause 4.11.3A.

Electric Storage Resource Obligation Quantity: The specific amount of capacity required to be provided in a Trading Interval as part of a Reserve Capacity Obligation for an Electric Storage Resource set by AEMO in accordance with clauses 4.12.14 and 4.12.14A as adjusted from time to time in accordance with these WEM Rules, including under clause 4.12.6.

Electric Storage Resource Obligation Interval: A Trading Interval in which an Electric Storage Resource Obligation Quantity for an Electric Storage Resource applies.

Electric Storage Resource Metering: A meter or meters that a Market Participant is required to install under clause 2.29.12.

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.

Enablement Limit: Enablement Maximum or Enablement Minimum.

Enablement Losses: For a Registered Facility operating at its Enablement Minimum in a Dispatch Interval, the difference between energy revenue and the cost of providing that energy.

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 specified as being available.

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 specified as being available.

Energy Market Clearing Price: The Market Clearing Price for energy.

Energy Offer Caps: The Energy Offer Price Floor and the Energy Offer Price Ceiling.

Energy Offer Price Ceiling: The price equal to the Alternative Maximum STEM Price.

Energy Offer Price Floor: The price equal to the Minimum STEM Price.

Energy Producing System: Set of one or more electricity producing resources or devices such as generation systems or Electric Storage Resources.

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 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.

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 WEM Rules for Essential System Services, including those set out in sections 3.7 and 3.10.

Estimated Enablement Losses: For a Registered Facility in a Dispatch Interval is:

$$EL = \text{Max}(0, LF * EM * (LFAOP - MCP))$$

Where:

EM is the Enablement Minimum;

LF is the Loss Factor for the Registered Facility.

LFAOP is the Loss Factor Adjusted Price in the Price-Quantity Pair for energy in the Real-Time Market Submission which corresponds to the Enablement Minimum Quantity; and

MCP is the Energy Market Clearing Price in that Dispatch Interval based on the Market Schedules published by AEMO.

Exempt Transmission Connected Generating System: Has the meaning given in clause 3A.3.1.

Extreme Frequency Tolerance Band: Has the meaning given in clause 3B.2.5.

Facility: Any facility registered under these WEM Rules.

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 Daily Reserve Capacity Price: The Facility Monthly Reserve Capacity Price for a Facility as determined in accordance with clause 4.29.1A, divided by the number of Trading Days in the relevant Trading Month.

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 Risk: Means, for a Facility, the sum of energy, Contingency Reserve Raise and Regulation Raise cleared from the relevant Facility in that Dispatch Interval.

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 Technology Types: Means any one of the types of technologies specified in clause 2.29.1.

Forecast Operational Demand: For a Dispatch Interval or Pre-Dispatch Interval, AEMO's estimate of the Injection required to be dispatched by the Dispatch Algorithm, determined according to clauses 7.3.2 and 7.3.3.

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.

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 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).

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 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.

Financial Penalty: Means a Civil Penalty or Infringement.

Forecast Operational Demand: For a Dispatch Interval or Pre-Dispatch Interval, AEMO's estimate of the Injection required to be dispatched by the Dispatch Algorithm, determined according to clauses 7.3.2 and 7.3.3.

Frequency Band: Means the Credible Contingency Event Frequency Band, Multiple Contingency Event Frequency 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.

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 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: Means 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 clauses 7.4.35(a) and 7.4.35(b), as determined by AEMO under clauses 7.4.30 or 7.4.32 and published on the WEM Website.

Generation Centre: A geographically concentrated area containing a generating system or generating systems with significant combined generating capability.

GIA Facility: A Facility that is, or will be, subject to an Arrangement for Access entered into or amended during the period commencing 24 June 2017 and ending on the start of Year 1 of the 2022 Reserve Capacity Cycle under which the Facility is not entitled to unconstrained access to the relevant Network for all of its capacity on and from the date and time specified in clause 4.1.11(b) for a Reserve Capacity Cycle.

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.

Impacted Participant: Has the meaning given in clause 3.18C.1(b).

Impacting Participant: Has the meaning given in clause 3.18C.1(a).

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.

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.

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.

In-Service Capacity: Means, for a Registered Facility in a Dispatch Interval, the sent out capacity in MW that is synchronised or is expected to be synchronised in the Dispatch Interval.

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).

Injection: The quantity of power or energy sent into a Network, as measured at:

- (a) for a Registered Facility with a single defined network connection point, the network connection point;
- (b) for a Registered Facility with multiple network connection points with the same Electrical Location, the Electrical Location; and
- (c) for a Registered Facility with network connection points at more than one Electrical Location, the Reference Node,

which is measured in instantaneous MW unless specified as MWh over a time period, and represented as a positive number or zero.

Initial Network Access Quantity: The Network Access Quantity determined for a Facility in accordance with section 4.1A.1.

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.

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 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.

Largest Credible Load Contingency: Means the highest magnitude possible MW Withdrawal that could be lost in a Dispatch Interval or Pre-Dispatch Interval due to a single Credible Contingency Event based on the output of the Dispatch Algorithm.

Largest Credible Supply Contingency: Means the maximum possible net MW Injection that could be lost in a Dispatch Interval or Pre-Dispatch Interval due to a single Credible Contingency Event based on the output of the Dispatch Algorithm, accounting for any associated change in Withdrawal as a result of the same Credible Contingency Event.

Largest Network Risk: Means, for a Dispatch Interval, the maximum MW value across all Network Risks.

Last Correct Dispatch Interval: Means the most recent Dispatch Interval preceding the Affected Dispatch Interval that is not itself an Affected Dispatch Interval.

Linearly Derating Capacity: The maximum capacity, in MW, of an Electric Storage Resource that can be guaranteed to be available over the Electric Storage Resource Obligation Duration, being the minimum of:

- (a) the nameplate capacity; and
- (b) the maximum Charge Level capability (in MWh) divided by 4 hours, being the maximum sustainable MW capacity, which could be delivered continuously across the Electric Storage Resource Obligation Duration.

Load Relief: The expected change in load in response to a change in power system frequency.

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 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.

Market Clearing Price: The price for a Market Service in a Dispatch Interval as determined in accordance with section 7.11B.

Market Participant Market Fees: The fees payable by Market Participants to AEMO the rate of which is determined by AEMO in accordance with clause 2.24, and as calculated for each Market Participant in accordance with clause 9.12.2.

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.

Maximum Capability: Means, the Facility's MW energy dispatch capability between the Low Breakpoint and the High Breakpoint.

Maximum Contingency Reserve Block Size: The largest quantity of Contingency Reserve Raise 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 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.

Medium Term PASA: A PASA covering the period in clause 3.16.1(a).

Minimum Capacity Credits Quantity: The minimum quantity of Capacity Credits a Market Participant requires to be assigned to a Facility for a Reserve Capacity Cycle for the Facility to participate in the Reserve Capacity Cycle.

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.

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.

MWs: Means megawatt-second.

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 Trading Quantity: In respect of a Trading Interval and for a Market Participant has the meaning given in clause 9.9.5.

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 4.15.5 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 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: A Facility that was assigned Capacity Credits for a Reserve Capacity Cycle in which it nominated in accordance with clause 4.10.1(m) to be 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 Contingency: Means a Credible Contingency Event associated with the unexpected disconnection of one or more major items of Network equipment, but excludes from that meaning the loss of output from a Facility arising as a result of failure of generating equipment at the Facility or the loss of the network connection point associated with the Facility.

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 Risk: Means, for a Network Contingency in a Dispatch Interval, the sum in MW of the Facility Risks for any Registered Facilities less the forecast consumption of any relevant Loads that are connected to the part of the Network affected by that Network Contingency, and that would lose the ability to Inject or Withdraw from the Network as a result of that Network Contingency.

New RCM Transition Date: The date on which AEMO publishes the timetable referred to in section 1.36A.

Non-Co-optimised Essential System Services: Has the meaning given in clause 3.9.9.

Non-Credible Contingency Event: Has the meaning given in clause 3.8A.3.

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-Thermal Network Limit: Means a Network Limit that is not Thermal Network Limit.

Normal Operating Frequency Band: Has the meaning given in in clause 3B.2.1.

Normal Operating Frequency Excursion Band: Has the meaning given in clause 3B.2.2.

Not In-Service Capacity: The capacity in MW that was in merit and would have been dispatched by AEMO but was not dispatched only due to the capacity not being declared to be In-Service Capacity.

Offending Rule Participant: Is a Rule Participant liable for a Financial Penalty.

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 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 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 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 Plan First Submission Date: The date on which an Outage Plan is first submitted to AEMO.

Outage Period: Means in respect of an Outage Plan, the duration of the Outage including all Dispatch Intervals specified in the Outage Plan commencing from, and including, the Outage Commencement Interval.

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.

Participant Interval Maximum STEM Price: For a Market Participant in a Trading Interval, a price in \$/MWh which:

- (a) is less than or equal to the Alternative Maximum STEM Price;
- (b) has been provided by that Market Participant as part of a STEM Submission or Standing STEM submission; and
- (c) is the maximum price that may be associated with its Portfolio Demand Curve.

Participant Interval Minimum STEM Price: For a Market Participant in a Trading Interval, a price in \$/MWh which:

- (a) is greater than or equal to the Minimum STEM Price;
- (b) has been provided by that Market Participant as part of a STEM Submission or Standing STEM submission; and
- (c) is the minimum price that may be associated with its Portfolio Supply Curve.

Per-Dispatch Interval Availability Payment: For a SESSM Award, the Availability Payment divided by the number of Dispatch Intervals in the SESSM Award Duration for which the Availability Quantity is greater than zero.

Power System Reliability Principles: Has the meaning given to that term in clause 3.3.3.

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.

Preliminary RCM Constraint Equation: Means a RCM Constraint Equation developed by AEMO pursuant to section 4.4B and published by AEMO in accordance with, and by the time specified in, clause 4.4B.6.

Priority Project: Has the meaning given in the Electricity Networks Access Code.

RCM Limit Advice: Means Limit Advice for a Thermal Network Limit at an ambient temperature of 41°C.

RCM Constraint Equation: Means a Constraint Equation developed by AEMO in accordance with section 4.4B.

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 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.

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.

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).

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 Raise: Has the meaning defined in clause 3.9.2.

Regulation Raise Market Clearing Price: The Market Clearing Price for Regulation Raise.

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.

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 capacity of the Facility, Separately Certified Component of a Facility, or item of equipment to provide the Outage Capability and measured in MW for Market Services other than RoCoF Control Service, in MWs for RoCoF Control Service, and in units as specified in the WEM Procedure for other Outage Capabilities.

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.

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 or Rate of Change of Frequency Control Service: Has the meaning defined in clause 3.9.7.

RoCoF Control Service Market Clearing Price: The Market Clearing Price for RoCoF Control Service.

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 Safe Limit or Rate of Change of Frequency Safe Limit: Means the RoCoF Limit referred to in Appendix 13.

RoCoF Upper Limit: Means, for a Dispatch Interval, the maximum RoCoF expected on the SWIS if Contingency Reserve was solely used to maintain SWIS frequency after a Contingency Event.

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 2.29.6 and 2.29.6B.

Scheduled Load: An electricity consuming resource or device or group of resources or devices which is controllable for dispatch purposes

Secure Operating State: The state of the SWIS defined in clause 3.4.2.

Self-scheduling Outage Facility List: Means the list maintained by AEMO under clause 3.18A.6.

Self-scheduling Outage Facility: Means a Facility that is included on the Self-scheduling Outage Facility List.

Semi-Scheduled Facility: A Facility that can reduce the absolute value of its Injection or Withdrawal to comply with a Dispatch Cap issued by AEMO and is registered as such in accordance with clauses 2.29.6 and 2.29.6B.

Separately Certified Component: means any component of a Registered 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.

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 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 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 WEM 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 WEM Rules are settled for the relevant adjusted Settlement Statement.

Settlement Disagreement Deadline: Has the meaning given in clause 9.16.2.

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.

Small Aggregation: The aggregation of a number of electricity producing resources connected to the distribution system and located at the same Electrical Location.

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.

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 will be available 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 will be available 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 Real-Time Market Submission made by a Market Participant in accordance with clause 7.4.55 until it is replaced in accordance with clause 7.4.56.

Standing Withdrawal Profile: The expected MW Withdrawal associated with a Demand Side Programme for each Dispatch Interval in a generic week, as submitted to AEMO under clause 7.4.12.

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 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.

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.

System Inertia: The total Inertia provided by Registered Facilities, Loads, Network equipment and other equipment connected to the SWIS.

System Restart Service Contract: A contract between AEMO and a person for the provision by that Market Participant's Facility of a System Restart Service to AEMO.

System Restart Service Provider: A person who agrees to provide System Restart Service to AEMO under a System Restart Service Contract.

System Size: Means, in respect of a facility being a quantity equalling the sum of:

- (a) the minimum of:
 - i. the Declared Sent Out Capacity of 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 MW output; and
- (b) if the facility contains no Electric Storage Resource, then zero, otherwise the minimum of:
 - i. The Contracted Maximum Demand in MW of the facility, where the Contracted Maximum Demand is a positive quantity; and
 - ii. negative one multiplied by the sum over all Electric Storage Resources comprising the Energy Producing System at the facility (calculated for each individual Electric Storage Resource), of each Electric Storage Resource's maximum MW offtake quantity (where that offtake quantity is negative).

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.

Technical Requirement: Means each Technical Requirement for a Transmission Connected Generating System specified in Appendix 12.

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.

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.

Unadjusted Semi-Scheduled Injection Forecast: The expected maximum available Injection from a Semi-Scheduled Facility in a Dispatch Interval, including the effect of any Outages that have not been rejected for that Registered Facility, assuming that the Registered Facility will not be subject to a Dispatch Instruction that limits its Injection or Withdrawal, which may be provided to AEMO in accordance with the WEM Procedures in clause 2.35.4, 7.7.5A or 7.13.3.

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.

Whole of System Plan: A plan prepared and published by the Coordinator in accordance with section 4.5A.

Withdrawal: The quantity of power or energy received from a Network, as measured at:

- (a) for a Registered Facility with a single defined network connection point, the network connection point;
- (b) for a Registered Facility with multiple network connection points with the same Electrical Location, the Electrical Location; and
- (c) for a Registered Facility with network connection points at more than one Electrical Location, the Reference Node,

which is measured in instantaneous MW unless specified as MWh over a time period, and is represented as a negative number or zero.

Withdrawal Profile: The expected MW Withdrawal associated with a Demand Side Programme for one or more specified Dispatch Intervals, as submitted to AEMO under clause 7.4.13.

126.2 The definition for 'Adjustment Process' is deleted and replaced with the following:

Adjustment Process: Has the meaning given in clause 9.3.5.

126.3 The definition for 'Available Capacity' is deleted and replaced with the following:

Available Capacity: For a Registered Facility in a Dispatch Interval, the sent out capacity in MW that is not currently synchronised and is not expected to be synchronised in the Dispatch Interval, but would be available for dispatch if the Registered Facility was given notice in accordance with start times in its Standing Data.

126.4 The definition for 'Bilateral Submission' is deleted and replaced with the following:

Bilateral Submission: A submission by a Market Participant to AEMO made in accordance with clause 6.2.

126.5 The definition for 'Business Day' is deleted and replaced with the following:

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).

126.6 The definition for 'Capacity Credit' is deleted and replaced with the following:

Capacity Credit: A notional unit of Reserve Capacity provided by a Facility during a Capacity Year. The total number of Capacity Credits provided by a Facility is determined in accordance with section 4.20. Each Capacity Credit is equivalent to 1MW of Reserve Capacity. The Capacity Credits to be provided by a Facility are held by the Market Participant registered in respect of that Facility. The number of Capacity Credits to be provided by a Facility may be reduced in certain circumstances under the WEM Rules, including under clause 4.25.4 or adjusted under clause 4.25.6.

126.7 The definition for 'Capacity Credit Allocation Acceptance' is deleted and replaced with the following:

Capacity Credit Allocation Acceptance: A submission from a Market Participant to AEMO made in accordance with clauses 4.30.7 and 4.30.8 to accept a Capacity Credit Allocation Submission.

126.8 The definition for 'Capacity Credit Allocation Submission' is deleted and replaced with the following:

Capacity Credit Allocation Submission: A submission from a Market Participant to AEMO made in accordance with clauses 4.30.1 and 4.30.3 to allocate Capacity Credits to a single Market Participant.

126.9 The definition for 'Capacity Credit Allocation' is deleted and replaced with the following:

Capacity Credit Allocation: The allocation of a number of Capacity Credits held by a Market Participant for a Facility to a Market Participant for a Trading Day for settlement purposes through the allocation process in section 4.30.

126.10 The definition for 'Category A' is deleted and replaced with the following:

Category A: The class of WEM Rules classified as Category A civil penalty provisions in the WEM Regulations for the purposes of the imposition of civil penalties under the Regulations.

126.11 The definition for 'Category B' is deleted and replaced with the following:

Category B: The class of WEM Rules classified as Category B civil penalty provisions in the WEM Regulations for the purposes of the imposition of civil penalties under the Regulations.

126.12 The definition for 'Category C' is deleted and replaced with the following:

Category C: The class of WEM Rules classified as Category C civil penalty provisions in the WEM Regulations for the purposes of the imposition of civil penalties under the Regulations.

126.13 The definition for 'Commissioning Test' is deleted and replaced with the following:

Commissioning Tests: Has the meaning given in clause 3.21A.5.

126.14 The definition for 'Commissioning Test Period' is deleted and replaced with the following:

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).

126.15 The definition for 'Commissioning Test Plan' is deleted and replaced with the following:

Commissioning Test Plan: The information submitted to AEMO in accordance with clause 3.21A.7.

126.16 The definition of 'Constraint' is deleted and replaced with the following:

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.

126.17 The definition of 'Constraints Library' is deleted and replaced with the following:

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; and
- (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 Preliminary RCM Constraint Equations; and
 - iii. the final RCM Constraint Equations used by AEMO in the Network Access Quantity Model for determining Network Access Quantities under Appendix 3.

126.18 The definition for 'Consumption Deviation Application' is deleted and replaced with the following:

Consumption Deviation Application: An application submitted by a Market Participant to AEMO under clause 4.26.2CB(a) or clause 4.28.9A, notifying AEMO and providing evidence that the consumption of a Load was affected.

126.19 The definition for 'Credit Limit' is deleted and replaced with the following:

Credit Limit: In respect of a relevant Rule Participant, the amount determined by AEMO in accordance with clause 2.37.4.

126.20 The definition for 'Cure Notice' is deleted and replaced with the following:

Cure Notice: Has the meaning given in clause 9.19.4(a).

126.21 The definition for 'Deemed DSM Dispatch' is deleted and replaced with the following:

Deemed DSM Dispatch: The quantity (in MWh) for a Demand Side Programme for a Trading Interval equal to the least of—

- (a) half of the Facility's DSM Capacity Credits;
- (b) the requested decrease in consumption specified under clause 7.13.1E(d); and
- (c) the greater of zero and the difference between—

- i. half of the Relevant Demand set in clause 4.26.2CA; and
- ii. the Demand Side Programme Load measured in the Trading Interval, adjusted to add back any Further DSM Consumption Decrease.

126.22 The definition for 'Default Levy' is deleted and replaced with the following:

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.

126.23 The definition for 'Demand Side Programme Load' is deleted and replaced with the following:

Demand Side Programme Load: Has the meaning given in clause 9.5.4.

126.24 The definition for 'Dispatch Instruction' is deleted and replaced with the following:

Dispatch Instruction: Has the meaning given in clause 7.6.5.

126.25 The definition for 'Draw Upon' is deleted and replaced with the following:

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.

126.26 The definition for 'EOI Quantity' is deleted and replaced with the following:

EOI Quantity: Means the quantity, in MW, at which a Registered Facility was Injecting or Withdrawing as at the end of a Dispatch Interval.

126.27 The definition for 'Equipment Limit' is deleted and replaced with the following:

Equipment Limit: has the meaning given in clause 3.2.1.

126.28 The definition for 'Equipment List' is deleted and replaced with the following:

Equipment List: Means the list maintained by AEMO under clause 3.18A.1.

126.29 The definition for 'Equivalent Planned Outage Hours' is deleted and replaced with the following:

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.

126.30 The definition for 'Essential System Services' is deleted and replaced with the following:

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.

126.31 The definition for 'Excess Allocation Price' is deleted and replaced with the following:

Excess Allocation Price: For a Market Participant is as calculated in accordance with clause 9.8.3(i).

126.32 The definition for 'Facility' is deleted and replaced with the following:

Facility: Any facility registered under these WEM Rules.

126.33 The definition for 'Facility Tolerance Range' is deleted and replaced with the following:

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.

126.34 The definition for 'Indicative Individual Reserve Capacity Requirement' is deleted and replaced with the following:

Indicative Individual Reserve Capacity Requirement: Means the estimate of a Market Participant's Individual Reserve Capacity Requirement determined and published by AEMO in accordance with clause 4.28.6.

126.35 The definition for 'Individual Reserve Capacity Requirement' is deleted and replaced with the following"

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.

126.36 The definition for 'Individual Reserve Capacity Requirement Contribution' is deleted and replaced with the following:

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.

126.37 The definition for 'Interval Meter Deadline' is deleted and replaced with the following:

Interval Meter Deadline: The date determined in accordance with clause 9.3.1(a).

126.38 The definition for 'Invoice' is deleted and replaced with the following:

Invoice: An invoice requesting payment for transactions under these WEM Rules issued under Chapter 9. An Invoice may relate to Settlement Statements or adjusted Settlement Statements as the case may be.

126.39 The definition for 'Invoicing Date' is deleted and replaced with the following:

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.

126.40 The definition for 'Key Project Dates' is deleted and replaced with the following:

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.

126.41 The definition for 'Load' is deleted and replaced with the following:

Load: An electricity consuming resource or device or group of resources of devices which is not an Electric Storage Resource.

126.42 The definition for 'Loss Factor' is deleted and replaced with the following:

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.

126.43 The definition for 'Loss Factor Adjusted Price' is deleted and replaced with the following:

Loss Factor Adjusted Price: Means, in respect of any price, that price divided by any applicable Loss Factor for the relevant Facility.

126.44 The definition for 'Market Advisory' is deleted and replaced with the following:

Market Advisory: Has the meaning given in clause 7.11.1.

126.45 The definition for 'Market Fees' is deleted and replaced with the following:

Market Fees: The fee rates and other fees payable by Rule Participants to AEMO as determined by AEMO in accordance with clause 2.24 and, for Market Participant Market Fees and Market Participant Regulator Fees, as calculated for each Market Participant in accordance with section 9.12.

126.46 The definition for 'Market Participant' is deleted and replaced with the following:

Market Participant: A Rule Participant that is registered in accordance with section 2.28.

126.47 The definition for 'Regulator Fees' is deleted and replaced with the following:

Market Participant Regulator Fees: The fees, the rates of which are determined by AEMO in accordance with clause 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 and the Rule Change Panel in undertaking their respective Wholesale Electricity Market related functions and other functions under these WEM Rules.

126.48 The definition for 'Maximum Consumption Capability' is deleted and replaced with the following:

Maximum Consumption Capability: For each Market Participant is as calculated in accordance with clause 6.3A.3(d).

126.49 The definition for 'Maximum Facility Refund' is deleted and replaced with the following:

Maximum Facility Refund: The total amount of the Capacity Credit payments paid or to be paid under these WEM 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).

126.50 The definition for 'Maximum Participant Generation Refund' is deleted and replaced with the following:

Maximum Participant Generation Refund: The total amount of the Capacity Credit payments paid or to be paid under these WEM Rules to a Market Participant in relation to its generating Facilities 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 generating Facilities; and
- (b) the cost of each Capacity Credit so acquired is determined in accordance with clause 4.28.2(d).

126.51 The definition for 'Metered Schedule' is deleted and replaced with the following:

Metered Schedule: Has the meaning given in clause 9.5.2 and clause 9.5.3, as the case may be.

126.52 The definition for 'Minimum Transaction Cost' is deleted and replaced with the following:

Minimum Transaction Cost: Means the dollar amount published by AEMO in accordance with clause 9.18.4(b).

126.53 The definition for 'Net STEM Refund' is deleted and replaced with the following:

Net Offer Refund: Has the meaning given in clause 4.26.3.

126.54 The definition for 'Net STEM Shortfall' is deleted and replaced with the following:

Net Offer Shortfall: Has the meaning given in clause 4.26.2AA.

126.55 The definition for 'Network' is deleted and replaced with the following:

Network: A transmission system or distribution system registered as a Network under clause 2.29.3.

126.56 The definition for 'Network Constraint' is deleted and replaced with the following:

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.

126.57 The definition for 'New Contract Information' is deleted and replaced with the following:

New Information: Is defined in clause 2.25.5LA.

126.58 The definition for 'Non-Dispatchable Load' is deleted and replaced with the following:

Non-Dispatchable Load: An unregistered facility, that is not a Scheduled Load, that may be associated with a Demand Side Programme or an Interruptible Load.

126.59 The definition for 'Non-Scheduled Generator' is deleted and replaced with the following:

Non-Scheduled Facility: A Facility that can 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 2.29.6A

126.60 The definition for 'Notice of Disagreement' is deleted and replaced with the following:

Notice of Disagreement: A notice issued by a Rule Participant under clause 9.16.1 to AEMO indicating a disagreement with a Settlement Statement.

126.61 The definition for 'Operational System Load Estimate' is deleted and replaced with the following:

Operational System Load Estimate: Means, for a Dispatch Interval, AEMO's estimate of the total net sent out energy based on actual Injection from each Registered Facility in that Dispatch Interval, and accounting for any instructed Withdrawals from Registered Facilities in that Dispatch Interval as estimated by AEMO using from data from its SCADA system.

126.62 The definition for 'Opportunistic Maintenance' is deleted and replaced with the following:

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).

126.63 The definition for 'Outage' is deleted and replaced with the following:

Outage: Has the meaning given in clause 3.18.3.

126.64 The definition for 'Outage Contingency Plan' is deleted and replaced with the following:

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.

126.65 The definition for 'Outage Facility' is deleted and replaced with the following:

Outage Facility: Means an Equipment List Facility or a Self-scheduling Outage Facility.

126.66 The definition for 'Outage Facility Maintenance' is deleted and replaced with the following:

Outage Facility Maintenance: Means an Outage for the purpose of:

- (a) an upgrade of Outage Facility equipment; or
- (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.

126.67 The definition for 'Outage Plan' is deleted and replaced with the following:

Outage Plan: Has the meaning given in clause 3.18B.1 as may be revised in accordance with clause 3.18D.1.

126.68 The definition for 'Participant Capacity Rebate' is deleted and replaced with the following:

Participant Capacity Rebate: For a Market Participant holding Capacity Credits associated with a Scheduled Facility, Semi-Scheduled Facility or a Demand Side Programme, the rebate determined for a Trading Month, as calculated in accordance with clause 4.26.4.

126.69 The definition for 'Payment Default' is deleted and replaced with the following:

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 WEM Rules by the time it is due.

126.70 The definition for 'Payment Outage' is deleted and replaced with the following:

Planned Outage: An Outage Plan that has been approved by AEMO.

126.71 The definition for 'Power System Adequacy' is deleted and replaced with the following:

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.

126.72 The definition for 'Power System Reliability' is deleted and replaced with the following:

Power System Reliability: Means the safe scheduling, operation and control of the SWIS in accordance with the Power System Reliability Principles.

126.73 The definition for 'Power System Security' is deleted and replaced with the following:

Power System Security: Means the safe scheduling, operation and control of the SWIS in accordance with the Power System Security Principles.

126.74 The definition for 'Price-Quantity Pair' is deleted and replaced with the following:

Price-Quantity Pair: In the context of:

- (a) Reserve Capacity Offers, Supply Portfolio 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 Demand Portfolio 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, 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.

126.75 The definition for 'Projected Assessment of System Adequacy (PASA)' is deleted and replaced with the following:

Projected Assessment of System Adequacy (PASA): An assessment undertaken by AEMO to assess future risks to Power System Security and Power System Reliability.

126.76 The definition for 'Prudential Obligations' is deleted and replaced with the following:

Prudential Obligations: In respect of a Rule Participant, the obligations set out in clauses 2.37 to 2.43.

126.77 The definition for 'Refund Exempt Planned Outage' is deleted and replaced with the following:

Refund Exempt Planned Outage: Means a Planned Outage of a Facility or a component of a Facility for which a Facility Reserve Capacity Deficit Refund is not payable, as determined by AEMO under clause 4.26.1C or clause 4.26.1CA.

126.78 The definition for 'Refund Exempt Planned Outage Count' is deleted and replaced with the following:

Refund Exempt Planned Outage Count: Means, in respect of a Facility or a component of a Facility and a period of time, the sum over all Trading Intervals in that period of:

- (a) zero, if the Trading Interval occurs before 8:00 AM on 1 June 2016 or if no Capacity Credits were associated with the Facility in the Trading Interval;
- or

- (b) the sum of CAPO(f,t) for all Refund Exempt Planned Outages for the Facility, or a component of a Facility, in the Trading Interval as calculated under clause 7.21.8B, divided by the number of Capacity Credits associated with the Facility in the Trading Interval.

126.79 The definition for 'Refund Payable Planned Outage' is deleted and replaced with the following:

Refund Payable Planned Outage: Means a Planned Outage of a Facility or a component of a Facility for which a Facility Reserve Capacity Deficit Refund is payable, as determined by AEMO under clause 4.26.1C.

126.80 The definition for 'Relevant Settlement Statement' is deleted and replaced with the following:

Relevant Settlement Statement: Has the meaning given in clause 9.3.6.

126.81 The definition for 'Reserve Capacity' is deleted and replaced with the following;

Reserve Capacity: Capacity associated with a Facility. Capacity 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) Demand Side Management, being the capability of a Facility registered by the Market Participant at a connection point to a Network forming part of the SWIS to reduce the consumption of electricity at that connection point.

126.82 The definition for 'Reserve Capacity Information Pack' is deleted and replaced with the following:

Reserve Capacity Information Pack: A package of information, including the information described in clause 4.7.3, pertaining to a Reserve Capacity Cycle.

126.83 The definition of 'Reserve Capacity Obligations' is deleted and replaced with the following:

Reserve Capacity Obligations: For a Market Participant holding Capacity Credits, determined in accordance with clause 4.12.1 or clause 4.28C.

126.84 The definition for 'Reserve Capacity Obligation Quantity' is deleted and replaced with the following:

Reserve Capacity Obligation Quantity: The specific amount of capacity required to be provided in a Trading Interval as part of a Reserve Capacity Obligation set by AEMO in accordance with clauses 4.12.4 and 4.12.5 or section 4.28C as adjusted from time to time in accordance with these WEM Rules, including under clause 4.12.6.

126.85 The definition for 'Reserve Capacity Target' is deleted and replaced with the following:

Reserve Capacity Target: In respect of a Capacity Year, AEMO's estimate of the total amount of Energy Producing Systems' capacity or Demand Side Management capacity required in the SWIS to satisfy the Planning Criterion for that Capacity Year determined in accordance with clause 4.5.10(b).

- 126.86 The definition for 'Security Deposit' is deleted and replaced with the following:
- 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.
- 126.87 The definition for 'Security Limit' is deleted and replaced with the following:
- 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.
- 126.88 The definition for 'Security Provider' is deleted and replaced with the following:
- Security Provider:** Means a person or entity which meets the Acceptable Credit Criteria and which itself is not a Rule Participant.
- 126.89 The definition for 'Service Fee Settlement Amount' is deleted and replaced with the following:
- Service Fee Settlement Amount:** Means the amounts determined in accordance with section 9.13.
- 126.90 The definition for 'Settlement Statement' is deleted and replaced with the following:
- 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.
- 126.91 The definition for 'Short Term PASA' is deleted and replaced with the following:
- Short Term PASA:** A PASA covering the period in clause 3.16.1(b).
- 126.92 The definition for 'Small Generating Unit' is deleted and replaced with the following:
- Small Generating Unit:** An Energy Producing System which has a rated capacity of less than 10MW.
- 126.93 The definition for 'Standing Bilateral Submission' is deleted and replaced with the following:
- Standing Bilateral Submission:** A submission by a Market Participant to AEMO made in accordance with section 6.2A.
- 126.94 The definition for 'Supplementary Capacity Contract' is deleted and replaced with the following:
- 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
- 126.95 The definition for 'Suspension Event' is deleted and replaced with the following:
- Suspension Event:** An event described in clause 9.19.

126.96 The definition for 'Suspension Notice' is deleted and replaced with the following:

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.

126.97 The definition for 'SWIS Operating State' is deleted and replaced with the following:

SWIS Operating State: One or any of the Reliable Operating State, Satisfactory Operating State, Secure Operating State or Emergency Operating State.

126.98 The definition for 'System Restart Service' is deleted and replaced with the following:

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 system shut down, or a major supply shutdown.

126.99 The definition for 'Technical Envelope' is deleted and replaced with the following:

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.

126.100 The definition for 'Tolerance Range' is deleted and replaced with the following:

Tolerance Range: Means the amount, in MW, determined by AEMO under clause 2.13.16 of the WEM Rules.

126.101 The definition for 'Total Amount' is deleted and replaced with the following:

Total Amount: Has the meaning given in clause 9.20.3.

126.102 The definition for 'Trading Day' is deleted and replaced with the following:

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.

126.103 The definition for 'Trading Week' is deleted and replaced with the following:

Trading Week: A period from the beginning of a Trading Day commencing at 8:00 AM on a Saturday, to the end of the Trading Day that finishes at 8:00 AM on the following Saturday.

126.104 Each of the definitions listed in the following Table is deleted.

Table
Ancillary Service
Ancillary Service Contract
Ancillary Service Declaration
Ancillary Service Provider
Ancillary Service Requirements
Backup Downwards LFAS Enablement
Backup Downwards LFAS Price
Backup LFAS Enablement
Backup LFAS Price

Backup Upwards LFAS Enablement
Backup Upwards LFAS Price
Balancing Facility
Balancing Facility Requirements
Balancing Forecast
Balancing Gate Closure
Balancing Horizon
Balancing Market
Balancing Market Commencement Day
Balancing Market Objectives
Balancing Merit Order
Balancing Portfolio
Balancing Price
Balancing Price-Quantity Pair
Balancing Settlement
Balancing Submission
BMO
Consequential Outage
Constrained Access Certification Review
Constrained Access Entitlement
Constrained Access Facility
Constrained Off Compensation Price
Constrained Off Quantity
Constrained On Compensation Price
Constrained On Quantity
Consumption Decrease Price
Contracted Ancillary Service
Contracted Dispatch Support Service
Contracted Load Rejection Reserve Service
Contracted Spinning Reserve Service
Contracted System Restart Service
Dispatch Order
Dispatch Plan
Dispatch Support Service
Downwards LFAS Enablement
Downwards LFAS Enablement Schedule
Downwards LFAS Merit Order
Downwards LFAS Price
Downwards LFAS Price-Quantity Pair
Downwards LFAS Quantity
Ex-post Downwards LFAS Enablement
Ex-post Upwards LFAS Enablement
Facility Monthly Special Reserve Capacity Price
Forecast Backup Downwards LFAS Price
Forecast Backup LFAS Price
Forecast Backup Upwards LFAS Price
Forecast BMO
Forecast Downwards LFAS Enablement Schedule
Forecast Downwards LFAS Merit Order

Forecast Downwards LFAS Price
Forecast Downwards LFAS Quantity
Forecast LFAS Enablement Schedule
Forecast LFAS Merit Order
Forecast LFAS Price
Forecast LFAS Quantity
Forecast Upwards LFAS Enablement Schedule
Forecast Upwards LFAS Merit Order
Forecast Upwards LFAS Price
Forecast Upwards LFAS Quantity
Further DSM Consumption Decrease
High Risk Operating State
Increased LFAS Quantity
Intermittent Generator
LFAS
LFAS Enablement
LFAS Enablement Schedule
LFAS Facility
LFAS Facility Requirements
LFAS Gate Closure
LFAS Horizon
LFAS Market
LFAS Merit Order
LFAS Price
LFAS Price-Quantity Pair
LFAS Quantity
LFAS Quantity Balance
LFAS Standing Data
LFAS Submission
Load Rejection Reserve Event
Load Rejection Reserve Response
Load Rejection Reserve Response Quantity
Load Rejection Reserve Service
LoadWatch Report
Maximum Theoretical Energy Schedule
Metered Balancing Quantity
Minimum LFAS Quantity
Minimum Theoretical Energy Schedule
Net STEM Refund
Non-Balancing Dispatch Merit Order
Non-Balancing Facility Dispatch Instruction Payment or DIP
Non-Scheduled Generator
Non-Qualifying Constrained Off Generation
Non-Qualifying Constrained On Generation
Non-STEM Settlement Date
Non-STEM Settlement Statement
Non-STEM Settlement Statement Date
Non-STEM Settlement Disagreement Deadline
Normal Operating State

Operating Instruction
Out of Merit
Portfolio Constrained Off Compensation Price
Portfolio Constrained Off Quantity
Portfolio Constrained On Compensation Price
Portfolio Constrained On Quantity
Portfolio Loss Factor
Portfolio Settlement Tolerance
Portfolio Ramp Rate Limit
Pricing BMO
Provisional Balancing Price
Provisional Pricing BMO
Relevant Dispatch Quantity
Reserve Capacity Auction
Reserve Capacity Auction Requirement
Reserve Capacity Offer
Scheduled Outage
Scheduled Generator
Sent Out Capacity
Settlement Tolerance
SOI Quantity
Special Price Arrangement
Special Reserve Capacity Price
Spinning Reserve
Spinning Reserve Event
Spinning Reserve Response
Spinning Reserve Response Quantity
Spinning Reserve Service
Stand Alone Facility
STEM Invoice
STEM Settlement Date
STEM Settlement Disagreement Deadline
STEM Settlement Statement
Upwards LFAS Enablement
Upwards LFAS Enablement Schedule
Upwards LFAS Merit Order
Upwards LFAS Price
Upwards LFAS Price-Quantity Pair
Upwards LFAS Quantity

127. Appendix 1 amended

127.1 The word '(m)' is deleted and replaced with the word '(n)' where it first occurs.

127.2 Clause (b)(x) is deleted and replaced with the following:

- x. the capability to provide each of the Frequency Co-optimised Essential System Services, including information on trade-off

functions when more than one other type of Essential System Service and/or energy is provided simultaneously.

127.3 Clause (b)(xix) is deleted and replaced with the following:

- xix. the facility's minimum physical response time before the facility can begin to respond to a Dispatch Instruction;

127.4 Clause (e)(iv) is deleted and replaced with the word '[Blank]'.

127.5 Clause (g)(vi) is deleted and replaced with the following:

- vi. the capability to provide Contingency Reserve Raise as a function of consumption;

127.6 Clause (h)(xiv) is deleted and replaced with the following:

- xiv. the information for each Associated Load described in clauses 2.29.5B(b) to 2.29.5B(f) and 4.10.1(f); and

127.7 Clause (j) is deleted and replaced with the word '[Blank]'.

127.8 Clause (k)(i) is deleted and replaced with the following:

- i. Reserve Capacity information including:
 - 1. the most recent Certified Reserve Capacity of the facility;
 - 2. the Capacity Credits held by the facility;
 - 3. the Reserve Capacity Obligation Quantity of the facility at 41°C (if applicable);
 - 4. the Reserve Capacity Obligation Quantity of the facility at 45°C (if applicable);
 - 5. for Interruptible Loads and Demand Side Programmes, the maximum number of times that interruption can be called during the term of the Capacity Credits; and
 - 6. the method to be used for determining the ambient temperature at the site of the facility (if applicable).

127.9 Clause (l) is deleted and replaced with the following:

- (l) For each Market Participant:
 - i. the Individual Reserve Capacity Requirement for the Market Participant;
 - ii. a list of Non-Temperature Dependent interval meters; and

- iii. a Standing STEM Submission (if provided by the Market Participant) comprising for each Trading Interval for a Trading Week:
 - 1. a Fuel Declaration;
 - 2. [Blank];
 - 3. [Blank];
 - 4. a Portfolio Supply Curve; and
 - 5. a Portfolio Demand Curve;
 - 6. at the Market Participant's discretion, a Participant Interval Minimum STEM Price and a Participant Interval Maximum STEM Price; and

127.10 Clause (m) is deleted and replaced with the word '[Blank]'.

127.11 Insert the following new clause (n):

- (n) For each Facility:
 - i. RoCoF Ride-Through Capability which if greater than the RoCoF Safe Limit must be supported by test results or engineering studies acceptable to AEMO;
 - ii. start-up costs;
 - iii. minimum generation costs;
 - iv. if the Facility is accredited to provide a Frequency Co-optimised Essential System Service, the Frequency Co-optimised Essential System Service Accreditation Parameters; and
 - v. if the Facility is not accredited to provide a Frequency Co-optimised Essential System Service the Facility's indicative, as applicable:
 - 1. Maximum Capability;
 - 2. Standing Enablement Minimum and Standing Enablement Maximum;
 - 3. Facility Speed Factor; and
 - 4. MWs inertia of the Facility when running, or if the Facility can operate in multiple configurations with differing levels of inertia, the MWs of inertia in each of those configurations.

128.1 Appendix 2 is deleted and replaced with the following:

Appendix 2: [Blank]

129. Appendix 2A added

129.1 Insert the following new Appendix 2A:

Appendix 2A: Runway share calculation method

1. Interpretation and calculation of a Market Participant's Total Runway Share

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's total runway 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.

2. Define Facility Sets and Facility Contingencies

2.1 Determine Facilities(DI) as the set of all Scheduled Facilities and Semi-Scheduled Facilities in Dispatch Interval DI.

2.2 For each member in Facilities(DI), f , calculate the FacilityRisk(f ,DI) to be the Facility Risk for f in Dispatch Interval DI as published under clause 7.13.1E(f)(i).

2.3 Determine ApplicableFacilities(DI), which is a subset of Facilities(DI), such that:

$$FacilityRisk(f, DI) \geq 10MW \forall f \in ApplicableFacilities(DI)$$

3. Applicable Facility Shares

3.1 Rank the Registered Facilities in the set ApplicableFacilities(DI) in Dispatch Interval DI in the ascending order of the value of FacilityRisk(f ,DI) as determined in clause 2.2 of this Appendix 2A. If two or more Registered Facilities in that set have the same FacilityRisk(f ,DI) value, AEMO shall rank those Registered Facilities, as between each other, in ascending alphabetical order of the name of the Registered Facilities recorded by AEMO in accordance with clause 10.5.1(c)(vii). The Registered Facility with the lowest FacilityRisk(f ,DI) value will have rank(f , DI) = 1, and the Registered Facility with the highest FacilityRisk(f ,DI) value will have rank(f ,

DI) = n, where n is the number of Registered Facilities in the set ApplicableFacilities(DI).

3.2 Calculate LargestFacilityRisk(DI), which is the FacilityRisk(f,DI) of the Registered Facility which has the rank(f,DI) = n as determined in clause 3.1 of this Appendix 2A.

3.3 Determine for each Registered Facility f, its runway share of the FacilityComponent(DI) as follows:

$$\text{FacilityRunwayShare}(f,DI) = \sum_{i=1}^{\text{Rank}(f,DI)} \frac{\text{FacilityMW}(i,DI) - \text{FacilityMW}(i-1,DI)}{\text{FacilityMW}(n,DI) \times (n+1-i)}$$

where:

- (a) FacilityMW(i,DI) is the FacilityRisk(x,DI) value of Registered Facility x with rank(x,DI) = i in Dispatch Interval DI, where FacilityMW(0,DI)=0, and $x \in \text{ApplicableFacilities}(DI)$;
- (b) Rank(f,DI) is the rank of Registered Facility f in Dispatch Interval DI as determined in clause 3.1 of this Appendix 2A; and
- (c) n is the number of Registered Facilities in the set ApplicableFacilities(DI) in Dispatch Interval DI.

4. Network Contingency Shares

4.1 Determine NetworkContingencies(DI), which is the set of Network Contingencies that are taken into account when setting the Contingency Reserve Raise requirement under clause 7.2.4(n) in Dispatch Interval DI.

4.2 For each member in NetworkContingencies(DI), nc, calculate NetworkRisk(nc,DI) in Dispatch Interval DI as follows:

- (a) NetworkRisk(nc,DI) equals the Largest Network Risk in Dispatch Interval DI as published by AEMO in clause 7.13.1E(f)(i)(1), if nc sets the Largest Credible Supply Contingency in Dispatch Interval DI; and
- (b) NetworkRisk(nc,DI) = 0 otherwise.

4.3 Determine ApplicableNetworkContingencies(DI) as a subset of NetworkContingencies(DI), such that:

$$\text{NetworkRisk}(nc,DI) > 0 \text{ MW } \forall nc \in \text{ApplicableNetworkContingencies}(DI)$$

4.4 Calculate m(DI), as the number of members of ApplicableNetworkContingencies(DI).

4.5 For each member in ApplicableNetworkContingencies(DI), nc, perform the following steps:

- (a) from the information published under clause 7.13.1E(f)(ii), determine the set of Registered Facilities whose Facility Risks are included in the Network Risk associated with Network Contingency nc as $CauserFacilities(nc,DI)$, where $CauserFacilities(nc,DI)$ is a subset of $ApplicableFacilities(DI)$ as defined in clause 2.3 of this Appendix 2A;
- (b) rank the Registered Facilities in $CauserFacilities(nc,DI)$ in the ascending order of the value of $FacilityRisk(f,DI)$ as determined in clause 2.2 of this Appendix 2A of this Appendix 2A. If two or more Registered Facilities in $CauserFacilities(nc,DI)$ have the same $FacilityRisk(f,DI)$ value in Dispatch Interval DI , AEMO shall rank those Registered Facilities, as between each other, in ascending alphabetical order of the name of the Registered Facility recorded by AEMO in accordance with clause 10.5.1(c)(vii). The Registered Facility with the lowest $FacilityRisk(f,DI)$ value will have $rank(nc,f,DI) = 1$, and the Registered Facility with the highest $FacilityRisk(f,DI)$ value will have a $rank(nc,f,DI) = n_{nc}$, where n_{nc} is the number of Registered Facilities in the set $CauserFacilities(nc,DI)$; and
- (c) determine for each Registered Facility f , which is a member of $CauserFacilities(nc,DI)$, its runway share of the Network Contingency component (attributable to Network Contingency nc) of procuring Contingency Reserve Raise and the Additional RoCoF Control Requirement component of RoCoF Control Service in Dispatch Interval DI as follows:

$$NetworkRunwayShare(nc,f,DI) = \sum_{i=1}^{Rank(nc,f,DI)} \frac{NetworkMW(nc,i,DI) - NetworkMW(nc,i-1,DI)}{NetworkMW(nc,n_{nc},DI) \times (n_{nc} + 1 - i)}$$

where:

- i. $NetworkMW(nc,i,DI)$ is the $FacilityRisk(x,DI)$ value of Registered Facility x with $rank(nc,x,DI) = i$ in Dispatch Interval DI , where $NetworkMW(nc,0,DI) = 0$, and $x \in CauserFacilities(nc,DI)$;
- ii. $Rank(nc,f,DI)$ is the rank of Registered Facility $f \in CauserFacilities(nc,DI)$ as determined in clause 4.5(b) of this Appendix 2A; and
- iii. n_{nc} is the number of Registered Facilities in the set $CauserFacilities(nc,DI)$ as determined in clause 4.5(b) of this Appendix 2A.

5. Cost Shares

5.1 Calculate the cost shares associated with the Network Contingency and Facility Contingency 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 Network Contingency component in Dispatch Interval DI as follows:

$$\text{NetworkComponent}(DI) = \frac{\text{Max}(0, \text{LargestNetworkRisk}(DI) - \text{LargestFacilityRisk}(DI))}{\text{LargestNetworkRisk}(DI)}$$

where:

- i. LargestNetworkRisk(DI) is the Largest Network Risk in Dispatch Interval DI; and
 - ii. LargestFacilityRisk(DI) is the largest Facility Risk in Dispatch Interval DI as calculated in clause 3.2 of this Appendix 2A; and
- (b) calculate the cost share associated with the Facility Contingency component in Dispatch Interval DI as follows:

$$\text{FacilityComponent}(DI) = 1 - \text{NetworkComponent}(DI)$$

5.2 Determine for each Registered Facility f associated with each Applicable Network Contingency nc its cost share of procuring the Network Contingency component of Contingency Reserve Raise and the Additional RoCoF Control Requirement of RoCoF Control Service (attributable to Network Contingency nc) in Dispatch Interval DI as follows:

$$\text{NetworkShare}(nc, f, DI) = \frac{1}{m(DI)} \times \text{NetworkRunwayShare}(nc, f, DI)$$

5.3 Determine Market Participant p's total runway share of procuring Contingency Reserve Raise and the Additional RoCoF Requirement component of RoCoF Control Service in Dispatch Interval DI as follows:

$$\text{TotalRunwayShare}(p, DI) = \text{FacilityComponentShare}(p, DI) + \text{NetworkComponentShare}(p, DI)$$

where:

- (a) FacilityComponentShare(p,DI) is calculated as follows:

$$\text{FacilityComponentShare}(p, DI) = \text{FacilityComponent}(DI) \times \sum_{f \in \text{ApplicableFacilities}(p, DI)} \text{FacilityRunwayShare}(f, DI)$$

where:

- i. FacilityComponent(DI) is the cost share associated with the Facility Contingency 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. ApplicableFacilities(p,DI) is a subset of ApplicableFacilities(DI) defined in clause 2.3 of this Appendix 2A, which denotes Registered Facilities in ApplicableFacilities(DI) which are registered to Market Participant p; and
- iii. FacilityRunwayShare(f,DI) is Registered Facility f's runway share of the Facility Contingency 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; and

(b) NetworkComponentShare(p,DI) is calculated as follows:

$$\text{NetworkComponentShare}(p,DI) = \text{NetworkComponent}(DI) \times \sum_{nc \in \text{ApplicableNetworkContingencies}(DI)} \sum_{f \in \text{CauserFacilities}(nc,p,DI)} \text{NetworkRunwayShare}(nc,f,DI)$$

where:

- i. NetworkComponent(DI) is the cost share associated with the Network Contingency 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. ApplicableNetworkContingencies(DI) is the subset of Network Contingencies determined in clause 4.3 of this Appendix 2A;
- iii. CauserFacilities(nc,p,DI) is a subset of CauserFacilities(nc,DI) identified in clause 4.5(a) of this Appendix 2A, which denotes Registered Facilities in CauserFacilities(nc,DI) registered to Market Participant p; and
- iv. NetworkRunwayShare(nc,f,DI) is Registered Facility f's cost share associated with Network Contingency nc in Dispatch Interval DI as calculated in clause 4.5(c) of this Appendix 2A.

130. Appendix 2B added

130.1 Insert the following new Appendix 2B:

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 Market Participant's share of the Minimum RoCoF Control Requirement component of the RoCoF Control Service cost in Trading Interval t by following the 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 subset of RoCoF Causers(t) being the Network Operator which does not hold an exemption under [clause X] in Trading Interval t ;
- (b) Injection Causer(t): the subset of RoCoF Causers(t) being each Registered Facility which injects energy into the SWIS, which has a non-zero Metered Schedule in Trading Interval t and which does not hold an exemption under [clause X] in Trading Interval t ; and
- (c) Offtake Causer(t): the subset of RoCoF Causers(t) being:
 - i. all Registered Facilities which comprise only Scheduled Loads; and
 - ii. all Non-Dispatchable Loads associated with or served by a Market Participant (including Synergy's Notional Wholesale Meter where Synergy is the Market Participant),

which consume energy from the SWIS, which have non-zero Metered Schedules in Trading Interval t and which Market Participant associated with the relevant Load has not demonstrated that the relevant Load holds an exemption under [clause X] 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

$$(c) \quad \text{OfftakeCauserFactor}(t) = \begin{cases} 0 & \text{if the Offtake Causer}(t) \text{ subset is empty} \\ 1 & \text{otherwise} \end{cases}$$

2.4 Determine the total number of causer groups $n(t)$ in Trading Interval t as follows:

$$n(t) = \text{NetworkCauserFactor}(t) + \text{InjectionCauserFactor}(t) + \text{OfftakeCauserFactor}(t)$$

where:

(a) $\text{NetworkCauserFactor}(t)$ 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) $\text{InjectionCauserFactor}(t)$ 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) $\text{OfftakeCauserFactor}(t)$ 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 the Network Operator's share of the Minimum RoCoF Control Requirement component of the RoCoF Control Service cost in Trading Interval t as follows:

$$\text{NOShare}(p,t) = \frac{1}{n(t)} \times \text{NetworkCauserFactor}(t)$$

where:

(a) p is the Network Operator;

(b) $\text{NetworkCauserFactor}(t)$ 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

(c) $n(t)$ 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:

$$\text{InjectionShare}(f,t) = \frac{1}{n(t)} \times \text{InjectionCauserFactor}(t) \times \frac{|\text{MeteredSchedule}(f,t)|}{\sum_{i \in \text{InjectionCauser}(t)} |\text{MeteredSchedule}(i,t)|}$$

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) 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) $i \in \text{InjectionCauser}(t)$ 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) $i \in \text{OfftakeCauser}(t)$ 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_{EP} 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_{EP} denotes all facilities which are members of Offtake Causer(t) and associated with Rule Participant p; and
- (e) NOShare(p,t) is, for the Network Operator, the Network Operator's share of the Minimum RoCoF Control Requirement components of the RoCoF Control Service cost in Trading Interval t, as calculated in clause 2.5 of this Appendix 2B, and for all other Rule Participants, zero.

131. Appendix 2C added

131.1 Insert the following new Appendix 2C:

Appendix 2C: SESSM refund calculation 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. 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 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:

$$\text{MaxUnavailability}(a) = \text{FLOOR} \left(N(a) \times (1 - \text{MinAvailability}(a)) \right)$$

where:

- i. the FLOOR() function rounds any non-integer figure down to the nearest integer; 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.

2.4 For each Dispatch Interval DI determine whether a Registered Facility was available (in respect of its obligations under SESSM Award a to provide Frequency Co-optimised Essential System Service c):

$$\text{IsAvailable}(a,DI) = \begin{cases} 1 & \text{if ESSOffer}(f,c,DI) \geq (\text{BaseQuantity}(a,DI) + \text{AvailabilityQuantity}(a,DI)) \\ & \text{or AvailabilityQuantity}(a,DI) = 0, \\ 0 & \text{otherwise} \end{cases}$$

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:
 - A. Registered Facility f is subject to a Planned Outage or a Forced Outage in Dispatch Interval DI; and
 - B. 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.

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:

$$\text{SESSMOutageCount}(a,DI) = \sum_{i=1}^{DI} (1 - \text{IsAvailable}(a,i))$$

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:

$$\text{SESSMRefund}(a,DI)=
\begin{cases}
0 \text{ if } \text{SESSMOutageCount}(a,DI) \leq \text{MaxUnavailability}(a), \\
\sum_{i=1}^{DI-1} \text{SESSMRefund}(a,i) \geq \text{PaymentCap}(a), \\
\text{AvailabilityQuantity}(a,DI) = 0, \\
\min \left(\begin{array}{l} \text{AvailabilityPayment}(a,DI) \times \text{SESSMRefundFactor} \times \text{SESSMShortfall}(a,DI), \\ \text{PaymentCap}(a) - \sum_{i=1}^{DI-1} \text{SESSMRefund}(a,i) \end{array} \right) \text{ otherwise}
\end{cases}$$

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) ESSOffer(f,c,DI) is the quantity determined under clause 2.4(a) of this Appendix 2C;
- (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; and
- (i) SESSMShortfall(a,DI) is the quantity determined under clause 2.7 of this Appendix 2C.

2.7 Calculate the SESSM shortfall for each SESSM Award for each Dispatch Interval as follows:

$$\text{SESSMShortfall}(a,DI) = \max \left(0, \frac{\text{AvailabilityQuantity}(a,DI) - \max(0, \text{ESSOffer}(f,c,DI) - \text{BaseQuantity}(a,DI))}{\text{AvailabilityQuantity}(a,DI)} \right)$$

where:

- i. AvailabilityQuantity(a,DI) is the quantity determined under clause 2.2(b) of this Appendix 2C;

- ii. ESSOffer(f,c,DI) is the quantity determined under clause 2.4(a) of this Appendix 2C; and
- ii. 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:
 - i. $RR_AvailabilityPayment(f,DI) = \sum_{a \in ARR} AvailabilityPayment(a,DI);$
 - ii. $RL_AvailabilityPayment(f,DI) = \sum_{a \in ARL} AvailabilityPayment(a,DI);$
 - iii. $CR_AvailabilityPayment(f,DI) = \sum_{a \in ACR} AvailabilityPayment(a,DI);$
 - iv. $CL_AvailabilityPayment(f,DI) = \sum_{a \in ACL} AvailabilityPayment(a,DI);$
 - v. $RCS_AvailabilityPayment(a,DI) = \sum_{a \in ARCS} AvailabilityPayment(a,DI);$

where:

- A. 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;
- B. 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;
- C. 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;
- D. 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;
- E. 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

- F. 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:
- i. $RR_SESSMRefund(f,DI) = \sum_{a \in ARR} SESSMRefund(a,DI)$;
 - ii. $RL_SESSMRefund(f,DI) = \sum_{a \in ARL} SESSMRefund(a,DI)$;
 - iii. $CR_SESSMRefund(f,DI) = \sum_{a \in ACR} SESSMRefund(a,DI)$;
 - iv. $CL_SESSMRefund(f,DI) = \sum_{a \in ACL} SESSMRefund(a,DI)$; and
 - v. $RCS_SESSMRefund(f,DI) = \sum_{a \in ARCS} SESSMRefund(a,DI)$,

where:

- A. SESSMRefund(a,DI) is the quantity determined under clause 2.6 of this Appendix 2C;
- B. $a \in ARR$ 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;
- C. $a \in ARL$ 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;
- D. $a \in ACR$ 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;
- E. $a \in ACL$ 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;
- F. $a \in ARCS$ 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.

132. Appendix 3 amended

132.1 Appendix 3 is deleted and replaced with the following:

Appendix 3: Determination of Network Access Quantities

The objectives of this appendix are:

1. To prevent AEMO determining Network Access Quantities (and assigning Capacity Credits) for Facilities that have been assigned Certified Reserve Capacity that have insufficient access to the Network and availability to usefully address the Reserve Capacity Requirement. A single algorithm is used for testing of 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:
 - where the Facilities, for which Capacity Credits for the current Reserve Capacity Cycle are being sought, do not include a Candidate Fixed Price Facility, set out in Part A; and
 - where the Facilities, for which Capacity Credits for the current Reserve Capacity Cycle are being sought, include a Candidate Fixed Price Facility, 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.
 - 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 WEM Rules. Terms which are defined in the WEM Rules will apply to this Appendix unless defined in this Appendix.

In this Appendix 3:

- Q[a] is the quantity associated with Availability Class “a” in clauses 4.5.12(b) or 4.5.12(c);
- X[a] is the total quantity of Certified Reserve Capacity to be provided by Facilities subject to Network Control Service Contracts during the period to which the Reserve Capacity Requirement applies where the capacity is certified as belonging to Availability Class “a” and is not subject to a bilateral trade;

- CR[a] is the capacity requirement associated with Availability Class "a";
- Z is the total preliminary Network Access Quantity determined for Facilities where the capacity is associated with Availability Class 1;
- the "capacity requirement" of:
 - Availability Class 1 is $CR[1] = \max(0, Q[1] - X[1])$; and
 - Availability Class 2 is $CR[2] = \max(0, \max(0, (Q[2] - X[2]) - \max(0, X[1] - Q[1]) - \max(0, Z - CR[1]))$; and
- "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 Reserve Capacity for a future Reserve Capacity Cycle; and
 - pursuant to that application, AEMO has assigned Early Certified Reserve Capacity to the Facility in accordance with section 4.28C.
- "Facility Upgrade" means, for a NAQ Facility, there will be 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 13(c)(ii) 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 Certified Reserve Capacity for the current Reserve Capacity Cycle; or
 - an Early CRC Facility where the current Reserve Capacity Cycle is the Reserve Capacity Cycle in which the Facility will first deliver Reserve Capacity, 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 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, where 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 total capacity requirement of the Availability Class, then those tied Facilities are to be selected according to the following rules until the tie is resolved:
 - the ratio of a Facility’s preliminary Network Access Quantity to Certified Reserve Capacity from highest to lowest; then
 - the combination of the 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 capacity requirement for the Availability Class; then
 - 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

Step 1: Calculate the capacity requirement of Availability Class 1.

Step 2: Let the Network Access Quantity Model contain:

- (a) NAQ Facilities for Availability Class 1 and Availability Class 2;
- (b) where the NAQ Facilities include any Early CRC Facilities that are also Network Augmentation Funding Facilities, the applicable Constraint Set for each of those Facilities; and
- (c) Indicative NAQ Facilities.

Step 3: For:

- (a) the 2022 Reserve Capacity Cycle, AEMO must:
 - i. undertake the processes in Steps 3A, 3B and 3C excluding:
 - 1. each NAQ Facility that is also a GIA Facility; and
 - 2. each Indicative NAQ Facility; then
 - ii. repeat Steps 3A, 3B and 3C with all NAQ Facilities and Indicative NAQ Facilities in accordance with the processes set out in those steps; and
- (b) subsequent Reserve Capacity Cycles, go to Step 3A.

Step 3A: Subject to the NAQ rules, using the Network Access Quantity Model determine the preliminary Network Access Quantity for each NAQ Facility and 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, for an Early CRC Facility is deemed to be:
 - i. for an Early CRC Facility that is also a Network Augmentation Funding Facility, the preliminary Network Access Quantity determined for the Facility at Step 13(c)(i) in a previous Reserve Capacity Cycle; or
 - ii. for each other Early CRC Facility, the Indicative NAQ determined for the Facility in the Reserve Capacity Cycle immediately preceding the current Reserve Capacity Cycle; and

- (b) the Certified Reserve Capacity for the NAQ Facility or 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 or Indicative NAQ Facility under a prior step to a value up to the Highest Network Access Quantity for the NAQ Facility or Indicative NAQ Facility where this is greater than the preliminary Network Access Quantity determined for the NAQ Facility or Indicative NAQ Facility in a prior step,

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 NAQ Facility under a prior step to a value up to a value equal to the Certified Reserve Capacity for the NAQ Facility or 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) to the Network Access Quantity Model and the applicable Constraint Set for each such Facility, 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) where 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 associated with Availability Class 1 and Availability Class 2, 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. where 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.

Step 6: If the sum of the preliminary Network Access Quantity determined for each Facility that is associated with Availability Class 1 under all prior steps does not fully cover the capacity requirement of Availability Class 1, then:

- (a) add all remaining Facilities and Facility Upgrades, excluding any new Early CRC Facilities, associated with Availability Class 1 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 added in Step 6(a); then
- (c) select Facilities, subject to, where applicable, the preliminary Network Access Quantity determined for a Facility being not less than the Minimum Capacity Credits Quantity for the Facility (as specified under clause 4.14.1D), until the capacity requirement of Availability Class 1 is fully covered, applying the prioritisation order, if required, or until there are no Facilities left to be selected; then
- (d) remove any Facilities 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 selected under Step 6(c); and
 - ii. where 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.

For the purposes of Step 11, 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 in the Network Access Quantity Model associated with Availability Class 1 (except for any Facilities that were not selected due to the preliminary Network Access Quantity determined for the Facility being less than the Minimum Capacity Credits Quantity for the Facility as specified under clause 4.14.1D) but the capacity requirement of Availability Class 1 has not been covered, then record the difference as the capacity shortfall for Availability Class 1.

- Step 8: Calculate the capacity requirement of Availability Class 2.
- Step 9: If the sum of the preliminary Network Access Quantity determined for each Facility that is associated with Availability Class 2 under all prior steps does not fully cover the capacity requirement of Availability Class 2, then:
- (a) add all remaining Facilities associated with Availability Class 2 to the Network Access Quantity Model and any Facilities that were removed from the Network Access Quantity Model at Step 6(d); then
 - (b) using the Network Access Quantity Model and, subject to the NAQ rules, determine the preliminary Network Access Quantity for each Facility added at Step 9(a); then
 - (c) select Facilities, subject to, where applicable, the preliminary Network Access Quantity determined for a Facility being not less than the Minimum Capacity Credits Quantity for the Facility (as specified under clause 4.14.1D), in order of decreasing availability until the capacity requirement of Availability Class 2 is fully covered, applying the prioritisation order, if required, or until there are no Facilities left to be selected; then
 - (d) remove any Facilities not selected under Step 6(c) from the Network Access Quantity; then
 - (e) using the Network Access Quantity Model and, subject to the NAQ rules:
 - i. determine the preliminary Network Access Quantity for each Facility selected under Step 9(c); and
 - ii. where applicable, adjust the preliminary Network Access Quantity determined for a Facility under a prior step or Indicative Network Access Quantity for an Indicative NAQ Facility.

For the purposes of Step 11, Facilities that have not been selected under Step 9(c) will not be treated as a Facility for which a preliminary Network Access Quantity has been determined.

- Step 10: If a preliminary Network Access Quantity has been determined for each Facility in the Network Access Quantity Model associated with Availability Class 2 (except for any Facilities that were not selected due to the preliminary Network Access Quantity determined for the Facility being less than the Minimum Capacity Credits Quantity for the Facility as specified under clause 4.14.1D) but the capacity requirement of Availability Class 2 has not been covered, then record the difference as the capacity shortfall for Availability Class 2.

- Step 11: 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 12: For each Availability Class report the capacity shortfall, which indicates the amount to be procured through the Supplementary Reserve Capacity process in section 4.24.

Step 13: Add the Facilities referred to in Step 13(a) and (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 13(c) for that group of Facilities before adding the next group of Facilities and repeating Step 13(c) for that subsequent group of Facilities:

- (a) new Early CRC Facilities that are also Network Augmentation Funding Facilities and all Constraint Sets applicable to each Facility; 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 13(a); and
 - ii. determine the Indicative Network Access Quantity for each Facility in the group of Facilities described in Step 13(b).

Step 14: End.

Part B Candidate Fixed Price Facility

Step 1: Calculate the capacity requirement of Availability Class 1.

Step 2: Let the Network Access Quantity Model contain:

- (a) NAQ Facilities for Availability Class 1 and Availability Class 2;
- (b) where the NAQ Facilities include any Early CRC Facilities that are also Network Augmentation Funding Facilities, the applicable Constraint Set for each of those Facilities; and
- (c) Indicative NAQ Facilities.

Step 3: For:

- (a) the 2022 Reserve Capacity Cycle, AEMO must:

- i. undertake the processes in Steps 3A, 3B and 3C excluding:
 - 1. each NAQ Facility that is also a GIA Facility; and
 - 2. each Indicative NAQ Facility; then
 - ii. repeat Steps 3A, 3B and 3C with all NAQ Facilities and Indicative NAQ Facilities in accordance with the processes set out in those steps; and
- (b) subsequent Reserve Capacity Cycles, go to Step 3A.

Step 3A: Subject to the NAQ rules, using the Network Access Quantity Model determine the preliminary Network Access Quantity for each NAQ Facility and 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, for an Early CRC Facility is deemed to be:
 - i. for an Early CRC Facility that is also a Network Augmented Funding Facility, the preliminary Network Access Quantity determined for the Facility at Step 13(c)(i) in a previous Reserve Capacity Cycle; or
 - ii. for each other Early CRC Facility, the Indicative NAQ determined for the Facility in the Reserve Capacity Cycle immediately preceding the current Reserve Capacity Cycle; and
- (b) the Certified Reserve Capacity for the NAQ Facility or 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 or Indicative NAQ Facility under a prior step to a value up to the Highest Network Access Quantity for the NAQ Facility or Indicative NAQ Facility where this is greater than the preliminary Network Access Quantity determined for the NAQ Facility or Indicative NAQ Facility in a prior step,

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 NAQ Facility under a prior step to a value up to a value equal to the Certified Reserve Capacity for the NAQ Facility or 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) to the Network Access Quantity Model and the applicable Constraint Set for each such Facility, 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) where 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 associated with Availability Class 1 and Availability Class 2, excluding:
 - i. any new Early CRC Facilities; and
 - ii. any committed Candidate Fixed Price 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. where 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.

Step 6: If the sum of the preliminary Network Access Quantity determined for each Facility under all prior steps is:

- (a) less than the Reserve Capacity Requirement plus 3%, then go to Step 6A;
or
- (b) equal to or more than the Reserve Capacity Requirement plus 3%, then go to Step 6C.

Step 6A: Add all committed Candidate Fixed Price Facilities associated with Availability Class 1 and Availability Class 2 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 committed Candidate Fixed Price Facility; and
- (b) where 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.

Step 6B: If the sum of the preliminary Network Access Quantity determined for each Facility that is associated with Availability Class 1 under all prior steps does not fully cover the capacity requirement of Availability Class 1, then:

- (a) add the Facilities referred to in Step 6B(a)(i) and (ii) (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 Steps 6B(b), 6B(c), 6B(d) and 6B(e)(i) for that group of Facilities, and Step 6B(e)(ii) in respect to the Facilities referred to in Step 6B(e)(ii), before adding the next group of Facilities, if required, and repeating Steps 6B(b), 6B(c), 6B(d) and 6B(e)(i) for that subsequent group of Facilities, and Step 6B(e)(ii) in respect to the Facilities referred to in Step 6B(e)(ii):
 - i. any remaining Facilities associated with Availability Class 1 that are not committed or Candidate Fixed Price Facilities; then
 - ii. Candidate Fixed Price Facilities associated with Availability Class 1 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 in that group of Facilities; then
- (c) select Facilities from that group of Facilities, subject to, where applicable, the preliminary Network Access Quantity determined for a Facility in that group of Facilities being not less than the Minimum Capacity Credits Quantity for the Facility (as specified under clause 4.14.1D), until the capacity requirement of Availability Class 1 is fully covered, applying the prioritisation order, if required, or until there are no Facilities left to be selected; then
- (d) remove any Facilities not selected under Step 6B(c) from that group of Facilities 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 selected under Step 6B(c); and
- ii. where applicable, adjust the preliminary Network Access Quantity determined for a Facility 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 11, 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 6C: If the sum of the preliminary Network Access Quantity determined for each Facility that is associated with Availability Class 1 under all prior steps does not fully cover the capacity requirement of Availability Class 1, then:

- (a) add the Facilities referred to in Step 6C(a)(i), (ii) and (iii) (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 Steps 6C(b), 6C(c), 6C(d) and 6C(e)(i) for that group of Facilities, and Step 6C(e)(ii) in respect to the Facilities referred to in Step 6C(e)(ii), before adding the next group of Facilities, if required, and repeating Steps 6C(b), 6C(c), 6C(d) and 6C(e)(i) for that subsequent group of Facilities (as applicable), and Step 6C(e)(ii) in respect to the Facilities referred to in Step 6C(e)(ii):
 - i. Facilities associated with Availability Class 1 that are not committed or Candidate Fixed Price Facilities; then
 - ii. committed Candidate Fixed Price Facilities associated with Availability Class 1; then
 - iii. Candidate Fixed Price Facilities associated with Availability Class 1 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 in that group of Facilities; then
- (c) select Facilities from that group of Facilities subject to, where applicable, the preliminary Network Access Quantity for a Facility in that group of Facilities being not less than the Minimum Capacity Credits Quantity for the Facility (as specified under clause 4.14.1D), until the capacity requirement of Availability Class 1 is fully covered, applying the

prioritisation order, if required, or until there are no Facilities left to be selected; then

- (d) remove any Facilities not selected from the group of Facilities under Step 6C(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 selected under Step 6C(c); and
 - ii. where applicable, adjust the preliminary Network Access Quantity determined for a Facility under a prior step (other than a step in this Step 6C) or the Indicative Network Access Quantity for an Indicative NAQ Facility,

For the purposes of Step 11, Facilities that have not been selected under Step 6C(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 in the Network Access Quantity Model associated with Availability Class 1 (except for any Facilities that were not selected due to the preliminary Network Access Quantity determined for the Facility being less than the Minimum Capacity Credits Quantity for the Facility as specified under clause 4.14.1D) but the capacity requirement of Availability Class 1 has not been covered, then record the difference as the capacity shortfall for Availability Class 1.

Step 8: Calculate the capacity requirement for Availability Class 2.

Step 9: Based on the Facilities for which a preliminary Network Access Quantity has been determined under all prior steps (except for any facilities that were not selected due to the preliminary Network Access Quantity determined for the Facility being less than the Minimum Capacity Credits Quantity for the Facility as specified under clause 4.14.1D), determine if there is a shortfall for Availability Class 2. Go to Step 11 if there is no shortfall, otherwise go to:

- (a) Step 9A if no committed Candidate Fixed Price Facility was added to the Network Access Quantity Model at Step 6A; or
- (b) Step 9B if committed Candidate Fixed Price Facilities were added to the Network Access Quantity Model at Step 6A.

Step 9A: Add the Facilities referred to in Step 9A(a), (b), (c), (d), (e) and (f) (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 Steps 9A(g), 9A(h), 9A(i) and 9A(j)(i) for that group of Facilities, and

Step 9A(j)(ii) in respect to the Facilities referred to in Step 9A(j)(ii), before adding the next group of Facilities, if required, and repeating Steps 9A(g), 9A(h), 9A(i) and 9A(j)(i) (as applicable) for that subsequent group of Facilities, and Step 9A(j)(ii) in respect to the Facilities referred to in Step 9A(j)(ii):

- (a) any remaining committed Candidate Fixed Price Facilities associated with Availability Class 1 and any Facilities that were removed from the Network Access Quantity Model at Step 6C(d); then
- (b) committed Candidate Fixed Price Facilities associated with Availability Class 2; then
- (c) any remaining Facilities associated with Availability Class 1 that are not committed or Candidate Fixed Price Facilities; then
- (d) Facilities that are not committed or Candidate Fixed Price Facilities associated with Availability Class 2; then
- (e) any remaining Candidate Fixed Price Facilities associated with Availability Class 1 that are not committed; then
- (f) Candidate Fixed Price Facilities associated with Availability Class 2 that are not committed; then
- (g) using the Network Access Quantity Model and, subject to the NAQ rules, determine the preliminary Network Access Quantity for each Facility in that set of Facilities; then
- (h) select Facilities from that group of Facilities, subject to, where applicable, the preliminary Network Access Quantity for a Facility in that group of Facilities being not less than the Minimum Capacity Credits Quantity for the Facility (as specified under clause 4.14.1D), until the capacity requirement of Availability Class 2 is fully covered, applying the prioritisation order, if required, or until there are no Facilities left to be selected; then
- (i) remove any Facilities not selected under Step 6C(h) from the Network Access Quantity Model; then
- (j) using the Network Access Quantity Model and, subject to the NAQ rules:
 - i. determine the preliminary Network Access Quantity for each Facility selected under Step 9A(h); and
 - ii. where applicable, adjust the preliminary Network Access Quantity determined for a Facility under a prior step (other than a step in this Step 9A) , or the Indicative Network Access Quantity for an Indicative NAQ Facility ; then

go to Step 10.

For the purposes of Step 11, Facilities that have not been selected under Step 9A(h) will not be treated as a Facility for which a preliminary Network Access Quantity has been determined.

- Step 9B: Add the Facilities referred to in Step 9B(a), (b), (c) and (d) (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 Steps 9B(e), 9B(f), 9B(g) and 9B(h)(i) for each group of Facilities, and Step 9B(h)(ii) in respect to any other Facilities referred to in Step 9B(h)(ii), before adding the next group of Facilities, if required, and repeating Steps 9B(e), 9B(f), 9B(g) and 9B(h)(i) for that subsequent group of Facilities, and Step 9B(h)(ii) in respect of any other Facilities referred to in Step 9B(h)(ii):
- (a) any remaining Facilities that are not committed or Candidate Fixed Price Facilities associated with Availability Class 1 and any Facilities that were removed from the Network Access Quantity Model at Step 6B(d); then
 - (b) Facilities that are not committed or Candidate Fixed Price Facilities associated with Availability Class 2; then
 - (c) any remaining Candidate Fixed Price Facilities associated with Availability Class 1 that are not committed; then
 - (d) Candidate Fixed Price Facilities associated with Availability Class 2 that are not committed; then
 - (e) using the Network Access Quantity Model and, subject to the NAQ rules, determine the preliminary Network Access Quantity for each Facility in that set of Facilities; then
 - (f) select Facilities from that set of Facilities, subject to, where applicable, the preliminary Network Access Quantity for a Facility being not less than the Minimum Capacity Credits Quantity for the Facility (as specified under clause 4.14.1D) until the capacity requirement of Availability Class 2 is fully covered, applying the prioritisation order, if required, or until there are no Facilities left to be selected; then
 - (g) remove any Facilities not selected under Step 9B(f) from the Network Access Quantity Model; then
 - (h) using the Network Access Quantity Model and, subject to the NAQ rules:
 - i. determine the preliminary Network Access Quantity for each such Facility selected under Step 9B(f); and

- ii. where applicable, adjust the preliminary Network Access Quantity determined for a Facility under a prior step (other than a step in this Step 9B) or Indicative Network Access Quantity for an Indicative NAQ Facility.

For the purposes of Step 11, Facilities that have not been selected under Step 9B(f) will not be treated as a Facility for which a preliminary Network Access Quantity has been determined.

Step 10: If a preliminary Network Access Quantity has been determined for all Facilities in the Network Access Quantity Model associated with Availability Class 1 and Availability Class 2 (except for any Facilities that were not selected due to the preliminary Network Access Quantity determined for the Facility being less than the Minimum Capacity Credits Quantity for the Facility as specified under clause 4.14.1D) but the capacity requirement of Availability Class 2 has not been covered, then record the difference as the capacity shortfall for Availability Class 2.

Step 11: 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 12: For each Availability Class report the capacity shortfall, which indicates the amount to be procured through the Supplementary Reserve Capacity process in section 4.24.

Step 13: Add the Facilities referred to in Step 13(a) and (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 13(c) for that group of Facilities before adding the next group of Facilities and repeating Step 13(c) for that subsequent group of Facilities:

- (a) new Early CRC Facilities that are also Network Augmentation Funding Facilities and all Constraint Sets applicable to each Facility; 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 13(a); and

- ii. determine the Indicative Network Access Quantity for each Facility in the group of Facilities described in Step 13(b).

Step 14: End.

133. Appendix 5 amended

133.1 Appendix 5 is deleted and replaced with the following:

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:

- All references, apart from those in Step 5A, to meters are interval meters.
- 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 $v=v^*$.
- The New Notional Wholesale Meter, determined in accordance with Step 5A, is to be treated as a registered interval meter measuring Temperature Dependent Load.
- 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.
- 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”).

- 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.
- 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.
- 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 $-1 \times \min(0, \text{SOMS}(m, t))$, where $\text{SOMS}(m, t)$ is the Sent Out Metered Schedule of m in t.

Step 1: Calculate:

$$RR = \min(\text{RCR}, \text{CC})$$

$$FL = \text{FL_RCR} \times RR / \text{RCR}$$

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 $\text{NTDL}(u)$, where:

$\text{NTDL}(u)$ 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 $\text{TDL}(v)$, where:

$\text{TDL}(v)$ 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 clauses 4.28.8(c) or 4.28.8A, 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:

$$TDLn(v^*) = TDL(v^*) - \text{Sum}(v \in NM, NMTDCR(v))$$

Step 8: For each Market Participant i , calculate:

$$ILRCR(i) = \text{Sum}(ILRCR(w) \times d(w,i))$$

Step 8A: Calculate:

$$NRR = RR - \text{Sum}(i, ILRCR(i))$$

$$NTDL_Ratio = NRR / FL$$

Step 8B: For each Market Participant i , calculate:

$$NTDLRCR(i) = \text{Sum}(NTDL(u) \times d(u,i)) \times NTDL_Ratio$$

Step 8C: Calculate:

$$TDL_Ratio = (NRR - \text{Sum}(i, NTDLRCR(i))) / \text{Sum}(i, \text{Sum}(MTDL(v) \times d(v,i)))$$

where

$$MTDL(v) = TDL(v) \text{ for all } v \text{ except } v^* \text{ and}$$

$$MTDL(v) = TDLn(v^*) \text{ for } v=v^*$$

Step 8D: For each Market Participant i , calculate:

$$TDLRCR(i) = (\text{Sum } MTDL(v) \times d(v,i)) \times TDL_Ratio$$

Step 9: For each Market Participant i , calculate

$$X(i) = \text{Sum}(i, \text{ILRCR}(i) + \text{NTDLRCR}(i) + \text{TDLRCR}(i)) + \text{Sum}(u, \text{NMNTCR}(u) \times d(u,i)) + \text{Sum}(v, \text{NMTDCR}(v) \times d(v,i))$$

Step 10: Calculate:

$$\text{Total_Ratio} = \text{RR} / \text{Sum}(i, X(i))$$

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:

$$X(i) \times \text{Total_Ratio}$$

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 $(\text{NTDL}(u) \times \text{NTDL_Ratio} \times \text{Total_Ratio})$;
- (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 $(\text{TDL}(v) \times \text{TDL_Ratio} \times \text{Total_Ratio})$;
- (c) for meter u at a new connection point identified in Step 5 measuring Non-Temperature Dependent Load equals $(\text{NMNTCR}(u) \times \text{Total_Ratio})$; and
- (d) for meter v at a new connection point identified in Step 5 measuring Temperature Dependent Load equals $(\text{NMTDCR}(v) \times \text{Total_Ratio})$.

134. Appendix 6 amended

134.1 Clause (b) is deleted and replaced with the following:

- (b) If the minimum quantity in a STEM Price Curve is greater than the Net Bilateral Position of the Market Participant then extend the STEM Price Curve to include the range between the Net Bilateral Position and the minimum quantity in the STEM Price Curve where this range is priced at the Participant Interval Minimum STEM Price.

134.2 Clause (c) is deleted and replaced with the following:

- (c) If the maximum quantity in a STEM Price Curve is less than the Net Bilateral Position of the Market Participant then extend the STEM Price Curve to include the range between the maximum quantity in the STEM Price Curve and the Net Bilateral Position where this range is priced at the Participant Interval Maximum STEM Price.

135. Appendix 9 amended

135.1 Appendix 9 is deleted and replaced with the following:

Appendix 9: Relevant Level Determination

This Appendix presents the methodology for determining the Relevant Levels for Facilities that have applied for certification of Reserve Capacity under clause 4.11.2(b) for a given Reserve Capacity Cycle (“Candidate Facility”).

For the purposes of the Relevant Level determination in this Appendix 9:

- the full operation date of a Candidate Facility for the Reserve Capacity Cycle (“Full Operation Date”) is:
 - the date provided under clause 4.10.1(c)(iii)(7) or revised in accordance with clause 4.27.11A, where at the time the application for certification of Reserve Capacity is made the Facility, or part of the Facility (as applicable) is yet to enter service (excluding a component of a Facility that is an Electric Storage Resource for which Certified Reserve Capacity is not being assessed in accordance with the methodology in this Appendix 9); or
 - the date most recently provided for a Reserve Capacity Cycle under clause 4.10.1(k) otherwise; and
- a Candidate Facility, which could be a component of a Facility, will be considered to be:
 - a new candidate Facility, if the five year period identified in step 1(a) of this Appendix commenced before 8:00 AM on the Full Operation Date for the Facility (“New Candidate Facility”); or
 - an existing Candidate Facility (“Existing Candidate Facility”), otherwise.

AEMO must perform the following steps to determine the Relevant Level for each Candidate Facility:

Determining Existing Facility Load for Scheduled Generation

Step 1: Identify:

- (a) the five year period ending at 8:00 AM on 1 April of Capacity Year 1 of the relevant Reserve Capacity Cycle;
- (b) any 12 month period, from 1 April to 31 March, occurring during the five year period identified in step 1(a), where the 12 Trading Intervals with the highest Existing Facility Load for Scheduled Generation in that 12 month period have not previously been determined under this Appendix 9; and

- (c) any 12 month period, from 1 April to 31 March, occurring during the five year period identified in step 1(a), where the 12 Trading Intervals with the highest Existing Facility Load for Scheduled Generation in that 12 month period have previously been determined under this Appendix 9.

Step 2: Determine the quantity of electricity (in MWh) sent out by each Candidate Facility:

- (a) using Meter Data Submissions, where the Candidate Facility is a Semi-Scheduled Facility that does not contain an Electric Storage Resource component or a Non-Scheduled Facility that does not contain an Electric Storage Resource component;
- (b) using Meter Data Submissions and the Electric Storage Resource Metering required to be installed pursuant to clause 2.29.5BA where the Candidate Facility is a Semi-Scheduled Facility containing an Electric Storage Resource component, ensuring the quantity of electricity excludes any generation or consumption measured by the Electric Storage Resource Metering; and
- (c) using Meter Data Submissions, where the Candidate Facility is a Non-Scheduled Facility containing only an Electric Storage Resource component and is assessed under clause 4.11.2(b),

for each of the Trading Intervals in the period identified in step 1(b).

Step 3: For each Candidate Facility, identify any Trading Intervals in the period identified in step 1(b) where the Facility was directed to restrict its Injection under a Dispatch Instruction with a Dispatch Cap or Dispatch Target as published under clause 7.13.1C(a).

Step 4: For each Candidate Facility and Trading Interval identified in step 3 identify the higher of:

- (a) the actual quantity determined in step 2; and
- (b) if AEMO made a revised estimate under clause 7.13.7 that estimate, otherwise AEMO's estimate made under clause 7.13.6, provided that where the Candidate Facility is a Semi-Scheduled Facility containing an Electric Storage Resource component, the quantity of electricity the subject of the estimate or revised estimate excludes any generation or consumption measured by the Electric Storage Resource Metering.

Step 5: [Blank]

Step 6: [Blank]

Step 6A: [Blank]

Step 7: Determine for each Trading Interval in each 12 month period identified in step 1(b) the Existing Facility Load for Scheduled Generation (in MWh) as:

$(\text{Total_Generation} + \text{DSP_Reduction} + \text{Interruptible_Reduction} + \text{Involuntary_Reduction}) - \text{CF_Generation}$

where

Total_Generation is the total sent out generation of all Facilities, as determined from Meter Data Submissions;

DSP_Reduction is the total quantity of Deemed DSM Dispatch for all Demand Side Programmes for that Trading Interval;

Interruptible_Reduction is the total quantity by which all Interruptible Loads reduced the magnitude of their Withdrawal in accordance with Essential System Service provision, as recorded by AEMO under clause 7.13.1C(c);

Involuntary_Reduction is the total quantity of energy not served due to involuntary load shedding (manual and automatic), as recorded by System Management under clause 7.13.1C(b); and

CF_Generation is the total estimated energy output of all Candidate Facilities, as determined in step 2 or estimated in step 4.

Step 8: Determine for each 12 month period identified in step 1(b) the 12 Trading Intervals, occurring on separate Trading Days, with the highest Existing Facility Load for Scheduled Generation.

Step 9: Identify, for each 12 month period identified in step 1(c), the following:

- (a) the Existing Facility Load for Scheduled Generation previously determined under this Appendix 9 for each Trading Interval in the 12 month period;
- (b) subject to step 9A, the estimated energy output (in MWh) for each Candidate Facility and for each Trading Interval in that 12 month period, where that estimated energy output was used to determine the CF_Generation (which is one of the variables used to determine the Existing Facility Load for Scheduled Generation in step 7) for that Trading Interval; and
- (c) the 12 Trading Intervals occurring on separate Trading Days that were previously determined to have the highest Existing Facility Load for Scheduled Generation in the 12 month period.

Step 9A: For the purposes of step 9(b), if:

- (a) AEMO has determined a revised estimate under clause 7.13.7;

- (b) the revised estimate relates to a Candidate Facility and a Trading Interval in a 12 month period identified in step 1(c); and
- (c) AEMO determined the estimated energy output for that Candidate Facility and for that Trading Interval in accordance with step 4 before it revised the estimate,

then AEMO must redetermine the estimated energy output for that Candidate Facility and that Trading Interval in accordance with step 4.

Determining New Facility Load for Scheduled Generation

Step 10: For each New Candidate Facility determine, for each Trading Interval in the period identified in step 1(a) that falls before 8:00 AM on the Full Operation Date for the Facility, an estimate of the quantity of energy (in MWh) that would have been put out by the Facility 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 provided that where the Candidate Facility is a Semi-Scheduled Facility that contains an Electric Storage Resource component, the quantity of electricity the subject of the estimate or revised estimate excludes any generation or consumption measured by the Electric Storage Resource Metering. The estimates must reflect the estimates in the expert report provided for the Facility under clause 4.10.3, unless AEMO reasonably considers the estimates in the expert report to be inaccurate.

Step 11: For each New Candidate Facility determine, for each Trading Interval in the period identified in step 1(a), the New Facility Load for Scheduled Generation (in MWh) as:

- (a) if the Trading Interval falls before 8:00 AM on the Full Operation Date for the Facility:

$$\text{EFLSG} + \text{Actual_CF_Generation} - \text{Estimated_CF_Generation}$$

where

EFLSG is the Existing Facility Load for Scheduled Generation for the Trading Interval, determined in step 7 or identified in step 9(a) as applicable;

Actual_CF_Generation is the sent out generation of the New Candidate Facility for the Trading Interval, as identified in step 9(b), determined in step 2 or estimated in step 4; and

Estimated_CF_Generation is the quantity determined for the New Candidate Facility and the Trading Interval in step 10;

or

- (b) the Existing Facility Load for Scheduled Generation for the Trading Interval, otherwise.

Step 12: For each New Candidate Facility determine, for each 12 month period identified in step 1(a), the 12 Trading Intervals, occurring on separate Trading Days, with the highest New Facility Load for Scheduled Generation.

Determining the Facility Average Performance Level

Step 13: For each Existing Candidate Facility, determine the 60 quantities comprising:

- (a) the MWh quantities determined in step 2 or estimated in step 4, for each of the Trading Intervals determined in step 8, multiplied by 2 to convert to units of MW; and
- (b) the MWh quantities determined in step 9(b) for each of the Trading Intervals identified in step 9(c), multiplied by 2 to convert to units of MW.

Step 14: For each New Candidate Facility, determine the 60 quantities comprising:

- (a) the MWh quantities identified in step 9(b), determined in step 2 or estimated in step 4 for each of the Trading Intervals identified in step 12 that fall after 8:00 AM on the Full Operation Date for the Facility, multiplied by 2 to convert to units of MW; and
- (b) the MWh quantities determined in step 10 for each of the Trading Intervals identified in step 12 that fall before 8:00 AM on the Full Operation Date of the Facility, multiplied by 2 to convert to units of MW.

Step 15: Determine the average performance level (in MW) for each Candidate Facility f (“Facility Average Performance Level”) as the mean of the 60 quantities determined for Facility f in step 13 or step 14 as applicable.

Determine the Facility Adjustment Factor

Step 16: Determine the variance (in MW) for each Candidate Facility f (“Facility Variance”) as the variance of the MW quantities determined for Facility f in step 13 or step 14 as applicable.

Step 17: Determine the facility adjustment factor (in MW) for each Candidate Facility f (“Facility Adjustment Factor”) in accordance with the following formula:

Facility Adjustment Factor = $\min(G \times \text{Facility Variance (f)}, \text{Facility Average Performance Level (f)} / 3 + K \times \text{Facility Variance (f)})$

Where

$$G = K + U / \text{Facility Average Performance Level (f)}$$

K is determined in accordance with the following table:

Reserve Capacity Cycle	Capacity Year	K value
2012	2014/15	0.001
2013	2015/16	0.002
2014	2016/17	0.003
2015 onwards	From 2017/18 onwards	To be determined by the Economic Regulation Authority in accordance with clause 4.11.3C.

U is determined in accordance with the following table:

Reserve Capacity Cycle	Capacity Year	U
2012	2014/15	0.211
2013	2015/16	0.422
2014	2016/17	0.635
2015 onwards	From 2017/18 onwards	To be determined by the Economic Regulation Authority in accordance with clause 4.11.3C.

Determining the Relevant Level for a Facility

Step 18: Determine the Relevant Level for each Candidate Facility f (in MW) in accordance with the following formula:

$$\text{Relevant Level (f)} = \max(0, \text{Facility Average Performance Level (f)} - \text{Facility Adjustment Factor (f)})$$

Publication of information

Step 19: Publish on the WEM Website by 1 June of Year 1 of the relevant Reserve Capacity Cycle on a provisional basis:

- (a) a forecast of the Trading Intervals that may be identified in step 8; and
- (b) a forecast of the Existing Facility Load for Scheduled Generation quantities that may be determined in step 7.

Step 20: Publish on the WEM Website within three Business Days after the date specified in clause 4.1.11 (as modified or extended) for the relevant Reserve Capacity Cycle:

- (a) the Trading Intervals identified in step 8; and
- (b) the Existing Facility Load for Scheduled Generation quantities determined in step 7.

136.1 Appendix 11 is deleted and replaced with the following:

Appendix 11: [Blank]

136.2 In each place in the Market Rules listed in the Table, delete the word 'Market' and replace it with the word 'Rule'.

Table
Clause 2.37.1
Clause 2.37.2
Clause 2.37.3
Clause 2.37.4
Clause 2.37.4(a)
Clause 2.37.7
Clause 2.37.8 (the first, second, third, fourth and fifth place where it occurs)
Clause 2.38.1
Clause 2.38.1(b)
Clause 2.38.2 (in the first and second place where it occurs)
Clause 2.38.3 (in the first and second place where it occurs)
Clause 2.38.3(c) (in the first and second place where it occurs)
Clause 2.38.4
Clause 2.38.4(a)(i)
Clause 2.38.4(a)(iv)
Clause 2.38.5
Clause 2.38.7(a)
Clause 2.39.1
Clause 2.40.1
Clause 2.40.1(a)
Clause 2.40.1(b)
Clause 2.41.1
Clause 2.41.4
Clause 2.41.5
Clause 2.42.1 (in the first and second place where it occurs)
Clause 2.42.3
Clause 2.42.4
Clause 2.42.7
Clause 2.43.1(c)(iii)

137. Various clauses deleted

137.1 In each place in the Market Rules listed in the Table, delete the contents of the section or clause and replace them with the word '[Blank]'.

Table
Clause 2.9.7
Clause 2.17.1(v)
Clause 2.28.12
Clause 2.28.18
Section 3.13
Section 3.14
Clause 3.2.3

Clause 3.2.4
Clause 4.25.9(d)
Clause 4.26.2
Clause 4.26.2A
Clause 4.26.2B
Clause 4.26.5
Clause 4.28.8(b)
Clause 4.28.10
Section 4.28B
Clause 4.29.1A(b)(i)
Clause 4.29.2
Clause 4.29.4
Clause 4.9.9(b)
Clause 4.11.7
Clause 4.11.8
Clause 4.11.9
Clause 4.12.5
Clause 4.16.2
Section 4.17
Section 4.18
Section 4.19
Clause 4.20.1
Clause 4.20.2
Clause 4.20.3
Clause 4.20.4
Clause 4.20.5
Clause 4.20.5AA(d)
Clause 4.20.5C
Clause 4.20.5D
Clause 4.20.6
Section 4.21
Clause 6.2.8
Clause 6.3A.2
Clause 6.6.2A(b)
Clause 6.6.2A(c)
Section 6.13
Section 6.15
Section 6.16
Section 6.16A
Section 6.16B
Section 6.17
Section 6.19
Clause 6.21.2
Section 7.12
Clause 7.13.2
Clause 8.4.3
Clause 8.4.4
Clause 8.4.5
Clause 10.5.1(f)(vi)

Clause 10.7.1(a)

138. Various punctuation marks replaced

- 138.1 In each place in the Market Rules listed in the Table, delete the long dash (—) and replace it with a colon (:).

Table

Clause 2.14.5B

Clause 2.14.5C

Clause 4.11.1C

Clause 4.11.1C(b)

Clause 4.11.1C(b)(ii)

Clause 4.11.1D

Clause 4.11.1E

Clause 4.11.10A

Clause 4.11.10A(a)

Clause 4.26.1D

Clause 4.26.1D(b)

Clause 4.27.3

Clause 4.27.4

Clause 4.27.4A

139. Various references to Market Customer amended

- 139.1 In each place in the Market Rules listed in the Table, delete the words 'Market Customer' and replace it with 'Market Participant' and delete the words 'Market Customers' and replace it with 'Market Participants' as the case requires.

Table

4.13.11A

4.25A.1

4.25A.2

4.25A.5

4.26.2CB(a)

4.26.2CB(a)(ii)

4.26.2CB(a)

4.26.2CB(a)(ii)

4.26.2CE(a)

4.26.2CE(b)

4.26.2CG

4.26.2CH

4.28.2(b)

4.28.2(b)(i)

4.28.6

4.28.7

4.28.8

4.28.8(a)

4.28.8(c)(ii)

4.28.8A

4.28.8B

4.28.9A

4.28.9A(b)

4.28.9E(a)

4.28.9E(b)

4.28.11
