

TRANCHE 6: EXPOSURE DRAFT 2

PROPOSED WHOLESALE ELECTRICITY MARKET (WEM) AMENDING RULES

Explanatory Note for Exposure Draft 2 of the Tranche 6 Proposed WEM Amending Rules

This is the second of two Exposure Drafts of amendments to be included in the Tranche 6 WEM Amending Rules. The first Exposure Draft was published for consultation on 31 March 2022.

This Exposure Draft contains proposed Amending Rules for:

- new and amended transitional provisions;
- an updated list of Protected Provisions;
- changes to Outage management provisions;
- Real-Time Market changes, including changes to:
 - the provision of forecasts for Semi-Scheduled Facilities and Non-Scheduled Facilities;
 - Real-Time Market Submission obligations for Non-Scheduled Facilities;
 - dispatch arrangements for Demand Side Programmes; and
 - publication requirements;
- refinements to capacity refund and settlement calculations;
- the implementation of a new Market Information framework;
- the replacement of Appendix 1 (Standing Data);
- changes to the Generator Performance Standard rules and Appendix 12; and
- minor error corrections and enhancements across all the WEM Rules.

This Exposure Draft also includes the proposed Amending Rules from Exposure Draft 1, to provide a combined set of Tranche 6 Amending Rules and show any further amendments made in response to stakeholder feedback. The Exposure Draft 1 Amending Rules are shaded in grey except where further amendments have been made to a clause. Energy Policy WA is not seeking further submissions on the Exposure Draft 1 Amending Rules, which are provided for information only.

This Exposure Draft is divided into three parts, based on the expected commencement dates of the Amending Rules.

The draft rules presented in this Exposure Draft are pending legal review. Following industry consultation and legal review, the proposed Amending Rules in this Exposure Draft will be submitted to the Minister for Energy for making and gazettal in late 2022.

Energy Policy WA is seeking stakeholder feedback on this Exposure Draft by 5:00 PM (WST) on 14 September 2022. Feedback can be sent to energymarkets@energy.wa.gov.au.

Mark-up Colour guide:

Text in black	Rules that are in force
Text in green	Amending Rules that have been made and will commence on a specified date
Text in blue	Amending Rules that have been made but no commencement date has been specified (it is expected that most of these Amending Rules will be commenced close to or at commencement of the new market)
Text in red - <u>underlined</u> and strikethrough	New amendments proposed under Tranche 6

Explanatory Note

Market Suspension and Administered Pricing (proposed policy position, draft rules to be prepared and presented at the 24 August 2022 TDOWG meeting)

The WEM Rules (primarily Chapter 7) is proposed to be updated, as part of the Tranche 6 Amending Rules, to include, amongst other matters, provisions that govern:

- For what reasons the market should be suspended and the roles and responsibilities for decision makers;
- How facilities will be dispatched when the market is suspended;
- How participants will be paid for energy and essential system services during a market suspension event; and
- Consequential changes for settlement calculations and processes.

It is intended that AEMO will have the ability to suspend the market, and the scenarios under which they may do this, or the criteria they must consider in making that decision, will be set out in the WEM Rules. The scenarios where the market will be suspended are likely to include, but are not limited to:

- WEMDE failure;
- Real-time market system failure;
- Black system;
- Communications failure; or
- AEMO otherwise determines that it is impossible to operate the market in accordance with the WEM Rules.

The Ministers Emergency Powers to suspend the WEM Rules (as per section 2.44 of the current WEM Rules) will be retained. The Rules will also specify the criteria that must apply for a market suspension to be lifted.

AEMO will be required to publish a WEM Procedure prescribing the processes that it and other Market Participants must follow for the dispatch of Registered Facilities during a market suspension event, and the process that will be followed to return from a suspension. These processes may differ based on the reason for market suspension. This WEM Procedure will also set out how AEMO will communicate with Rule Participants and other relevant parties during a market suspension event.

During a market suspension event, administered pricing will apply. In the event of a medium term suspension (one week or less), the administered energy or ESS price for any given interval will be the real-time market clearing price for the same interval in the previous week. In the event of a longer term suspension (more than one week), the administered energy and ESS price will be the average real-time market clearing price from the previous calendar month.

Consequential changes will be required to the Chapter 9 (Settlement) and other parts of the WEM Rules as necessary to implement the market suspension and administered pricing framework.

Part 1. Amending Rules to commence on Gazettal

Explanatory Note

This part contains Amending Rules that are proposed to commence the day after the Gazettal of the Tranche 6 Amendments.

1.19. [Blank]

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

Explanatory Note

Clause 1.19A.1 is amended to correct a minor typographical error.

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

- (a) reflect the transfer of functions, powers, rights and obligations from Western Power, AEMO or the Rule Change Panel to the Transferee or another Transferee; or
- (b) maintain consistency between the WEM Procedure and these WEM Rules, without undertaking the Procedure Change Process.

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Explanatory Note

Section 1.36C is proposed to be amended so that it applies to amending rules that are made by the Minister and commenced on dates other than on the New WEM Commencement Day (i.e. 1 October 2023), when the new proposed general transitional provisions in sections 1.55 will apply to the amending rules commencing on that day. While there is arguably some cross-over between the obligations under sections 1.55 and 1.36C (e.g. compliance with the WEM Rules pre- and post-amendments), the sections are intended to address amendments to the WEM Rules that commence at different times.

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

~~**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, other than the New WEM Commencement Day, by notice published in the Government Gazette, that a Specific Amending Rule commences.~~

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

- 1.36C.2. Before 8:00 AM on ~~a Tranches 2 and 3 an~~ Amending Rules Commencement Day, notwithstanding that the Pre-Amended Rules continue to apply, each WEM Participant must perform all obligations imposed on that WEM Participant under the Post-Amended Rules, in relation to that ~~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 an~~ Amending Rules Commencement Day, notwithstanding that the Pre-Amended Rules continue to apply, a WEM Participant performs an obligation under the Post-Amended Rules under clause 1.36C.2, then to the extent that the obligation is performed, the WEM Participant is not required to perform any equivalent obligation under the Pre-Amended Rules to the extent that these obligations relate to that ~~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 an~~ Amending Rules Commencement Day, notwithstanding that the Pre-Amended Rules continue to apply, a WEM Participant is required to perform an obligation that relates to that ~~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~~ an Amending Rules Commencement Day, notwithstanding that the Post-Amended Rules apply, each WEM Participant must perform all obligations imposed on that WEM Participant under the Pre-Amended Rules, arising in relation to each Trading Day (or part of a Trading Day) up to but excluding that ~~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.~~

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Explanatory Note

Clauses 1.41.2, 1.41.12 and 1.41.14 are amended to replace the term “Template Generator Monitoring Plan” with “Generator Monitoring Plan Requirements” (see section 3A.6 for details of the reason for the change).

1.41. Generator Monitoring Plans for Existing Transmission Connected Generating Systems

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

- (b) meets the ~~requirements of the Template Generator Monitoring Plan~~ Generator Monitoring Plan Requirements as applicable to the Existing Transmission Connected Generating System other than in respect of variations that the Market Participant reasonably considers are required on the basis that:
 - i. compliance is not possible, or where doing so would impose unreasonable costs on the Market Participant; or
 - ii. an Existing Monitoring Plan includes a monitoring regime or requirements in respect of the relevant Technical Requirement.

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

- (a) the technical feasibility of the Existing Transmission Connected Generating System complying with the ~~Template Generator Monitoring Plan~~ Generator Monitoring Plan Requirements;
- (b) consistency of alternative testing methods proposed with good electricity industry practice including any contained in an Existing Monitoring Plan (if applicable);
- (c) the age of the Existing Transmission Connected Generating System, in particular the cost of imposing the standard testing method relative to the benefits gained over the expected remaining life of the Existing Transmission Connected Generating System;
- (d) the risk that the Existing Transmission Connected Generating System poses to power system security and reliability (considering size, location and technology type of generator);
- (e) the efficacy of an alternative proposed testing method (incorporating cost, risk and accuracy of alternative proposed testing method);
- (f) any advice from manufacturers and industry experts;
- (g) specific factors associated with the technology of the Existing Transmission Connected Generating System, including whether its performance is likely to drift or degrade over a particular timeframe, in which case more stringent monitoring may be required; and
- (h) whether the testing method or data source proposed by the Market Participant responsible for the Existing Transmission Connected Generating System as a modification to the ~~Template Generator Monitoring Plan~~ Generator Monitoring Plan Requirements was used to establish the compliance standard as part of the process to determine the Registered Generator Performance Standards for that Existing Transmission Connected Generating System.

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- 1.41.14. Where AEMO rejects a proposed Generator Monitoring Plan submitted in accordance with this section 1.41, AEMO:
- (a) must notify the Market Participant;
 - (b) must provide reasons to the Market Participant for the rejection; and
 - (c) may request amendments to the proposed Generator Monitoring Plan that it considers are required to meet the requirements of the ~~Template~~ Generator Monitoring Plan Generator Monitoring Plan Requirements or are otherwise satisfactory to AEMO taking into account the matters referred to in clause 1.41.12 where relevant.

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

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Explanatory Note

Clause 1.49.8 is amended to replace 'Load' with the appropriate term under the new registration taxonomy ('Non-Dispatchable Load').

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

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Explanatory Note

Section 1.52 is proposed to be amended as a consequence of the amendments to section 1.36C (see Explanatory Note to section 1.36C).

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

- 1.52.1. Notwithstanding any other provision of these WEM Rules:
- (a) a reference to each of the provisions specified in clauses 2.8.14(b), 2.8.14(c), 2.8.14(d) and 2.8.14(e) is a reference to a Specific Amending Rule (as defined in clause 1.36C.1);
 - (b) clauses 2.4.3B and 2.5.1D do not apply to a Specific Amending Rule specified in clause 1.52.1(a) until the Specific Amending Rule (as defined in clause 1.36C.1) is a Commenced ~~Tranches 2 and 3~~ Amending Rule (as defined in clause 1.36C.1); and
 - (c) for the purposes of this clause 1.52.1 a Specific Amending Rule (as defined in clause 1.36C.1) includes any subsequent amendment or

replacement of the Specific Amending Rule in a subsequent instrument made by the Minister under regulation 7(5) of the WEM Regulations.

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Explanatory Note

Section 1.55 is a general transitional provision that provides that all:

- acts, matters or things that need to be done with respect to obligations that will commence at the start of the new market (i.e. 1 October 2023) but are required to be done before that date are done (e.g. Scheduling Day activities); and
- acts, matters or things that need to be done with respect to obligations under the WEM Rules in force before commencement of the new market prior to commencement of the new market will be required to be done under the WEM Rules in force prior to commencement of the new market (e.g. settlement).

These are general 'catch-all' provisions to ensure that all relevant operational activities in respect of the current and new markets are able to be performed under the applicable WEM Rules.

1.55. General Transitional Provisions – Operational Matters

1.55.1. In this section 1.55:

Commenced Amending Rule: Means a Specific Amending Rule that has commenced on the New WEM Commencement Day.

New WEM Commencement Month: Means the Trading Month in which the New WEM Commencement Day falls.

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

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

Specific Amending Rule: Means an Amending Rule made by the Minister under regulation 7(5) of the WEM Regulations (whether made before or after the date this section 1.55 commenced) by a notice published in the Government Gazette as part of the program of work for the Wholesale Electricity Market and Constrained Network Access Reform.

1.55.2. Before 8:00 AM on the New WEM Commencement Day, notwithstanding that the Pre-Amended Rules continue to apply, each Rule Participant must, subject to clause 1.55.8, perform all obligations imposed on that Rule Participant under the Post-Amended Rules, in relation to the New WEM Commencement Day and subsequent Trading Days, that, if the Post-Amended Rules were in force, the Rule Participant would have been required to perform under the Post-Amended Rules. This includes, but is not limited to, obligations relating to:

(a) operation of the Real-Time Market under Chapter 7, including scheduling and dispatch of Market Services and Non-Co-optimised Essential System Services;

(b) PASA assessments and Outages under Chapter 3;

- (c) operation of the STEM under Chapter 6;
 - (d) administration of the market under Chapter 2;
 - (e) administration of the Reserve Capacity Mechanism under Chapter 4; and
 - (f) settlement under Chapter 9.
- 1.55.3. If before 8:00 AM on the New WEM Commencement Day, notwithstanding that the Pre-Amended Rules continue to apply, a Rule Participant performs an obligation under the Post-Amended Rules under clause 1.55.2, then to the extent that the obligation is performed, the Rule Participant is not required to perform any equivalent obligation under the Pre-Amended Rules to the extent that these obligations relate to the New WEM Commencement Day or subsequent Trading Days.
- 1.55.4. Before 8:00AM on the New WEM Commencement Day, notwithstanding that the Pre-Amended Rules continue to apply, a Rule Participant may, subject to clause 1.55.8, perform any of the discretionary actions that the Rule Participant is permitted to perform under the Post-Amended Rules, in relation to the New WEM Commencement Month and subsequent Trading Months, that, if the Post-Amended Rules were in force, the Rule Participant would be permitted to perform under the Post-Amended Rules.
- 1.55.5. If before 8:00 AM on the New WEM Commencement Day, notwithstanding that the Pre-Amended Rules continue to apply, a Rule Participant is required to perform an obligation that relates to the New WEM Commencement Day or any subsequent Trading Days that it will not be required to perform under the Post-Amended Rules, the Rule Participant is not required to perform the obligation to the extent that:
- (a) it relates to the New WEM Commencement Day or any subsequent Trading Days; and
 - (b) to the extent that the obligation will not apply under the Post-Amended Rules.
- 1.55.6. After 8:00 AM on the New WEM Commencement Day, notwithstanding that the Post-Amended Rules apply, each Rule Participant must, subject to clause 1.55.8, perform all obligations imposed on that Rule Participant under the Pre-Amended Rules, arising in relation to each Trading Interval (or part of a Trading Interval) in a Trading Day, each Trading Day (or part of a Trading Day) or each Trading Month (or part of a Trading Month) up to but excluding the New WEM Commencement Day, that, if the Pre-Amended Rules were in force, the Rule Participant would have been required to perform under the Pre-Amended Rules. This includes, but is not limited to, obligations relating to, or in connection with:
- (a) administration of the market under Chapter 2, including compliance monitoring and enforcement;
 - (b) dispatch under Chapter 7; and

(c) settlement under Chapter 9.

1.55.7. From the New WEM Commencement Day, notwithstanding that the Post-Amended Rules apply, each Rule Participant may, subject to clause 1.55.8, perform any of the discretionary actions that the Rule Participant is permitted to perform under the Pre-Amended Rules, in relation to each Trading Month up to but excluding the New WEM Commencement Month, that, if the Pre-Amended Rules were in force, the Rule Participant would have been permitted to perform under the Pre-Amended Rules.

1.55.8. Where a Rule Participant:

- (a) intends to perform an obligation under the Post-Amended Rules pursuant to clause 1.55.4 or the Pre-Amended Rules pursuant to clause 1.55.7; or
- (b) is required by clauses 1.55.2 or 1.55.6 or sections 1.56 or 1.57 to perform an obligation under the Pre-Amended Rules or the Post-Amended Rules, as applicable,

that utilises a market system or other software system maintained by AEMO, the Rule Participant is only permitted, or required, as applicable, to perform the obligation if the relevant market system or software system in respect of the obligation is available and fully operational, including all associated dependent links or interfaces, at the time the obligation is intended or required to be performed.

Explanatory Note

Clause 1.55.9 provides that in respect of any calculations or determinations made after the start of the new market that use data or information that was produced or exchanged under the WEM Rules in force before the start of the new market and there is a difference between defined terms in the pre-and post-new market data or information, then AEMO can apply the relevant defined term in the new market that is intended to apply for the purposes of that determination or calculation. For example, a Scheduled Generator under the WEM Rules in force before the start of the new market is defined as a Scheduled Facility under the WEM Rules that will apply from the start of the new market.

1.55.9. For any calculations or determinations under the Post-Amended Rules that requires or relies on data or other market related information or documents produced or exchanged under the Pre-Amended Rules that contains a term that is defined under the Pre-Amended Rules that does not exist or have the same meaning under the Post-Amended Rules, AEMO may:

- (a) use the term defined under the Post-Amended Rules that AEMO reasonably determines is intended to apply in respect of the relevant act, matter or thing, to give effect to the calculation or determination; and
- (b) apply and use the data or other market related information or documents in a manner consistent with, or to give effect to, the term to be used by AEMO pursuant to clause 1.55.9(a).

Explanatory Note

Clause 1.55.10 gives AEMO the power to reject, decline, not approve or withdraw its approval with respect to any activities that affect intervals before and after the start of the new market if it considers that Power System Security and Power System Reliability may be adversely affected. For example, Commissioning Test Plans.

1.55.10. Despite anything to the contrary in the Pre-Amended Rules, where any act, matter or thing is scheduled, expected or approved to occur before the New WEM Commencement Day or after the New WEM Commencement Day and AEMO reasonably determines that the act, matter or thing could adversely affect Power System Security or Power System Reliability from the New WEM Commencement Day, AEMO may:

- (a) reject, decline, or not approve, a request by a Market Participant for the act, matter or thing;
- (b) where the act, matter or thing was approved under the Pre-Amended Rules, notify the relevant Market Participant that AEMO's approval is withdrawn; or
- (c) direct a Rule Participant to cease doing the act, matter or thing.

Explanatory Note

Clause 1.55.11 clarifies the treatment of information in reports and other documents that contain information relating to periods falling before and after the start of the new market.

1.55.11. Notwithstanding any provision to the contrary, where a report or other document is required to be prepared under these WEM Rules that is to contain or be based on information concerning a period where the Pre-Amended Rules are in force and a period where the Post-Amended Rules will be in force, then:

- (a) the report or other document does not need to include information that is not required to be included in the report or document, as applicable, under the Post-Amended Rules; and
- (b) subject to clause 1.55.11(a), the report or document, as applicable, must contain or be based on the information relevant to the period where the Pre-Amended Rules were in force and the period where the Post-Amended Rules were in force even though the report or document may only be finalised or published (if applicable) under the Post-Amended Rules.

For the avoidance of doubt, for information based on a period where the Pre-Amended Rules were in force, AEMO may, acting reasonably, utilise or reflect that information in the report or document, as applicable, in a manner consistent with the utilisation or reflection of information based on a period under the Post-Amended Rules in that report or document, as applicable.

Explanatory Note

As section 1.36C is proposed to be amended to exclude amending rules made by the Minister that are commenced on the New WEM Commencement Day (as this section 1.55 will apply to those

provisions), clauses 1.55.12 and 1.55.13 (which are similar to clauses 1.36C.6 and 1.36C.7) address the situation where the interpretation or operation of an amending rule commenced on the New WEM Commencement Day relies on an amending rule that is not yet commenced. For example, a commenced amending rule refers to a definition that has not yet commenced. In those situations regard can be had to those yet to be commenced amending rules to interpret or give effect to the relevant amending rule.

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

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

Explanatory Note

To ensure a smooth transition to the new market arrangements, section 1.56 gives AEMO the power to create a Transition Schedule specifying the activities required to be done (and the dates and times by when such activities are to be done) under the WEM Rules that will apply from the start of the new market.

After obtaining the Coordinator's approval of the Transition Schedule, AEMO is required to publish the Transition Schedule on the WEM Website by 1 July 2023. AEMO may amend the schedule – including to add new activities or change the dates and times by when activities need to be done – with the Coordinator's approval.

1.56. Specific Transitional Provisions – Transition Schedule

1.56.1. In this section 1.56:

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

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

1.56.2. Subject to clause 1.56.3, by 5:00 PM on [1 July 2023], AEMO must determine, and publish on the WEM Website, a document ("**Transition Schedule**") specifying:

(a) the acts, matters or things to be done, which includes information to be provided or published, by AEMO and other Rule Participants relating to key operational activities under the Post-Amended Rules in respect of the Scheduling Day for the Trading Day that is also the New WEM Commencement Day and any subsequent Trading Day for which activities are required to be done before commencement of the Post-Amended Rules;

- (b) any other acts, matters or things to be done by AEMO or any other Rule Participant that are reasonably necessary or desirable to enable AEMO or any other Rule Participant to perform their respective functions under the Post-Amended Rules, including, without limitation:
- i. operation of the Real-Time Market;
 - ii. scheduling and dispatch of Market Services and Non-Co-optimised Essential System Services;
 - iii. PASA assessments and Outages;
 - iv. operation of the STEM;
 - v. administration of the market under Chapter 2;
 - vi. administration of the Reserve Capacity Mechanism under Chapter 4; and
 - vii. settlement under Chapter 9; and
- (c) the dates and times and, where applicable, the format, for when each of those acts, matters or things must be done.

1.56.3. Prior to publishing the Transition Schedule under clause 1.56.2, AEMO must obtain the Coordinator's approval of the Transition Schedule.

1.56.4. Subject to clause 1.56.5, AEMO may:

- (a) amend the Transitional Schedule to add or remove any acts, matters or things; and
- (b) modify or extend the dates or times for any one or more of the acts, matters or things specified in Transition Schedule by publishing an updated Transition Schedule on the WEM Website.

Any such further acts, matters or things, or modified or extended dates and times, take effect from the date that the updated Transition Schedule is published.

1.56.5. Prior to making any amendments to the Transition Schedule pursuant to clause 1.56.4, AEMO:

- (a) may consult with other Rule Participants or interested stakeholders on the proposed amendment; and
- (b) must obtain the Coordinator's approval to the proposed amendment.

Explanatory Note

Clause 1.56.6 provides that even though the Transition Schedule will require information to be provided and published with respect to various activities that will commence from the start of the new market – for example, Dispatch Schedules, Dispatch Targets and Dispatch Instructions – the relevant Market Participants will only need to comply with the effect of those activities – for example, following Dispatch Instructions – from the start of the new market.

1.56.6. Each Rule Participant must perform their obligations specified in the Transition Schedule by the dates and times, and in accordance with, the Transition Schedule.

Explanatory Note

The purpose of clauses 1.56.7 and 1.56.8 is to clarify that the activities specified in the Transition Schedule are to be done in accordance with the WEM Rules that will apply from the start of the new market, except where AEMO specifies in the Transition Schedule that an activity is to be done under the WEM Rules that apply before the start of the new market.

1.56.7. Except where expressed to be done under the Pre-Amended Rules or the WEM Procedures in place under the Pre-Amended Rules in the Transition Schedule, all acts, matters or things specified in the Transition Schedule are to be done in accordance with the Post-Amended Rules or the WEM Procedures under the Post-Amended Rules that will apply on and from the New WEM Commencement Day notwithstanding that at the time the act, matter or thing is done the Post-Amended Rules or the WEM Procedures under the Post-Amended Rules have not yet commenced.

1.56.8. Without limiting clause 1.56.7, where any assessment or determination, which includes a decision to accept, approve or reject, specified in the Transition Schedule to be done by AEMO prior to the New WEM Commencement Day affects periods falling both before and after the New WEM Commencement Day, AEMO may specify in the Transition Schedule whether the act, matter or thing is to be done by AEMO in accordance with the Pre-Amended Rules or the Post-Amended Rules notwithstanding that at the time the act, matter or thing is done the Post-Amended Rules have not yet commenced.

Explanatory Note

To avoid duplication of published material, clause 1.56.9 gives AEMO the discretion to not have to publish information under WEM Rules that will apply from the start of the new market where the information has already been published in accordance with the WEM Rules that apply prior to the start of the new market.

1.56.9. Any information to be published by AEMO pursuant to the Transition Schedule under the Post-Amended Rules may, but is not required, to include any information that is also published under the Pre-Amended Rules.

Explanatory Note

Clause 1.56.10 gives AEMO the discretion to publish a single settlement timeline for the settlement dates (and adjustments) under the WEM Rules that apply before the start of the new market and the WEM Rules that apply from the start of the new market.

The general transitional provisions in section 1.55 provide that settlement and associated adjustments for Trading Months (or parts thereof) before the start of the new market will be carried out in accordance with the WEM Rules that apply before the start of the new market, even though those settlements and adjustments will take place after the start of the new market.

1.56.10. For the settlement cycle timeline, which includes associated adjustment processes, to be published by AEMO pursuant to the Transition Schedule, AEMO may, but is not required to, publish a single timeline that sets out the settlement cycle timeline in respect of:

(a) each Trading Month (or part of a Trading Month) in the Financial Year that is to be settled under the Pre-Amended Rules;

(b) each Trading Week (or part of a Trading Week) in the Financial Year that is to be settled under the Post-Amended Rules,

provided that the timeline must comply with:

(c) the requirements in section 9.16 of the Pre-Amended Rules for each period referred to in clause 1.56.10(a); and

(d) the requirements in section 9.3 of the Post-Amended Rules for each period referred to in clause 1.56.10(b).

AEMO may amend the dates in the timeline if AEMO considers that the New WEM Commencement Day will be different from the date AEMO expects will be specified by the Minister at the time the most recent timeline was published. The amended settlement timeline will take effect from the date the amended timeline is published.

1.57. Specific Transitional Provisions – Key Operational Matters

1.57.1. In this section 1.57:

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

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

Explanatory Note

Clause 1.57.2(a) provides that Synergy's Dispatch Plan is not required to contain any periods after the start of the new market and, if it does, Synergy is not required to follow the Dispatch Plan for those intervals.

Clause 1.57.2(b) requires Market Participants to ensure their market-related submissions before and after the start of the new market are consistent.

Clause 1.57.2(c) requires Market Participants (except Synergy) to ensure their market-related submissions after the start of the new market are consistent with any Ancillary Service Contracts in force prior to the start of the new market.

1.57.2. Without limiting section 1.56:

(a) the Dispatch Plan for Synergy under the Pre-Amended Rules is not required to contain any Trading Intervals with effect from the New WEM Commencement Day, but to the extent it does contain any such Trading Intervals, Synergy is not required to comply with the Dispatch Plan for those Trading Intervals from 08:00 AM on the New WEM Commencement Day;

- (b) each Market Participant must make reasonable endeavours to ensure its Balancing Submissions and LFAS Submissions, as applicable, under the Pre-Amended Rules for each Trading Interval falling within the period seven Trading Days prior to the New WEM Commencement Day are consistent with the Market Participant's Real-Time Market Submissions under the Post-Amended Rules that take effect from the New WEM Commencement Day; and
- (c) each Market Participant, other than Synergy, that is subject to an Ancillary Service Contract that is in force under the Pre-Amended Rules as at the New WEM Commencement Day must make reasonable endeavours to ensure that the Market Participant's Real-Time Market Submissions are consistent with the terms of each such Ancillary Service Contract until the end of the last Trading Interval at the end of the New WEM Commencement Day.

Explanatory Note

Clause 1.57.3 requires Market Participants that are scheduled or expected to be dispatched at the start of the new market (i.e. 8:00 AM on 1 October 2023) to ensure their Facilities are ready and able to comply with the relevant Dispatch Instruction applicable to that interval.

- 1.57.3. Where a Reference Scenario for a Pre-Dispatch Interval or Dispatch Interval specified in the Transition Schedule published in accordance with section 1.56 determines that a Registered Facility will be cleared to provide a Market Service in the first Dispatch Interval of the New WEM Commencement Day, the Market Participant must ensure that its Registered Facility is ready and able to provide the Market Service in accordance with the Dispatch Instruction that will take effect from commencement of that Dispatch Interval.

Explanatory Note

Clause 1.57.4 requires AEMO to consider the expected dispatch of Synergy's Facilities from the start of the new market when scheduling and dispatching the Balancing Portfolio prior to the start of the new market.

- 1.57.4. For each Trading Interval that falls within three Trading Days prior to the New WEM Commencement Day, AEMO must, when scheduling and dispatching Registered Facilities in the Balancing Portfolio under the Pre-Amended Rules:
- (a) take into account the expected dispatch of each such Registered Facility with effect from the New WEM Commencement Day; and
- (b) make reasonable endeavours to ensure that notwithstanding the information provided by Synergy under clause 7.6A.2 of the Pre-Amended Rules, that each such Registered Facility is dispatched in a manner that will enable the Registered Facility to comply with the Dispatch Instruction for that Registered Facility that will take effect from the commencement of the first Dispatch Interval of the New WEM Commencement Day.

Explanatory Note

Clause 1.57.5 gives AEMO the power to dispatch Facilities out of merit in the lead up to the start of the new market (between 4:00 AM and 8:00 AM on 1 October 2023) to ensure that Facilities which are expected to be dispatched from the start of the new market are ready to provide the relevant Market Service having regard to the ramp rates applicable to the Facility.

1.57.5. Notwithstanding the provisions of the Pre-Amended Rules, between the start of the 4:00 AM Trading Interval and the end of the 7:30 AM Trading Interval on the Trading Day immediately prior to the New WEM Commencement Day, AEMO may dispatch a Registered Facility Out of Merit where the:

- (a) expected position of the Registered Facility pursuant to the last Dispatch Instruction issued to the Registered Facility during those Trading Intervals; and
- (b) expected starting dispatch position of the Registered Facility pursuant to a Dispatch Instruction under the Post-Amended Rules for the first Dispatch Interval of the New WEM Commencement Day,

differs by more than the Ramp Rate Limit of the Registered Facility as specified in the Standing Data for the Registered Facility at the relevant time.

Explanatory Note

Clause 1.57.6 provides that any Market Advisories and Dispatch Advisories that are still in place prior to the start of the new market are deemed to be withdrawn. However, AEMO is required to assess whether the circumstances that gave rise to those advisories is continuing and, if so, issue a Market Advisory in accordance with the WEM Rules that apply from the start of the new market.

1.57.6. In respect of any Market Advisories or Dispatch Advisories issued under the Pre-Amended Rules that are still in force at the New WEM Commencement Day:

- (a) each such Market Advisory and Dispatch Advisory will be deemed to be withdrawn under the Pre-Amended Rules and will cease to apply from the New WEM Commencement Day; and
- (b) prior to the New WEM Commencement Day, AEMO must assess, in the context of the criteria set out in section 7.11 of the Post-Amended Rules, whether the matters or circumstances specified in those Market Advisories or Dispatch Advisories continue to apply. Where the matter or circumstance continues to apply, AEMO must issue a Market Advisory in respect of that matter or circumstance in accordance with section 7.11 of the Post-Amended Rules.

Explanatory Note

Clause 1.57.7(a) requires that until the start of the new market, AEMO must use the Medium Term PASA for periods in it that fall after the start of the new market, and can have regard to the information in any the Medium Term PASA in anticipation of the new market.

Clause 1.57.7(b) gives AEMO the discretion after the start of the new market to consider any information in the Medium Term PASA carried out under the WEM Rules that apply prior to the start of the new market in respect of any periods after the start of the new market but AEMO is not

obliged to use the information.

1.57.7. For the purposes of carrying out a Medium Term PASA study or assessment under section 3.16 of the Pre-Amended Rules or the Post-Amended Rules:

(a) until the New WEM Commencement Day, AEMO:

- i. must use the Medium Term PASA carried out under the Pre-Amended Rules in respect to any periods in that Medium Term PASA falling after the New WEM Commencement Day; and
- ii. may take into account information in any Medium Term PASA carried out under the Post-Amended Rules in respect to any periods in that Medium Term PASA falling on or after the New WEM Commencement Day; and

(b) after the New WEM Commencement Day, AEMO may, but is not required to, consider information in any Medium Term PASA carried out under the Pre-Amended Rules with respect to any Trading Interval commencing on or after the New WEM Commencement Day.

Explanatory Note

Clause 1.57.8 gives AEMO the discretion to consider any information in the Short Term PASA or the Medium Term PASA carried out under the WEM Rules that apply before the start of the new market for the purpose of any assessments or determinations relating to matters involving Power System Security and Power System Reliability under the WEM Rules that will apply from the start of the new market.

1.57.8. For the purposes of any assessments or determinations by AEMO prior to the New WEM Commencement Day relating to or in connection with Power System Security and Power System Reliability under the Post-Amended Rules for any period after the New WEM Commencement Day, AEMO may take into account information in any PASA carried out under the Pre-Amended Rules or the Post-Amended Rules that relates to Trading Intervals commencing on or after the New WEM Commencement Day.

Explanatory Note

Clauses 1.57.9, 1.57.10 and 1.57.11 establish a framework for the conversion and verification of outage data from the current market systems to the new market systems. AEMO is required to set out the relevant processes, steps and actions in a procedure and publish the procedure on the WEM Website.

The procedure is not a 'WEM Procedure' as defined in the WEM Rules. Even though the current WEM Rules relating to WEM Procedures will not apply to the 'Outage Data Conversion Procedure', clause 1.57.11 requires AEMO to consult with relevant stakeholders, including the Coordinator and other Rule Participants, in the process of documenting the procedure.

1.57.9. AEMO must transfer and convert, as applicable, data and other information relating to or in connection with Outages under the Pre-Amended Rules to the relevant systems under the Post-Amended Rules ("**Outage Data Conversion**") that AEMO determines is necessary or desirable to:

- (a) enable AEMO to perform its functions in respect of Outages under Chapter 3 of the Post-Amended Rules;
- (b) enable a Market Participant to comply with its obligations in respect of Outages under Chapter 3 of the Post-Amended Rules; and
- (c) enable a Network Operator to comply with its obligations in respect of Outages under Chapter 3 of the Post-Amended Rules.

1.57.10. AEMO must document, and publish on the WEM Website, the procedure ("**Outage Data Conversion Procedure**") in respect of the Outage Data Conversion by the date and time specified in the Transition Schedule. The Outage Data Conversion Procedure must include, without limitation:

- (a) the processes to be followed by AEMO (which AEMO must follow), including how AEMO will convert any Outage-related data and other information having regard to any differences between the defined terms and requirements under the Pre-Amended Rules and the Post-Amended Rules;
- (b) the processes to be followed by Market Participants (which Market Participants must follow), including with respect to any Outage-related data or information that the Market Participant must review or submit to AEMO for assessment;
- (c) the processes and obligations with respect to the provision or management of any Outage-related data and information that is required to be provided but is to be excluded from the Outage Data Conversion;
- (d) the dates and times by which acts, matters and things must be done, which may be specified in the Transition Schedule; and
- (e) any other matters AEMO considers relevant.

For the avoidance of doubt, the Outage Data Conversion Procedure is not a WEM Procedure for the purposes of the Pre-Amended Rules or the Post-Amended Rules and consequently none of the provisions applying to WEM Procedures under the Pre-Amended Rules or the Post-Amended Rules will apply to the procedure.

1.57.11. In documenting the procedure referred to in clause 1.57.10, AEMO must:

- (a) consult with the Coordinator and other Rule Participants; and
- (b) take into account any feedback from the Coordinator or other Rule Participants.

Explanatory Note

Clause 1.57.12 clarifies that Rule Participants are only required to comply with the WEM Rule relating to Outage Intention Plans from 1 January 2025.

1.57.12. Despite anything to the contrary in the Post-Amended Rules, on and from the New WEM Commencement Day, AEMO and other Rule Participants are not required to comply with their respective obligations specified in:

(a) clauses 3.18C.5(b) and 3.18C.12(c);

(b) section 3.19; and

(c) any other provisions relating to Outage Intention Plans under the Post-Amended Rules,

until after 1 January 2025.

Explanatory Note

Clause 1.57.13 gives AEMO the power to reject any applications for registration as a Market Participant or for registration or transfer of a Facility where the registration process will not be fully completed by the start of the new market. After the start of the new market, Applicants will need to submit a 'rejected' application in accordance with the WEM Rules that will apply from the start of the new market.

1.57.13. Despite anything to the contrary in the Pre-Amended Rules, if, prior to the New WEM Commencement Day, a person submits an application for registration as a Market Participant under section 2.28 or for a Facility under section 2.29, or for a Facility transfer or de-registration as a Rule Participant or a Facility under section 2.31 of the Pre-Amended Rules and AEMO reasonably determines that the registration, transfer or de-registration process, as applicable, will not be fully completed prior to the New WEM Commencement Day, then:

(a) AEMO may reject the application; and

(b) the person who submitted the application must submit a new application in accordance with the relevant Post-Amended Rules after the New WEM Commencement Day.

Explanatory Note

The intent of new proposed section 1.58 is to ensure that information produced or exchanged under the current WEM Rules maintains the same confidentiality status in the new market, but only in so far as the information was produced or exchanged under the current WEM Rules. In other words, the same or similar types of information or documents produced or exchanged under the WEM Rules that will apply from the start of the new market may be assigned a different confidentiality status (e.g. a type of information is confidential under the current WEM Rules but is to be public for the same type of information produced under the new WEM Rules).

However, as market related information will be classified only as either Confidential Information or Public Information under the new Chapter 10 Market Information Framework, the six different confidentiality classes as per the current classifications (listed in sub-clause 1.58.3(a)) will be treated as Confidential Information under the new framework.

Any market related information or documents produced or exchanged under the current WEM Rules or WEM Procedures that is not specified in the list published by AEMO on the WEM Website (which was last updated as at 1 July 2012) or otherwise prescribed a confidentiality status pursuant to the current WEM Rules or WEM Procedures, will be managed by the new Information Manager in accordance with the new Chapter 10 Market Information Framework.

1.58. Specific Transitional Provisions – Market Information

1.58.1. In this section 1.58:

Confidentiality Status List: Means the document published by AEMO on the WEM Website specifying the confidentiality status of market related information and documents produced or exchanged in accordance with the Pre-Amended Rules or WEM Procedures set by AEMO pursuant to Chapter 10 of the Pre-Amended Rules.

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

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

WEM Procedures: Means the WEM Procedures as in force under the Pre-Amended Rules immediately prior to the New WEM Commencement Day.

1.58.2. On and from the New WEM Commencement Day, AEMO must continue to publish the Confidentiality Status List on the WEM Website that was published on the WEM Website immediately prior to the New WEM Commencement Day.

1.58.3. On and from the New WEM Commencement Day:

(a) all market related information and documents specified in the Confidentiality Status List as:

- i. Rule Participant Market Restricted;
- ii. Rule Participant Dispatch Restricted;
- iii. System Operation Confidential;
- iv. AEMO Confidential;
- v. Rule Participant Network Restricted; and
- vi. Coordinator Restricted,

in accordance with clause 10.2.1 and sections 10.7, 10.8 and 10.9 of the Pre-Amended Rules, as applicable, or otherwise prescribed to be so classified pursuant to the Pre-Amended Rules or WEM Procedures, will, on and from the New WEM Commencement Day, be deemed to be classified as Confidential Information by the Information Manager pursuant to Chapter 10 of the Post-Amended Rules, but only in so far as the market related information and documents was produced or exchanged under the Pre-Amended Rules or WEM Procedures;

(b) all market related information and documents specified in the Confidentiality Status List as Public in accordance with clause 10.2.1 and section 10.5 of the Pre-Amended Rules, or otherwise prescribed to be so classified pursuant to the Pre-Amended Rules or WEM Procedures, will, on and from the New WEM Commencement Day, be deemed to be classified

as Public Information by the Information Manager pursuant to Chapter 10 of the Post-Amended Rules; and

- (c) all other market related information and documents produced or exchanged in accordance with the Pre-Amended Rules or WEM Procedures is to be managed by the Information Manager in accordance with Chapter 10 of the Post-Amended Rules on and from the New WEM Commencement Day notwithstanding that the market related information and documents was produced or exchanged in accordance with the Pre-Amended Rules or WEM Procedures.

For the avoidance of doubt, all market related information and documents produced or exchanged under the Post-Amended Rules (however described) will be managed by the Information Manager pursuant to Chapter 10 of the Post Amended Rules, which could result in market related information and documents being set or assigned a confidentiality status under the Post-Amended Rules that is different to the confidentiality status set for the same or similar type of market related information and documents produced or exchanged under the Pre-Amended Rules.

...

2.1A. Australian Energy Market Operator

...

Explanatory Note

The *Wholesale Electricity Market Amendment (Tranches 2 and 3 Amendments) Rules 2020 (Tranches 2 and 3 Amendments)* include the replacement of clauses 2.1A.2(IF) and 2.1A.2(IG) (Schedule C, paragraph 8.5), but the Amending Rule will not commence because clause 2.1A.2(IG) does not exist. Clause 2.1A.2 is therefore amended to:

- make the minor clarification to clause 2.1A.2(IF) proposed in the Tranches 2 and 3 Amendments (to reflect the potential for multiple Networks); and
- insert new clause 2.1A.2(IG), based on the 'replacement' clause 2.1A.2(IG) in the Tranches 2 and 3 Amendments.

2.1A.2. The WEM Regulations also provide for the WEM Rules to confer additional functions on AEMO. The functions conferred on AEMO are:

...

- (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 ~~the~~ their Network; ~~and~~

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

...

...

2.2C. Network Operators

Explanatory Note

The Tranches 2 and 3 Amendments include the replacement of clause 2.2C.1(bA) (Schedule C, paragraph 9.1), but the Amending Rule will not commence because clause 2.2C.1(bA) does not exist. Clause 2.2C.1 is therefore amended to insert new clause 2.2C.1(bA), based on the 'replacement' clause 2.2C.1(bA) in the Tranches 2 and 3 Amendments.

2.2C.1. The WEM Regulations provide for the WEM Rules to confer functions on registered participants of a specified class. The functions conferred on each Network Operator are to:

(a) calculate and provide Loss Factors to AEMO;

(b) provide Limit Advice to AEMO;

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

...

...

2.10. Procedure Change Process

...

Explanatory Note

Clause 2.10.8 is amended to use standard formatting.

2.10.8. ~~[blank]~~[Blank]

Explanatory Note

Clause 2.10.9 is amended to remove an unnecessary sub-clause.

2.10.9. The independent Chair of the Market Advisory Committee must convene a meeting of the Market Advisory Committee concerning any Procedure Change Proposal before the due date for submissions in relation to the Procedure Change Proposal if:

(a) the independent Chair, the Coordinator, AEMO or the Economic Regulation Authority considers that advice on the Procedure Change Proposal is required from the Market Advisory Committee;

(aA) a Network Operator considers that advice on the Procedure Change Proposal prepared by a Network Operator is required from the Market Advisory Committee;

~~(aB)~~—[Blank]

- (b) two or more members of the Market Advisory Committee have informed the independent Chair in writing that they consider that advice on the Procedure Change Proposal is required from the Market Advisory Committee.

...

2.16. Monitoring the Effectiveness of the Market

...

Explanatory Note

Clause 2.16.9 is amended to remove unnecessary sub-clauses.

2.16.9. The Economic Regulation Authority must investigate any market behaviour if it considers that the behaviour has resulted in the market not functioning effectively. The Economic Regulation Authority, with the assistance of AEMO, must monitor:

- (a) Ancillary Service Contracts that AEMO enters into and the criteria and process that AEMO uses to procure Ancillary Services from other persons;
and
- (b) inappropriate and anomalous market behaviour, including behaviour related to market power and the exploitation of shortcomings in the WEM Rules or WEM Procedures by Rule Participants:
 - ~~i. [Blank]~~
 - ~~ii. [Blank]~~
 - ~~iii. [Blank]~~
 - ~~iv. [Blank]~~
 - ~~v. [Blank]~~
- ~~(c) [Blank]~~
- ~~(d) [Blank]~~

...

Explanatory Note

The unnecessary clause 2.16.9H is deleted.

~~2.16.9H. [Blank]~~

...

Explanatory Note

Clause 2.16.13D is amended to set an explicit deadline for the Coordinator to deliver their first report to the Minister on the effectiveness of the market. In the context of the delayed New WEM Commencement Day to 1 October 2023, the proposed deadline of 1 July 2025 has been set to allow time for the new market arrangements to bed in after New WEM Commencement Day and provide sufficient historical data for a meaningful assessment and consultation with stakeholders.

The amendment to clause 2.16.13D is expected to commence immediately after gazettal of the Tranche 6 Amending Rules.

2.16.13D. The Coordinator must provide to the Minister a report dealing with the matters identified in clause 2.16.13A and 2.16.13B at least once in every three years, with the first such report due by 1 July 2025.

...

Explanatory Note

Clause 2.16.15A is amended to correct a reference error.

2.16.15A. Where the Coordinator provides a report to the Minister in accordance with clause ~~2.16.13C~~ 2.16.13D, it must, after consultation with the Minister, publish a version of the report which has confidential or sensitive data aggregated or removed

...

2.23. [Blank]

Explanatory Note

Clause 2.23 is amended to delete redundant subclauses 2.23.1 to 2.23.14 inclusive.

~~2.23.1. [Blank]~~

~~2.23.2. [Blank]~~

~~2.23.3. [Blank]~~

~~2.23.4. [Blank]~~

~~2.23.5. [Blank]~~

~~2.23.6. [Blank]~~

~~2.23.7. [Blank]~~

~~2.23.8. [Blank]~~

~~2.23.8A. [Blank]~~

~~2.23.8B. [Blank]~~

~~2.23.9. [Blank]~~

~~2.23.10. [Blank]~~

~~2.23.11. [Blank]~~

~~2.23.12. [Blank]~~

~~2.23.13. [Blank]~~

~~2.23.14. [Blank]~~

...

2.24. Determination of Market Fees

...

Explanatory Note

Clause 2.24.3 is amended to correct a punctuation error (full stop instead of comma after “System Operation Fee rate”).

2.24.3. At the same time as AEMO publishes a level of revised Market Fee rate, System Operation Fee rate, Coordinator Fee rate or Regulator Fee rate (as applicable), AEMO must also publish an estimate of the total amount of revenue to be earned from:

- (a) Market Fees collected for:
 - i. [Blank]
 - ii. AEMO's:
 - 1. market operation services;
 - 2. system planning services; and
 - 3. market administration 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.7 or as adjusted under clause 2.24.2A;

...

...

Explanatory Note

In practice, it is problematic to separate out the Coordinator's costs relating to its functions under clause 2.2D.1(j) (undertake reviews and consultation as required under these WEM Rules) from its costs relating to the functions listed in clause 2.24.5E(b) (e.g. the functions under clauses 2.2D.1(g) (develop amendments to these WEM Rules and replacements for them) and 2.2D.1(h) (consider and, in consultation with the MAC, progress the evolution and development of the WEM and these WEM Rules)). Clause 2.24.5E is therefore amended to extend the list in clause

2.24.5E(b) to include the functions described in clause 2.2D.1(j).

2.24.5E For the purposes of clause 2.24.5C(b), the Coordinator need not separately publish the proportion of costs corresponding to the function described in clause 2.2D.1(d) and may consolidate the costs corresponding to the following groups of functions:

- (a) the functions described clauses 2.2D.1(a) and 2.2D.1(b); and
- (b) the functions described in clauses 2.2D.1(c), ~~and~~ 2.2D.1(f) to 2.2D.1(i) inclusive, and 2.2D.1(j).

...

2.26. Economic Regulation Authority Review of Methodology for Setting Administered Prices

Explanatory Note

Clause 2.26.3 is amended to correct minor typographical errors.

- 2.26.3. At least once in every five years, the Economic Regulation Authority must review the methodology for setting the Benchmark Reserve Capacity Price and the Energy Price Limits. A review must examine:
- (a) the level of competition in the market;
 - (b) the level of market power being exercised and the potential for the exercise of market power;
 - (c) the effectiveness of the methodology in curbing the use of market power;
 - (d) [Blank];
 - ~~(dA) [Blank];~~
 - ~~(dB) [Blank];~~
 - (e) historical STEM Bids and STEM Offers and the proportion of STEM Bids and Offers with prices equal to the Energy Price Limits;
 - (eA) the Bids and Offers with prices equal to the Energy Price Limits submitted for Facilities which have received Constraint On payments in the Trading Intervals to which the Bids and Offers applied;
 - (f) the appropriateness of the parameters and methodology in section 4.16 and the WEM Procedure referred to in clause 4.16.3 for recalculating the Benchmark Reserve Capacity Price;
 - (g) the appropriateness of the parameters and methodology in section 6.20 for recalculating the Energy Price Limits; and
 - (h) [Blank]; ~~and~~
 - (i) other matters which the Economic Regulation Authority considers relevant.

...

2.27A. Limit Advice and Constraint Equations

Explanatory Note

Clause 2.27A.6 is amended to correct minor typographical errors.

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).

Explanatory Note

Clause 2.27A.10(cB) is amended to correct a minor typographical error.

2.27A.10. AEMO must document in a WEM Procedure:

...

- (cB) the processes to be followed and the methodology to be used by AEMO in selecting one or more Constraint Equations to ~~respond to~~ represent a Network Constraint, including in respect of the location of terms on each side of the Constraint Equation;

...

...

2.28. Rule Participants

Explanatory Note

Clause 2.28.19 is amended to reflect changes made in March 2017 to the Corporations Act, which removed the definition of 'externally-administered body corporate'.

2.28.19. A Rule Participant must:

- (a) be resident in, or have permanent establishment in, Australia;
- (b) not be ~~an externally-administered body corporate~~ a Chapter 5 body corporate (as defined in the Corporations Act), or under a similar form of administration under any laws applicable to it in any jurisdiction;
- (c) not have immunity from suit in respect of the obligations of a Rule Participant under these WEM Rules; and
- (d) be capable of being sued in its own name in a court of Australia.

...

2.36. Market Systems Requirements

...

Explanatory Note

Clause 2.36.3 is amended to extend the obligation to all Rule Participants (including Network Operators) and correct a minor typographical error.

2.36.3. A ~~Market Participant~~ Rule Participant must ensure that any of its systems which are linked to AEMO's systems ~~must~~ conform to AEMO's data and IT security standards at the point of interface.

Explanatory Note

Clause 2.36.4 is amended to extend the obligation to all Rule Participants (including Network Operators) and improve the clarity of the clause.

2.36.4. ~~No Market Participant is to~~ A Rule Participant must not deliberately use systems in a manner that will undermine the operability of those or connected software systems.

...

2.38. Credit Support

...

Explanatory Note

Clause 2.38.6 is amended to reflect changes made in March 2017 to the Corporations Act, which removed the definition of 'externally-administered body corporate'.

- 2.38.6. An entity meets the Acceptable Credit Criteria if it is:
- (a) either:
 - i. under the prudential supervision of the Australian Prudential Regulation Authority; or
 - ii. a central borrowing authority of an Australian State or Territory which has been established by an Act of Parliament of that State or Territory;
 - (b) resident in, or has a permanent establishment in, Australia;
 - (c) not ~~an externally administered body corporate~~ a Chapter 5 body corporate (within the meaning of the Corporations Act), or under a similar form of administration under any laws applicable to it in any jurisdiction;
 - (d) not immune from suit;
 - (e) capable of being sued in its own name in a court of Australia; and
 - (f) has an acceptable credit rating, being either:
 - i. a rating of A-1 or higher for short term unsecured counterparty obligations of the entity, as rated by Standard and Poor's (Australia) Pty. Limited; or
 - ii. a rating of P-1 or higher for short term unsecured counterparty obligations of the entity, as rated by Moodys Investor Services Pty. Limited.

...

3.11A. Triggering Procurement of Non-Co-optimised Essential System Services (NCESS)

...

Explanatory Note

Clauses 3.11A.2 and 3.11A.2A are amended to improve coordination between AEMO and Network Operators by requiring:

- a Network Operator to notify AEMO before the Network Operator makes a submission to request the Coordinator to determine whether to trigger an NCESS procurement process; and
- AEMO to notify Western Power before AEMO makes a submission to request the Coordinator to determine whether to trigger an NCESS procurement process.

3.11A.2. Where a Network Operator reasonably considers that one or more of the following events has occurred or applies, ~~the Network Operator must make a submission to request the Coordinator to determine whether or not to trigger an NCESS procurement process in accordance with section 3.11B:~~

- (a) frequent intervention by AEMO in the dispatch merit order to relieve non-frequency control constraints, such as loss of reactive power or system

strength, indicates a network security problem, and a case could be made to procure a locational security NCESS;

- (b) if network planning assumptions change at any time during the network planning timeframe (for example, demand is lower or higher than forecast), it may signal the need for an emerging service such as reactive power support or voltage stability which could be provided by non-network services located in the relevant part of the network; or
- (c) a modification to an existing Power System Security or Power System Reliability standard or the introduction of a new Power System Security or Power System Reliability standard within a network planning cycle may trigger the need to procure a NCESS.

the Network Operator must:

- (d) as soon as practicable, but in any event before making a submission under clause 3.11A.2(e), notify AEMO of each event that it considers has occurred or applies; and
- (e) make a submission to request the Coordinator to determine whether to trigger an NCESS procurement process in accordance with section 3.11B.

3.11A.2A. Where AEMO reasonably considers that one or more of the following events has occurred or applies, ~~AEMO must make a submission to request the Coordinator to determine whether or not to trigger an NCESS procurement process in accordance with section 3.11B:~~

- (a) in the course of its normal power system operations, that a significant threat to Power System Security or Power System Reliability exists or is emerging, and the existing mechanisms under these WEM Rules may not be sufficient to address the threat; or
- (b) a modification to an existing WEM Technical Standard, or introduction of a new WEM Technical Standard, that may impact Power System Security or Power System Reliability, and the existing market mechanisms may not be sufficient to meet the modified or new standard.

AEMO must:

- (c) as soon as practicable, but in any event before making a submission under clause 3.11A.2A(d), notify Western Power of each event that it considers has occurred or applies; and
- (d) make a submission to request the Coordinator to determine whether to trigger an NCESS procurement process in accordance with section 3.11B.

Explanatory Note

It may not always be possible for AEMO or a Network Operator to comply with clause 3.11A.3(b) as currently drafted. This is because the NCESS process includes several mandatory steps with timeframes for which the relevant party is not fully responsible.

Clause 3.11A.3(b) is amended to prevent a potential compliance risk by requiring AEMO and Western Power to apply “reasonable consideration” around the expected process timeframes.

Clause 3.11A.3(c) is amended to extend its scope to cover AEMO’s trigger events, which are listed in clause 3.11A.2A, as well as the Network Operator trigger events listed in clause 3.11A.2.

3.11A.3. A submission by a Network Operator or AEMO under clauses 3.11A.2 or 3.11A.2A must:

- (a) be in writing;
- (b) be made by a date that the Network Operator or AEMO, as applicable, reasonably considers allows sufficient time to enable the NCESS procurement process set out in section 3.11B to be conducted; and
- (c) contain sufficient information and analysis regarding the potential or actual impact on Power System Security, Power System Reliability or costs for each trigger event in clauses 3.11A.2 or 3.11A.2A that is specified in the submission to enable the Coordinator to consider the factors outlined in clause 3.11A.7.

...

3.11B. Procuring Non-Co-optimised Essential System Services

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Explanatory Note

Clauses 3.11B.5 and 3.11B.7 are amended in response to stakeholder concerns that unless the information in the new clause 3.11B.5(eA) is provided the AEMO would not be able decide whether the proposed Facility is capable of being assigned Certified Reserve Capacity and Capacity Credits. Further, clause 3.11B.7 is included to enable a proponent to request reimbursement of any Capacity Cost Refunds it must pay as a direct consequence of the enablement or dispatch of the NCESS (e.g. in the event NCESS services provided by storage are enabled outside of the ESR obligation intervals).

3.11B.5. An NCESS Service Specification must, at a minimum, include:

- (a) the service requirements;
- (b) the expected technical capability of a facility or equipment that may be able to provide the service;
- (c) where applicable, the likely network location where the service is to be provided;
- (d) the maximum quantity of the service required;
- (e) the timing expected commencement and duration of the service;
- (eA) reasonable expectation of the frequency of service utilisation, the expected duration of each utilisation and when the service is expected to be utilised during typical days;
- (f) any operational requirements or limitations;

- (g) the material contractual terms associated with the NCESS, including required pricing structure;
- (h) the selection criteria that may apply to the NCESS Submissions; and
- (i) any other relevant matters.

...

3.11B.7. An NCESS Submission form must, at a minimum, include:

- (a) the name and type of facility or equipment, and whether it is registered or intending to register under the WEM Rules;
- (b) the name of the Market Participant, or service provider, as applicable, in respect to the facility or equipment;
- (c) the quantity of service the facility or equipment will provide for the NCESS;
- (d) the timing and duration of the service availability for the NCESS;
- (e) the location of the facility or equipment on the network;
- (f) any operational requirements or limitations that must be respected for use of the facility or equipment for the NCESS;
- (g) where the NCESS Submission is made in respect to a type of technology that would ordinarily be capable of being assigned Certified Reserve Capacity, the information required to be provided by the Market Participant or service provider to demonstrate that it will be able to meet the relevant requirements in clause 4.10.1 for at least the first Reserve Capacity Cycle coinciding with the period of the NCESS Contract;
- (gA) where the NCESS Submission is made in respect to a type of technology that would not ordinarily be capable of being assigned Certified Reserve Capacity, the information required to be provided by the Market Participant or service provider to demonstrate that it is not able to meet the relevant requirements of clause 4.10.1;
- (h) whether the facility or equipment participates, or will participate, in Central Dispatch or is accredited or will be accredited under these Market Rules to provide an Essential System Service;
- (i) the proposed availability payment which must be equal to or less than the incremental fixed costs, if any, that, where applicable, are not already covered by any Capacity Credit payments, which would be incurred to make the capability available for the NCESS;
- (iA) if the facility or equipment would ordinarily be capable of being assigned Certified Reserve Capacity, whether the Market Participant, or service provider, would require any reimbursement of any Capacity Cost Refunds it must pay as a direct consequence of the enablement or dispatch of the NCESS;

- (j) the highest price at which the facility or equipment will provide the NCESS when enabled or dispatched; and
- (k) any other payment that the facility or equipment requires to provide the NCESS.

...

Explanatory Note

The heading above section 3.24 is amended to make it relevant to that section.

Market Data Distributed Energy Resources Register

3.24. Distributed Energy Resources Register

...

3A. Requirements for Transmission Connected Generating Systems

3A.1. General

...

Explanatory Note

Clause 3A.1.5 is added to provide guidance to Participants on how AEMO and Western Power will determine the maximum temperature for a Transmission Connected Generating System under Appendix 12.

3A.1.5. AEMO must, in consultation with the Network Operator, prepare guidelines on how it determines the maximum temperature as defined in Appendix 12 and publish those guidelines on the WEM website.

...

3A.4. General Obligations of a Network Operator

- 3A.4.1. A Network Operator must ensure its connection process as it relates to Transmission Connected Generating Systems for which a Market Participant is responsible is consistent with this Chapter 3A.
- 3A.4.2. A Network Operator must develop and maintain a WEM Procedure that addresses the requirements of the generation system model referred to section 17 of Appendix 12.
- 3A.4.3. The WEM Procedure referred to in clause 3A.4.2, must specify the timeframes by which the Market Participant must ensure that the generation system model

referred to in section 17 of Appendix 12, complies with each amended requirement of the generation system model as specified in the WEM Procedure.

Explanatory Note

Clause 3A.4.4. is amended to require the network operator to prepare assessment guidelines in consultation with AEMO, and to publish them on its website and to provide guidance for Participants on what information needs to be included in their submissions.

3A.4.4. A Network Operator must:

- (a) prepare guidelines in consultation with AEMO, to provide information to Market Participants as to how the standard or technical level of performance in respect of each Technical Requirement will be assessed, and the information that must be included in submissions for Proposed Generator Performance Standards, for each type of generating unit; and
- (b) publish those guidelines on its website.

...

3A.6. Generator Monitoring Plans

Explanatory Note

Clause 3A.6.1(a) is amended to use the correct defined term.

3A.6.1. A Market Participant responsible for a Transmission Connected Generating System must:

- (a) monitor its compliance with the Registered Generator Performance Standards for the Transmission Connected ~~Generation~~ Generating System;
- (b) once issued an Approval to Generate Notification, have a Generator Monitoring Plan approved by AEMO for the Transmission Connected Generating System at all times; and
- (c) comply with the Generator Monitoring Plan approved by AEMO for the Transmission Connected Generating System on and from the date specified in the Generator Monitoring Plan approved by AEMO.

Explanatory Note

Clause 3A.6.2(a) requires AEMO to specify certain requirements relating to the content of a Generator Monitoring Plan in a WEM Procedure. The requirements are currently referred to as a "Template Generator Monitoring Plan". However, this name is misleading because the requirements do not constitute a template. AEMO intends to publish a template-like document in Microsoft Word to assist Market Participants in preparing their Generator Monitoring Plans, but does not intend to include that template in the WEM Procedure.

Clause 3A.6.2(a) is therefore amended to replace the name "Template Generator Monitoring Plan" with "Generator Monitoring Plan Requirements". Additionally, clause 3A.6.2(aA) is inserted to require AEMO to include in the WEM Procedure details of the process to be used by Market

Participants to submit a proposed Generator Monitoring Plan (which is expected to involve the use of the published template).

3A.6.2. AEMO must develop and maintain a WEM Procedure which includes:

- (a) ~~a Template Generator Monitoring Plan which details~~ the following requirements relating to the content of a Generator Monitoring Plan (“Generator Monitoring Plan Requirements”):
- i. how a Market Participant responsible for a Transmission Connected Generating System must monitor performance against the applicable Registered Generator Performance Standards including any testing and verification requirements;
 - ii. the record keeping obligations relating to monitoring compliance with Registered Generator Performance Standards; and
 - iii. the information and data provision obligations a Market Participant responsible for a Transmission Connected Generating System must comply with when requested by AEMO, the Network Operator or the Economic Regulation Authority, including the form by which that information and data must be provided;

(aA) the process by which a Market Participant responsible for a Transmission Connected Generating System must submit a proposed Generator Monitoring Plan to AEMO;

- (b) the assessment and approval process to be followed by AEMO for a proposed Generator Monitoring Plan submitted by a Market Participant responsible for a Transmission Connected Generating System;
- (c) the process by which a Market Participant responsible for a Transmission Connected Generating System must report any alleged non-compliance or suspected non-compliance with the applicable Registered Generator Performance Standards and the applicable Generator Monitoring Plan approved by AEMO;
- (d) the process by which a Market Participant responsible for a Transmission Connected Generating System must report that it has not met or complied with, or may not be able to meet or comply with an approved Rectification Plan in accordance with clause 3A.11.9; and
- (e) the process by which a Market Participant responsible for a Transmission Connected Generating System must submit proposed updates and amendments to a Generator Monitoring Plan approved by AEMO and the assessment process to be followed by AEMO for such updates and amendments.

3A.6.3. AEMO must classify Generator Monitoring Plans and information relating to Generator Monitoring Plans including outcomes, reporting data and supporting evidence relating to a Generator Monitoring Plan as Rule Participant Network Restricted information.

Explanatory Note

Clauses 3A.6.4, 3A.6.5, 3A.6.6 and 3A.6.9 are amended to replace “Template Generator Monitoring Plan” with “Generator Monitoring Plan Requirements”.

- 3A.6.4. A Market Participant responsible for a Transmission Connected Generating System must submit a proposed Generator Monitoring Plan to AEMO for approval in accordance with any requirements for submission in the WEM Procedure referred to in clause 3A.6.2 for each Transmission Connected Generating System that either:
- (a) meets the ~~requirements of the Template Generator Monitoring Plan set out in the WEM Procedure referred to in clause 3A.6.2~~ Generator Monitoring Plan Requirements as applicable to the Transmission Connected Generating System; or
 - (b) meets the ~~requirements of the Template Generator Monitoring Plan~~ Generator Monitoring Plan Requirements as applicable to the Transmission Connected Generating System, other than in respect of variations that the Market Participant reasonably considers are required on the basis that compliance is not possible, or where doing so would impose unreasonable costs on the Market Participant.
- 3A.6.5. AEMO must approve a proposed Generator Monitoring Plan if:
- (a) it meets the ~~requirements of the Template Generator Monitoring Plan set out in the WEM Procedure referred to in clause 3A.6.2~~ Generator Monitoring Plan Requirements as applicable to the Transmission Connected Generating System; or
 - (b) AEMO considers any variations from the ~~Template Generator Monitoring Plan~~ Generator Monitoring Plan Requirements as applicable to the Transmission Connected Generating System are:
 - i. required on the basis that compliance is not possible, or where doing so would impose unreasonable costs on the Market Participant; and
 - ii. not likely to endanger the safety of any person, damage equipment or breach any applicable law, or pose a threat to Power System Security or Power System Reliability.
- 3A.6.6. AEMO may reject a proposed Generator Monitoring Plan if AEMO reasonably considers that:
- (a) the proposed Generator Monitoring Plan does not meet the requirements of clause 3A.6.5(a);
 - (b) the proposed Generator Monitoring Plan is likely to pose a safety risk or threat to Power System Security or Power System Reliability; or

- (c) any proposed variations from the ~~Template Generator Monitoring Plan~~ Generator Monitoring Plan Requirements as applicable to the Transmission Connected Generating System do not meet the requirements of clause 3A.6.5(b).

...

- 3A.6.9. If the ~~Template Generator Monitoring Plan~~ Generator Monitoring Plan Requirements as applicable to a Transmission Connected Generating System is amended, the Market Participant responsible for the Transmission Connected Generating System must submit an amended proposed Generator Monitoring Plan to AEMO for approval in accordance with clause 3A.6.4 within six months of the amendment to the ~~Template Generator Monitoring Plan~~ Generator Monitoring Plan Requirements taking effect.

...

Explanatory Note

Section 3A.13 establishes an obligation on a Market Participant responsible for a Transmission Connected Generating System or an Exempt Transmission Connected Generating System to notify the relevant Network Operator prior to undertaking a Potential Relevant Generator Modification to a generating unit or generating works that are part of a Transmission Connected Generating System or Exempt Transmission Connected Generating System.

A Potential Relevant Generator Modification may be declared by the Network Operator to be a Relevant Generator Modification. If a Relevant Generator Modification is declared, section 3A.14 applies.

A Network Operator, in consultation with AEMO, is required to develop, maintain and publish guidelines to inform Market Participants and provide examples of Potential Relevant Generator Modifications and circumstances and situations in which a Potential Relevant Generator Modification may be declared a Relevant Generator Modification.

In the Tranche 6 amendments, 3A.13.1 and 3A.13.2 are enhanced to ensure that significant equipment replacements (e.g. whole of generator replacements) are permitted to be considered as Potential Generator Modifications, as the previous wording could be interpreted as not allowing for this to be the case. Further, these amendments require the guidelines published by the Network Operator provide more guidance to participants on the types of equipment replacements that would not be declared a Potential Relevant Generator Modification, and the general processes and considerations for the Market Participant in undertaking, and a Network Operator in assessing, a Potential Relevant Generator Modification.

3A.13. Potential Relevant Generator Modifications

Explanatory Note

The concept and definition of 'Potential Relevant Generator Modification' will apply for the purposes of Chapter 3A only at this stage.

In the Tranche 6 amendments, the text at the bottom of clause 3A.13.1 has been relocated to clause 3A.12.2 to provide clarity that some types of equipment replacement may be considered as a Potential Generator Modification, and to ensure guidance is provided to Participants on when this is likely to be case.

3A.13.1. Potential Relevant Generator Modification means for the purposes of Chapter 3A, a modification to a generating unit or generating works that are part of a Transmission Connected Generating System or Exempt Transmission Connected Generating System that:

- (a) has the potential to materially impact or change any of the characteristics, performance or capacity of the generating unit or generating works in respect of a Technical Requirement;
- (b) has the potential to alter the capacity of the Transmission Connected Generating System or Exempt Transmission Connected Generating System in respect of any Technical Requirement for which the Ideal Generator Performance Standard has been amended since the applicable Registered Generator Performance Standard was approved;
- (c) is reasonably considered to require an amendment to the Arrangement for Access for the Transmission Connected Generating System or Exempt Transmission Connected Generating System; or
- (d) requires submission of a connection application in accordance with a Network Operator's policy for access to its Network^{7.2}

~~but does not include the replacement of equipment where the capacity of the Transmission Connected Generating System to meet the Registered Generator Performance Standard remains unchanged as a result of the replacement of equipment.~~

3A.13.2. A Network Operator, in consultation with AEMO, must develop, maintain and publish guidelines to inform Market Participants and provide examples of:

- (a) Potential Relevant Generator Modifications; ~~and~~
- ~~(b) circumstances and situations in which the replacement of equipment where the characteristics, performance or capacity of the Transmission Connected Generating System remain unchanged may not be declared a Relevant Generator Modification;~~
- ~~(c) circumstances and situations in which a Potential Relevant Generator Modification may be declared a Relevant Generator Modification;~~
- ~~(d) the processes that a Market Participant must follow to notify the relevant Network Operator prior to undertaking a Potential Relevant Generator Modification; and~~
- ~~(e) the processes that a Network Operator must follow in making a determination about a Potential Relevant Generator Modification and in notifying the Market Participant of the outcome of its determination.~~

for the purposes of Chapter 3A and Appendix 12.

3A.13.2A. A Network Operator must develop and publish the initial guidelines referred to in clause 3A.13.2 by 1 July 2022.

- 3A.13.3. A Market Participant responsible for a Transmission Connected Generating System or an Exempt Transmission Connected Generating System must notify the relevant Network Operator prior to undertaking a Potential Relevant Generator Modification in accordance with the processes described in the guidelines published under clause 3A.13.2.
- 3A.13.4. Subject to clause 3A.13.5 and clause 3A.13.6, a Network Operator may declare a Potential Relevant Generator Modification to be a Relevant Generator Modification in accordance with the processes described in the guidelines published under clause 3A.13.2.
- 3A.13.5. Where a Network Operator is notified of a Potential Relevant Generator Modification in accordance with clause 3A.13.3, it must:
- (a) consult with AEMO before making a decision whether or not to declare the Potential Relevant Generator Modification a Relevant Generator Modification under clause 3A.13.4; and
 - (b) make the decision whether or not to declare the Potential Relevant Generator Modification a Relevant Generator Modification as soon as practicable.
- 3A.13.6. A Network Operator must declare a Potential Relevant Generator Modification to be a Relevant Generator Modification where AEMO advises the Network Operator under clause 3A.13.5 that the Potential Relevant Generator Modification should be declared a Relevant Generator Modification.
- 3A.13.7. If a Network Operator declares a Potential Relevant Generator Modification to be a Relevant Generator Modification in accordance with clause 3A.13.4, the Network Operator must notify the Market Participant responsible for the Transmission Connected Generating System or Exempt Transmission Connected Generating System.
- 3A.13.8. If, following consultation with AEMO in accordance with clause 3A.13.5, a Network Operator does not intend to declare the Potential Relevant Generator Modification to be a Relevant Generator Modification:
- (a) the Network Operator must notify the Market Participant responsible for the Transmission Connected Generating System or Exempt Transmission Connected Generating System; and
 - (b) the Market Participant may undertake the Potential Relevant Generator Modification as notified by the Network Operator subject to any other requirements or obligations that apply to the Market Participant under its Arrangement for Access, the Access Code, the Technical Rules applicable to the Network, these WEM Rules or any applicable law.

...

The Reserve Capacity Expression of Interest

4.2. The Reserve Capacity Expression of Interest Process

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Explanatory Note

Clause 4.2.2, which was inadvertently deleted by the replacement of section 4.2 in the Tranches 2 and 3 Amendments, is reinserted.

4.2.2. AEMO must prepare a Request for Expressions of Interest which contains information which includes the information described in clause 4.3.1.

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Explanatory Note

Clause 4.2.7 is amended to exclude EOI Facility Variants from the information that AEMO must publish in relation to Reserve Capacity Expressions of Interest. This change effectively removes duplicated information which may otherwise provide a misleading indication of the additional Reserve Capacity potentially available under clause 4.2.7(b).

4.2.7. By the date and time specified in clause 4.1.6, AEMO must publish the following information:

- (a) the **total** number of Expressions of Interest received;
- (aA) the number of Expressions of Interest received, excluding Expressions of Interest for EOI Facility Variants that have not been nominated under clause 4.4.2;
- (b) based on the Expressions of Interest referred to in clause 4.2.7(aA), the additional Reserve Capacity potentially available, categorised as:
 - 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;

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...

4.4. Information to be Included in an Expression of Interest

Explanatory Note

Exposure Draft 1 proposed changes to clause 4.4.1(d) to require the inclusion of an Access Proposal/Offer application reference number and date of application in an Expression of Interest where available.

Further changes are proposed to section 4.4 to require proponents to signify where multiple Expressions of Interest under the Reserve Capacity Expression of Interest process relate to the same intended Facility, referred to as EOI Facility Variants.

The proponent must also nominate one EOI Facility Variant for AEMO to formulate Preliminary RCM Constraint Equations and publish the required information under clause 4.2.7.

The changes allow AEMO to manage its workload in relation to Preliminary RCM Constraint Equations without limiting the number of variations a proponent may wish to submit as an Expression of Interest, noting that the submission of an Expression of Interest is a pre-condition for the application of certification of Reserve Capacity under clause 4.8.2.

- 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:
 - i. the expected nameplate capacity for each technology; and
 - ii. the maximum Reserve Capacity anticipated to be available from each technology;
 - (bB) whether more than one technology is proposed for the Facility or location;
 - (bC) whether the Expression of Interest is for an EOI Facility Variant, and if so, whether the Expression of Interest is nominated under clause 4.4.2;
 - (c) the maximum 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;
- vi. whether the Facility is expected to be nominated to be classified as a Network Augmentation Funding Facility; ~~and~~
- vii. whether the Facility has entered into or is expected to enter into an NCESS Contract; ~~;~~
- viii. if an application under clause 4.4.1(d)(ii) has been submitted, the application reference number provided by the Network Operator; and
- ix. if an application under clause 4.4.1(d)(ii) has been submitted, the date the application was submitted to the Network Operator; and
- (e) any other information specified by AEMO in the Request for Expression of Interest under clause 4.3.1(j).

4.4.2. A person who submits Expressions of Interest for EOI Facility Variants must nominate one Expression of Interest to be used by AEMO for the purposes of clauses 4.2.7(b) and 4.4B.4.

4.4.3. If:

- (a) a person submits Expressions of Interest and does not specify that any of the Expressions of Interest is for an EOI Facility Variant under clause 4.4.1(bC); and
- (b) AEMO reasonably considers that two or more of the Expressions of Interest are for EOI Facility Variants,

AEMO may (after using reasonable endeavours to consult with the person) select one Expression of Interest to use for the purposes of clauses 4.2.7(b) and 4.4B.4. The Expression of Interest selected by AEMO is deemed to be the Expression of Interest nominated by the person under clause 4.4.2.

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4.4B. RCM Limit Advice and RCM Constraint Equations

Explanatory Note

Clause 4.4B.3 is amended to correct a minor typographical error.

- 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; and
 - 3. all NCESS Contracts expected to be in-service, as at 1 October of Year 3 of the Reserve Capacity Cycle;
 - iii. including the connection of new Facilities notified by AEMO under clauses 4.4B.2(a) and 4.4B.2(c); and
 - iv. including the impact of any Facilities notified by AEMO under clause 4.4B.2(b); and
 - (b) in accordance with the WEM Procedure referred to in clause 2.27A.11(b)(i).

Explanatory Note

Clause 4.4B.4 is amended and new clause 4.4B.4A inserted to allow AEMO to limit the formulation of Preliminary RCM Constraint Equations to only one EOI Facility Variant.

- 4.4B.4. Subject to clause 4.4B.4A, 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 and Limit Advice available in relation to Non-Thermal Network Limits 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 or Facilities subject to an NCESS Contract in accordance with clause 2.27A.6 at the time specified in clause 4.4B.5, use Non-Thermal Network Limits which, in its reasonable opinion, most closely represent the expected Non-Thermal Network Limit for the Facility.

4.4B.4A. AEMO is not required to formulate Preliminary RCM Constraint Equations for a Facility that is an EOI Facility Variant unless the Expression of Interest is:

- (a) nominated under clause 4.4.2; or
- (b) deemed to be nominated in accordance with clause 4.4.3.

...

4.5. Long Term Projected Assessment of System Adequacy

...

Explanatory Note

Clause 4.5.10(a) is amended to capitalise the defined term “Energy Producing System”.

4.5.10. AEMO must use the information assembled to:

- (a) assess the extent to which the anticipated installed capacity of the ~~energy producing systems~~ **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.

...

...

4.9. Process for Applying for Certification of Reserve Capacity

...

Explanatory Note

Clause 4.9.8(b) is amended to correct a clause reference.

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~~ 4.1.12 in the Reserve Capacity Cycle when AEMO next processes applications for Certified Reserve Capacity in accordance with section 4.11.

...

4.10. Information Required for the Certification of Reserve Capacity

...

Explanatory Note

Exposure Draft 1 included amendments to clause 4.10.1 to:

- clarify which requirements under clause 4.10.1(e) relate to a Non-Intermittent Generating System rather than its parent Facility;
- remove unnecessary repetition by combining clauses 4.10.1(fA), 4.10.1(fB) and 4.10.1(fC) into a single clause 4.10.1(fA);
- extend clause 4.10.1(fD)(ii) to require the provision of maximum Charge Level capabilities and temperature dependence information for Non-Scheduled Facilities that comprise only Electric Storage Resources; and
- clarify that the test in clause 4.10.1(k) should only use configuration information provided under clause 4.10.1(dA) that applies to the components being assigned Certified Reserve Capacity using the Relevant Level Methodology. For example, for a Semi-Scheduled Facility comprising an Electric Storage Resource and an Intermittent Generating System, only the configuration information provided under clause 4.10.1(dA) for the Intermittent Generating System should be considered.

Clause 4.10.1(f) is now also amended to remove the requirement for a DSP Ramp Rate Limit, because DSP Ramp Rate Limits are no longer required under the proposed changes to Demand Side Programme dispatch arrangements.

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;

(dB) for a Semi-Scheduled Facility or Scheduled Facility, the minimum stable loading level of the Facility expressed in MW;

(e) for a Non-Intermittent Generating System:

i. the capacity of the ~~Facility~~ Non-Intermittent Generating System 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 Non-Intermittent Generating System when it is operated normally at an ambient temperature of 41oC;
 - 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 Non-Intermittent Generating System 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 Facility 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 Non-Intermittent Generating System has primary and alternative fuels:
 - i. the process for changing from one fuel to another; and
 - ii. the fuel or fuels which the Facility Non-Intermittent Generating System 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 Non-Intermittent Generating System 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 Non-Intermittent Generating Systems that have operated for at least 12 months, the forced and unforced outage rate of the Facility Non-Intermittent Generating System;
- (f) for Demand Side Programmes:

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

- 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; and
- vii. ~~the proposed DSP Ramp Rate Limit for the Facility; and~~ [Blank]
- viii. the single Transmission Node Identifier for the Facility;

(fA) ~~for a Scheduled Facility comprising only an Electric Storage Resource an~~ Electric Storage Resource, except where clause 4.10.1(fD) applies:

- i. the nameplate capacity and maximum and minimum Charge Level capabilities of the Electric Storage Resource and the temperature dependence of that capacity;
- ii. the maximum sent out capacity, net of embedded and Parasitic Loads, that can be guaranteed to be available for supply to the relevant Network from the ~~Facility~~ Electric Storage Resource when it is operated normally at an ambient temperature of 41oC;
- 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 41oC 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) ~~[Blank]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 41oC;~~
- ~~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 41oC 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) ~~[Blank]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 41oC;~~
- ~~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 41oC 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 and maximum Charge Level capabilities of each Electric Storage Resource and the temperature dependence of that capacity;
- 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 41oC 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) evidence of whether the Facility will be subject to an NCESS 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~~ specified for the Facility or component under clause 4.10.1(dA)), the date on which the Facility or component of the Facility became fully operational under this configuration, unless this date has already been provided to AEMO in a previous application for certification of Reserve Capacity;

(l) evidence of the extent to which the Facility will be able to receive, confirm and implement Dispatch Instructions from AEMO; and

- (m) subject to clauses 4.10A.2 and 4.10A.3, a Market Participant that wishes to nominate that its Facility or an upgrade of its Facility, be classified as a Network Augmentation Funding Facility, must provide to AEMO:
 - i. a notice in writing from the Market Participant nominating that the Facility, 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.

...

Explanatory Note

Clause 4.10.3 is amended to clarify that the test in clause 4.10.3(d) should only use configuration information provided under clause 4.10.1(dA) that applies to the part of the Facility being assessed under 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~~ specified for the Facility or component (as applicable) under 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.

...

4.11. Setting Certified Reserve Capacity

...

Explanatory Note

Clause 4.11.1 is amended to reflect the proposed changes to dispatch arrangements for Demand Side Programmes. Under the proposed arrangements, a Market Participant will be required to have curtailed the Withdrawal of its Demand Side Programme to the requested level before the start time specified in the relevant Dispatch Instruction, so an assessment of its ability to reduce its Withdrawal in a single Trading Interval is no longer needed.

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:

...

- (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:~~ 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
- ~~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~~

...

...

Explanatory Note

Clause 4.11.3A is amended to clarify that AEMO is required to consult with Market Participants when determining the Electric Storage Resource Obligation Intervals but not when occasionally changing, as permitted under Chapter 6, the period during which these Electric Storage Resource Obligation Intervals will apply on the next Trading Day. Note, that AEMO is not permitted to change the duration of this period as this is prescribed by the WEM Rules as eight Trading Intervals and cannot be changed without changing the WEM Rules.

4.11.3A. AEMO must:

- (a) determine in consultation with Market Participants 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 under clause 4.11.3A(a)~~;
 - 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~~ determine that the Trading Intervals classified as Electric Storage Resource Obligation Intervals ~~and the obligations on AEMO to consult with Market Participants. for a specific Trading Day are not the Electric Storage Resource Obligation Intervals published by AEMO under clause 4.11.3A(a)~~; and
 - iv. the processes to be followed by AEMO to meet its obligations to consult with Market Participants in determining Electric Storage Resource Obligation Intervals under clause 4.11.3A(a).

...

Explanatory Note

Clause 4.11.4 is amended to clarify how AEMO is to assign an Availability Class to Certified Reserve Capacity.

- 4.11.4. Subject to clause 4.11.12, when assigning Certified Reserve Capacity ~~to a Demand Side Programme~~, AEMO must assign an Availability Class to apply to that Certified Reserve Capacity as follows:

- (a) Availability Class 1 where ~~either: AEMO reasonably expects the Facility to be available to be dispatched for all Trading Intervals in a Capacity Year, allowing for Outages and any restrictions on the availability specified by the applicant under clause 4.10.1(g); or~~
- i. the Facility contains an Intermittent Generating System or Non-Intermittent Generating System; or
 - ii. AEMO reasonably expects the Facility to be available to be dispatched for all Trading Intervals in a Capacity Year, allowing for Outages and any restrictions on the availability specified by the applicant under clause 4.10.1(g); or
- (b) Availability Class 2 otherwise.

...

4.13. Reserve Capacity Security²

Explanatory Note

Clause 4.13.9 is amended to remove the reference to the setting of Reserve Capacity Obligation Quantities, because Certified Reserve Capacity is not used to set these quantities.

- 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).~~

...

4.14. Market Participant Auction and Bilateral Trade Declaration

Explanatory Note

Clause 4.14.1C is amended to correct minor typographical errors.

- 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 an NCESS Contract (at the date Capacity Credits are first assigned to the Facility); ~~and~~

² See section 4.13A in relation to Reserve Capacity Security for Demand Side Programmes.

- (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.

...

4.15. Network Access Quantity

...

Explanatory Note

Clause 4.15.5 will be replaced by the *Wholesale Electricity Market Amendment (Tranche 5 Amendments) Rules 2021 (Tranche 5 Amendments)* on 1 September 2022.

Exposure Draft 1 included proposed amendments to ensure that the facility dispatch scenarios developed by AEMO for use with the Network Access Quantity Model consider Facilities with Early Certified Reserve Capacity.

An additional issue with this clause was identified by AEMO after the publication of Exposure Draft 1. Depending on the relevant Step in Appendix 3, a Facilities may be dispatched up to their Certified Reserve Capacity or their Network Access Quantity assigned in the previous Reserve Capacity Cycle. In the situation where either the total assigned Certified Reserve Capacity or Network Access Quantities is less than the peak demand it will be impossible for AEMO to satisfy clause 4.15.5(c).

For this reason, clause 4.15.5 is further amended to remove clause 4.15.5(c). How AEMO will create facility dispatch scenarios in a shortfall situation will be covered in the Network Access Quantity WEM Procedure.

- 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(e));~~
 - (b) include Facilities with Certified Reserve Capacity or Early Certified Reserve Capacity for the relevant Reserve Capacity Cycle;
 - ~~(c) ensure the sum of facility dispatch in each scenario equals peak demand (as described in clause 4.15.3(e));~~
 - ~~(d)~~(c) ensure a Facility is not dispatched to a level greater than the Certified Reserve Capacity or Early Certified Reserve Capacity for the Facility;
 - ~~(e)~~(d) subject to clause ~~4.15.5(d)~~ 4.15.5(c), account for any services that are required at peak demand to be provided by a Facility with Certified Reserve Capacity under an NCESS Contract; and
 - ~~(f)~~(e) include any other factors specified in the WEM Procedure referred to in clause 4.15.17.

...

Explanatory Note

Clause 4.15.16, which will be inserted by the *Wholesale Electricity Market Amendment (Tranches 2 and 3 Amendments) Rules 2020* on 1 September 2022, is further amended to require AEMO to publish Indicative Network Access Quantities at the same time as it publishes Network Access Quantities.

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 or Indicative Network Access Quantity ~~has been determined and the Network Access Quantity determined for~~ the each Facility.

...

4.20. Capacity Credits

Explanatory Note

Clause 4.20.16 is amended to remove a superfluous comma after “clause 4.1.21A”.

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,⁷ 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.

...

4.23A. Capacity Credits and Facility Registration

...

Explanatory Note

Clause 4.23A.4 is amended to refer to the defined term “Aggregated Facility”.

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~~ 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~~ Aggregated Facility subject to the conditions that:

- (a) the information submitted with the application for aggregation must demonstrate that the ~~aggregated facility~~ 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~~ 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~~ 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~~ Aggregated Facility must at all times be capable of being disaggregated in accordance with clause 4.23A.3.

...

Explanatory Note

The heading above section 4.28B is deleted because section 4.28B, the only section under that heading, was deleted by the Tranches 2 and 3 Amendments (Schedule C).

~~Treatment of New Small Generators~~

4.28B. [Blank]

Early Certification of Reserve Capacity

4.28C. Early Certification of Reserve Capacity

...

5 Network Control Services and AEMO-procured NCESS

5.1. [Blank]

5.2. [Blank]

5.2A Registration and Certification

5.2A.1. [Blank]

Explanatory Note

Clauses 5.2A.2 and 5.2A.3 require a Market Participant to apply for Certified Reserve Capacity if it has entered into a Network Control Service Contract or Dispatch Support Service Contract prior to the close of the Certified Reserve Capacity application window. Clause 4.8A.3 requires a Market Participant to apply for an indicative Facility Class prior to submitting an application for Certified Reserve Capacity.

If a Market Participant enters into a contract a short period (e.g. a day or even a week) before the certification application window closes, it would have a rule obligation to apply for Certified Reserve Capacity. However, this would not provide AEMO with sufficient time to assign the Facility an indicative Facility Class and create a Certified Reserve Capacity application in its systems to enable the Market Participant to submit an application before the certification window closes. This would force either AEMO or the Market Participant into non-compliance.

To resolve this issue, clause 5.2A.3 is amended to shift the relevant deadline to the opening of the certification application window (as specified under clause 4.1.7).

Clause 5.2A.2 is also amended to remove a superfluous comma.

5.2A.2. Where a Market Participant enters into a Dispatch Support Service Contract or a Network Control Service Contract for a Facility, and the Facility would ordinarily be capable of being assigned Certified Reserve Capacity, then the Market Participant must meet the requirements of clause 4.8A.3(c) where applicable, and use best endeavours to meet the requirements of clause 4.10.1, in respect of each Reserve Capacity Cycle that the Facility would be eligible to participate in over the period for which a service will be provided under the relevant Dispatch Support Service Contract or Network Control Service Contract.

5.2A.3. Clause 5.2A.2 does not require a Market Participant to apply for Certified Reserve Capacity for a Facility for a Reserve Capacity Cycle where the Market Participant has entered into a Network Control Service Contract or Dispatch Support Service Contract in respect of the Facility after the date and time specified under clause ~~4.1.11~~ 4.1.7 for that relevant Reserve Capacity Cycle.

...

9.9. The Ancillary Service Settlement Calculations for a Trading Month

Explanatory Note

Clause 9.9.3A is amended to remove a superfluous word “and” in the definition of Cost_LR(m).

9.9.3A. The value of ASP_Balance_Payment(m) for Trading Month m is:

$$\begin{aligned} \text{ASP_Balance_Payment}(m) = & \\ & \text{Sum}(c \in \text{CAS_SR}, \text{ASP_SRPayment}(c,m)) + \\ & \text{Min}(\text{Cost_LR}(m), \text{Sum}(c \in \text{CAS_LR}, \text{ASP_LRPayment}(c,m)) \\ & \quad + \text{Sum}(c \in \text{CAS_BS}, \text{ASP_BSPayment}(c,m))) + \\ & \text{Sum}(c \in \text{CAS_DS}, \text{ASP_DSPayment}(c,m)) \end{aligned}$$

Where

c denotes a Contracted Ancillary Service;

CAS_SR is the set of Contracted Spinning Reserve Services;

CAS_LR is the set of Contracted Load Rejection Reserve Services;

CAS_BS is the set of Contracted System Restart Services;

CAS_DS is the set of Contracted Dispatch Support Services;

Cost_LR(m) is the amount specified by AEMO for Trading Month m under clause 3.22.1(g)(i) for Load Rejection Reserve Service ~~and~~ and System Restart Service; and

each of the terms ASP_SRPayment(c,m), ASP_LRPayment(c,m), ASP_BSPayment(c,m) and ASP_DSPayment(c,m) is determined in accordance with clause 9.9.4.

Explanatory Note

Clause 9.9.3B is amended to remove a superfluous word and comma from the definition of Cost_LR(m).

9.9.3B. The value of Cost_LR_Shortfall(m) for Trading Month m is:

$$\begin{aligned} \text{Cost_LR_Shortfall}(m) = & \\ & \text{Max}(0, \text{Sum}(c \in \text{CAS_LR}, \text{ASP_LRPayment}(c,m)) \\ & \quad + \text{Sum}(c \in \text{CAS_BS}, \text{ASP_BSPayment}(c,m)) \\ & \quad - \text{Cost_LR}(m)) \end{aligned}$$

Where

c denotes a Contracted Ancillary Service;

CAS_LR is the set of Contracted Load Rejection Reserve Services;

CAS_BS is the set of Contracted System Restart Services;

Cost_LR(m) is the amount specified by AEMO for Trading Month m under clause 3.22.1(g)(i) for Load Rejection Reserve Service ~~and~~ and System Restart Service; and

each of the terms ASP_LRPayment(c,m) and ASP_BSPayment(c,m) is determined in accordance with clause 9.9.4.

...

9.24. Settlement in Default Situations

...

Explanatory Note

Clause 9.24.3A is amended to insert a full stop after the clause number and remove a superfluous comma in clause 9.24.3A(a)(ii).

9.24.3A. AEMO must apply the Total Amount as follows.

- (a) First, AEMO must apply the Total Amount to satisfy:
- i. payment of Service Fee Settlement Amounts to AEMO, the Economic Regulation Authority and the Coordinator (including as contemplated by clause 9.22.10);
 - ii. payments which AEMO is required to make under Supplementary Capacity Contracts or to a provider of Ancillary Services holding an Ancillary Service Contract with AEMO or to a provider of Dispatch Support Services holding a Dispatch Support Service 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. [Blank]
 - iv. funds required to be disgorged or repaid by AEMO as contemplated by clause 9.24.2;

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.

...

11. Glossary

...

Explanatory Note

The amending rules that commenced on 1 March 2022 removed section 4.28B and sought to remove the reference to section 4.28B in the definition of Certified Reserve Capacity. However, the amendments inserted a new definition rather than replacing the original definition, therefore a further amendment is required to remove the original definition.

~~**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 or section 4.28B, 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.~~

...

Explanatory Note

A definition of Deemed DSM Dispatch is reinserted in the Glossary. The definition was deleted on 1 October 2021 by the *Wholesale Electricity Market Amendment (Reserve Capacity Pricing Reforms) Rules 2019* (RC Pricing Amendments). The RC Pricing Amendments did not update Appendix 9, which is still using the defined term in Step 7.

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 Capacity Credits;
- (b) the requested decrease in consumption specified under clause 7.13.1(eG);
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.

...

Explanatory Note

The definition of EOI Facility Variant is intended to apply in situations where a proponent may submit multiple Expressions of Interest under the Reserve Capacity Expressions of Interest process for different permutations of a single intended facility. That is, the proponent does not intend for all Expressions of Interest submitted to progress to the certification of Reserve Capacity, but rather a single permutation. Each of the related Expressions of Interest are “EOI Facility Variants”.

EOI Facility Variant: An Expression of Interest that is associated with one or more other Expressions of Interest and that, on the basis of the information provided in clause 4.4.1, relates to the same Facility.

...

Explanatory Note

A definition for the currently used term “Expression of Interest” is inserted in the Glossary.

Expression of Interest: In respect of a Reserve Capacity Cycle, a response to the Request for Expressions of Interest provided to AEMO in accordance with section 4.2.

...

Explanatory Note

The new term “Generator Monitoring Plan Requirements” replaces the term “Template Generator Monitoring Plan”.

Generator Monitoring Plan Requirements: The requirements relating to the content of a Generator Monitoring Plan set out in the WEM Procedure referred to in clause 3A.6.2 as amended from time to time.

...

Explanatory Note

The definition of GIA Facility is amended to ensure that it only captures Facilities that were treated as Constrained Access Facilities for the purpose of certification of Reserve Capacity for one or more Reserve Capacity Cycles.

~~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 date and time specified in clause 4.1.11 as amended or extended by AEMO under clause 1.36B.6(g) for the 2022 Reserve Capacity Cycle, under which the Facility is not entitled to unconstrained access to the relevant Network for all of its capacity.~~

GIA Facility: A Facility that was a Constrained Access Facility (as previously defined in the WEM Rules) for the purpose of certification of Reserve Capacity in one or more Reserve Capacity Cycles.

...

Explanatory Note

The definition of Island Separation Frequency Band is amended to correct a minor typographical error.

Island Separation Frequency Band: ~~has~~Has the meaning given in clause 3B.2.4.

...

Explanatory Note

The definition Network Access Quantity Model is amended to correct a clause reference error.

Network Access Quantity Model: A model to be developed and maintained by AEMO pursuant to clause ~~4.15.5~~ 4.15.6 and to be used by AEMO for determining Network Access Quantities for Facilities in accordance with the processes in Appendix 3.

...

Explanatory Note

The definition of Network Access Quantity Model Inputs, which will be inserted by the *Wholesale Electricity Market Amendment (Tranches 2 and 3 Amendments) Rules 2020* on 1 September 2022, is further amended to require AEMO to publish adjusted Indicative Network Access Quantities for each applicable step in Appendix 3. This is because Indicative Network Access Quantities, like preliminary Network Access Quantities, can be adjusted in each step of the process.

Network Access Quantity Model Inputs: Means, in respect of the relevant Reserve Capacity Cycle:

- (a) the preliminary Network Access Quantity determined by AEMO for a Facility and, where applicable, the adjusted Indicative Network Access Quantity determined for a Facility that is classified as an Indicative NAQ Facility under Appendix 3, for each applicable step in Appendix 3;
- (b) each of the assumptions and parameters used by AEMO in the Network Access Quantity Model;
- (c) each RCM Constraint Equation that is used in the Network Access Quantity Model; and
- (d) RCM Limit Advice used in the Network Access Quantity Model.

Explanatory Note

The definition of Network Augmentation Funding Facility is amended to ensure it is aligned with section 4.10A (Network Augmentation Funding Facility).

~~**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. For a Reserve Capacity Cycle, a Facility or upgrade to a Facility that a Market Participant has nominated to be classified as a Network Augmentation Funding Facility for the Reserve Capacity Cycle in an application for certification of Reserve Capacity under clause 4.10.1(m), and which AEMO has classified as a Network Augmentation Funding Facility for the Reserve Capacity Cycle.~~

...

Explanatory Note

The definition of Normal Operating Frequency Band is amended remove a superfluous word.

Normal Operating Frequency Band: Has the meaning given in ~~in~~ clause 3B.2.1.

...

Explanatory Note

The term "Template Generator Monitoring Plan" is being replaced with "Generator Monitoring Plan Requirements" and is therefore no longer required.

~~**Template Generator Monitoring Plan:** Means the template Generator Monitoring Plan set out in the WEM Procedure referred to in clause 3A.6.2 as amended from time to time.~~

...

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.

Explanatory Note

AEMO may be required to use multiple Constraint Sets within the NAQ Model. Currently, only steps that involve the addition of Network Augmentation Funding Facilities explicitly include a reference to add the “applicable Constraint Set”. However, the addition of other Facilities may also require changes to the Constraint Sets used in the NAQ Model.

Appendix 3 is amended to replace the explicit references to adding Constraint Sets in specific steps with a general requirement for AEMO to use the applicable Constraint Set in the NAQ Model for the Facilities assessed in each step of Appendix 3.

[AEMO must use the applicable Constraint Set in the Network Access Quantity Model for the Facilities assessed in each step of this Appendix 3.](#)

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);
- 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;

Explanatory Note

The definition of the capacity requirement of Availability Class 1 is amended to remove the superfluous minus sign after Q[1].

The definition of the capacity requirement of Availability Class 2 is amended to remove a superfluous right-hand bracket after Q[2].

- the “capacity requirement” of:
 - Availability Class 1 is $CR[1] = Q[1]$; and
 - Availability Class 2 is $CR[2] = \max(0, Q[2]) - \max(0, Z - CR[1])$; 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.

Explanatory Note

Regardless of whether a Market Participant intends to increase the nameplate capacity of a Facility in the future or in the past 12 months, the increase should be considered a Facility Upgrade for the purposes of Appendix 3. The definition of Facility Upgrade is therefore amended to remove the implication that the increase in nameplate capacity needs to occur in the future.

- "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.

...

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; and
- ~~(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)~~ (b) Indicative NAQ Facilities.

...

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 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; and
- ~~(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)~~ (b) Indicative NAQ Facilities.

...

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 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.

...

Appendix 12: Transmission Connected Generating System Generator Performance Standards

This Appendix lists each of the Technical Requirements for Transmission Connected Generating Systems and sets out the Ideal Generator Performance Standard, Minimum Generator Performance Standard and any applicable Common Requirements for each Technical Requirement.

Each Technical Requirement may specify Negotiation Criteria which must be met if a Market Participant responsible for a Transmission Connected Generating System submits a Proposed Negotiated Generator Performance Standard.

If a Technical Requirement specifies Common Requirements, these apply whether an Ideal Generator Performance Standard or Negotiated Generator Performance Standard is intended to apply to a Transmission Connected Generating System in respect of a Technical Requirement.

Use of defined terms in this Appendix 12

Terms defined in Part A12.1 of this Appendix 12 are defined for the purposes of this Appendix alone and must not be used to infer the meaning of those words, or other words, in these WEM Rules. Terms which are defined in these WEM Rules will apply to this Appendix unless defined in this Appendix or the context otherwise requires.

Where the terms Scheduled Generator and Non-Scheduled Generator are used in this Appendix, in relation to generating works that are proposed to be connected to a transmission system and is yet to be registered under these WEM Rules as a Facility or a Facility that is undergoing an upgrade that may impact its Facility Class, these terms are to be used as they will ultimately apply to the relevant Facility.

Explanatory Note

The following is included to clarify that the usage of each term is dependent on where the Technical Requirement is measured from. In many cases this will be at the Connection Point, however the measurement location can vary depending on the nature of the Transmission Connected Generating System and the individual Technical Requirement.

Where the following terms are used in this Appendix:

(a) Rated Maximum Active Power;

(b) Rated Maximum Apparent Power;

- (c) Maximum Continuous Current;
- (d) Rated Minimum Active Power;
- (e) Temperature Dependency Data; and
- (f) Generator Performance Chart.

the measurement location for these is as specified in the relevant clause, or where applicable, by the Network Operator in consultation with AEMO and recorded in the relevant Generator Performance Standard.

When producing electric power, Electricity Storage which is part of a Generating System will be considered as Generation and must meet the Technical Requirements of Appendix 12.

Where the term 'Technical Rules' is used in this Appendix then the reference to the Technical Rules is to the Technical Rules of Western Power for the SWIS.

Where terms defined in Technical Rules are used in this Appendix, then any references to 'power system' in those definitions should be read as the SWIS.

For ease of reference, a list of the Technical Requirements that apply to Transmission Connected Generating Systems contained in this Appendix is set out below.

Appendix 12 Part	Technical Requirement
A12.2.	Active Power Capability
A12.3.	Reactive Power Capability
A12.4.	Voltage and Reactive Power Control
A12.5.	Active Power Control
A12.6.	Inertia and Frequency Control
A12.7.	Disturbance Ride Through for a Frequency Disturbance
A12.8.	Disturbance Ride Through for a Voltage Disturbance
A12.9.	Disturbance Ride Through for Multiple Disturbances
A12.10.	Disturbance Ride Through for Partial Load Rejection
A12.11.	Disturbance Ride Through for Quality of Supply
A12.12.	Quality of Electricity Generated
A12.13.	Generation Protection Systems
A12.14.	Remote Monitoring Requirements
A12.15.	Remote Control Requirements
A12.16.	Communications Equipment Requirements

A12.1. Definitions

In this Appendix 12, the following terms are defined:

Active Power: As described in the Technical Rules.

Adequately Damped: As described in the Technical Rules.

Apparent Power: As described in the Technical Rules.

Asynchronous Generating System: Means a Generating System comprised of Asynchronous Generating Units.

Asynchronous Generating Unit: Means a Generating Unit that is not a Synchronous Generating Unit.

Communication Standard: Means the requirements for the provision of information to be provided between Network Operators and AEMO as described in the WEM Procedure referred to in clause 2.36A.1 and as contemplated under section 2.36A.

Connection Point: Means the point on the Network Operator's Network where the Network Operator's Primary Equipment (excluding metering assets) is connected to the Primary Equipment of the Transmission Connected Generating System.

Continuous Uninterrupted Operation: In respect of a Generating System or operating Generating Unit within a Transmission Connected Generating System that is operating immediately prior to a power system disturbance, means:

- (a) not disconnecting from the SWIS except in accordance with its Registered Generator Performance Standard;
- (b) during the disturbance, contributing active and reactive current as required by its Registered Generator Performance Standard;
- (c) after clearance of any electrical fault that caused the disturbance, only substantially varying its Active Power and Reactive Power as required or permitted by its Registered Generator Performance Standard; and
- (d) not exacerbating or prolonging the disturbance or causing a subsequent disturbance for other connected Equipment, except as required or permitted by its Registered Generator Performance Standard,

with all essential auxiliary and reactive Equipment remaining in service.

Control Centre: Means the facilities used to direct and control the operation of a Generating System.

Control System: As described in the Technical Rules.

Credible Contingency: An unplanned disconnection of equipment, or other event, that a Generating System may reasonably be exposed to as described in the Technical Rules.

Critical Fault Clearance Time: As described in the Technical Rules.

Dispatch: Means the process of dispatch as described in these WEM Rules.

Dispatch Systems Requirements: Means the requirements described in section 2.35.

Generation: As described in the Technical Rules.

Explanatory Note

Proposed drafting changes are for clarity. An alternative definition for Electricity Storage to that which exists in the WEM Rules is used in this Appendix 12. This is because the GPS definition specifically “excludes” non-dispatchable storage, whereas the WEM Rules definition is quite open-ended, as controllability comes down to how a Facility is registered. This definition maintains, for GPS purposes, a limitation to only storage devices that are dispatchable.

Electricity Storage: Means equipment consisting of Storage Works but does not include ~~non-controllable non-dispatchable Active Power~~ energy storage equipment such as a synchronous compensator or flywheel.

Equipment: As described in the Technical Rules.

Excitation Control System: As described in the Technical Rules.

Frequency Dead Band: The range through which power system frequency can vary without the frequency control system initiating an active power response.

Generating System: As described in the Technical Rules.

Generating Unit: As described in the Technical Rules.

Generation: As described in the Technical Rules.

Explanatory Note

Clarifications included in the definition below to show that the data provided covers multiple temperature ranges and is in relation to a specified measurement location, and clarifies that the operating ranges needs to ensure compliance with other Technical Requirements.

Generator Capability Performance Chart: Means a chart defining the capability of a Generating System or Generating Unit to produce Active Power while producing or consuming Reactive Power. The capability is provided for specified ambient conditions and voltage levels at the ~~Connection Point~~ agreed Measurement Location based on a template provided by the Network Operator. The chart shows the Reactive Power capability continuously achievable, subject to energy source availability, for any-a given level of Active Power output for a range of ambient temperatures, while not exceeding limits necessary to prevent damage to Equipment ~~or ensure stable operation~~ and ensure compliance with other Technical Requirements.

Generator Performance Standard: Means either the Ideal Generator Performance Standard or Negotiated Generator Performance Standard in respect of a Technical Requirement.

Explanatory Note

The definition below is revised to provide clarity on how this value is determined. Given this will be based on the specific standards associated with the type of equipment, Western Power and AEMO will provide additional guidance to participants via the guidelines published under clause 3A.4.4 on the relevant standards.

Maximum Continuous Current: Means the maximum current capable of being injected continuously in accordance with the relevant Australian or ISO Standard for Synchronous Generating Units and Asynchronous Generating Units at the Connection Point agreed Measurement Location when by the Generating System or Generating Units, as applicable, in order to support maintaining voltage on the SWIS during a disturbance, without causing damage to, or maloperation of, Equipment in the Transmission Connected Generating System is delivering Rated Maximum Apparent Power and the Connection Point voltage is within the normal range.

Explanatory Note

The definition below is added for use in definitions and Technical Requirements that require a specific temperature reference, and to provide guidance to Participants on where information will be published under 3A outlining the temperature assessment.

Maximum Temperature: Means the maximum ambient temperature specified by AEMO in consultation with the Network Operator, based on an assessment of where the Generating Units are physically located, as described in the guidelines published by AEMO under WEM Rules clause 3A.1.5 and recorded in the temperature dependency data.

Explanatory Note

The definition Measurement Location is added as the common clauses for some of the GPS allow for the Network Operator and AEMO to agree a location other than the connection point to measure the GPS in reference to.

Measurement Location: means either the Connection Point or another measurement location agreed between AEMO and the Network Operator, as specified for the relevant Technical Requirement.

Nameplate Rating: As described in the Technical Rules.

Nomenclature Standards: As described in the Technical Rules.

Power Factor: As described in the Technical Rules.

Power Station: As described in the Technical Rules.

Primary Equipment: As described in the Technical Rules.

Protection Scheme: As described in the Technical Rules.

Protection System: As described in the Technical Rules.

Explanatory Note

The definition below is revised to provide clarity on the temperature and location at which this is measured for use in linking to other Technical Requirements. It also clarifies where this value is recorded.

Rated Maximum Active Power: Means the maximum Active Power level that a Generating Unit or Generating System, as applicable, can continuously deliver at the agreed Measurement Location, subject to energy source availability, in accordance with the requirements of A12.2 when the ambient temperature is at the Maximum Temperature, as specified in the Temperature Dependency Data.

- ~~(a) — in relation to a Generating Unit, subject to the energy source availability, the maximum amount of Active Power that the Generating Unit can continuously deliver at the Connection Point relevant location when operating at its Nameplate Rating (adjusted for temperatures up to and including the maximum required ambient temperature as specified by the Network Operator); and~~
- ~~(b) — in relation to a Generating System, subject to the energy source availability, the combined maximum amount of Active Power that its Generating Units can deliver at the Connection Point relevant location, when its Generating Units are operating at their respective Nameplate Ratings (adjusted for temperatures up to and including the maximum required ambient temperature as specified by the Network Operator).~~

Explanatory Note

The definition below is revised to provide clarity on the temperature and location at which this is measured for use in linking to other Technical Requirements.

Rated Maximum Apparent Power: Means the maximum Apparent Power level that a Generating Unit or Generating System, as applicable, can continuously deliver at the agreed Measurement Location, subject to energy source availability, when operating at the extent of the Generator Performance Chart provided under A12.3 and the ambient temperature is at the Maximum Temperature.

- ~~(a) — in relation to a Generating Unit, subject to the energy source availability, the maximum amount of Apparent Power that the Generating Unit can continuously deliver at the Connection Point relevant location, when operating at its Nameplate Rating; and~~
- ~~(b) — in relation to a Generating System, subject to the energy source availability, the combined maximum amount of Apparent Power that its Generating Units can deliver at the Connection Point relevant location, when its Generating Units are operating at their respective Nameplate Ratings.~~

Explanatory Note

The definition below is revised to provide clarity on the location at which this is measured for use in linking to other Technical Requirements.

Rated Minimum Active Power: Means

- (a) in relation to a Generating Unit, the minimum amount of Active Power that the Generating Unit can continuously deliver, subject to energy source availability, while maintaining stable operation at the ~~Connection Point or another specified location in the SWIS (including within the Generating System)~~ agreed Measurement Location; and
- (b) in relation to a Generating System, the combined minimum amount of Active Power that its in-service Generating Units can continuously deliver, subject to energy source availability, at the ~~Connection Point~~ agreed Measurement Location while maintaining stable operation.

Reactive Power: As described in the Technical Rules.

Reactive Power Capability: Means the required level of Reactive Power performance as specified in Part A12.3 of this Appendix 12.

Remote Control Equipment or RCE: As described in the Technical Rules.

Remote Monitoring Equipment or RME: As described in the Technical Rules.

Rise Time: In relation to a control system, means the time taken for an output quantity to rise from its initial value to 90% of the final value induced by a step change of an input quantity, including in response to a disturbance as required under section A12.9.

RoCoF: Means the rate of change of frequency, expressed in Hertz per second.

Settling Time: In relation to a control system, means the time measured from initiation of a step change in an input quantity to the time when the magnitude of error between the output quantity and its final settling value remains less than 10% of:

- (a) if the sustained change in the quantity is less than half of the maximum change in that output quantity, half of the maximum change induced in that output quantity; or otherwise
- (b) the sustained change induced in that output quantity.

Static Excitation System: As described in the Technical Rules.

Synchronism: As described in the Technical Rules.

Synchronous Generating System: Means a Generating System comprised of Synchronous Generating Units.

Synchronous Generating Unit: As described in the Technical Rules.

Tap-Changing Transformer: As described in the Technical Rules.

Explanatory Note

The definition below is added to provide clarity on how this is used in defining the Technical Requirements.

Target Setpoint: Means a value specifying a desired operating level for the Generating Unit or Generating System, as applicable, at the relevant location. For example, a desired Active Power, Reactive Power or Power Factor.

Explanatory Note

The definition below is revised to provide clarity on the location at which this is measured for use in linking to other Technical Requirements.

Temperature Dependency Data: Means a set of data defining the maximum achievable Active Power of a Generating System or Generating Unit at a particular temperature at the agreed Measurement Location. The data will be provided based on a template provided by the Network Operator. The data shows the Active Power capability achievable for any a range of ambient temperatures while also meeting all other Technical Requirements not exceeding limits necessary to prevent damage to plant or ensure stable operation.

Total Fault Clearance Time: As described in the Technical Rules.

Transformer: As described in the Technical Rules.

Transmission System: As described in the Technical Rules.

Turbine Control System: As described in the Technical Rules.

A12.2. Technical Requirement: Active Power Capability

Explanatory Note

This section is revised to provide clarity on where the requirement is to be measured from, and how Participants are to record the Active Power quantities in the Temperature Dependency Data. The clauses below have also been modified to clarify the interaction between the Active Power values in the Temperature Dependency Data and the other Technical Requirements.

A12.2.1. Common Requirements

A12.2.1.1. ~~As the Ideal Generator Performance Standard is the same as the Minimum Generator Performance Standard for Active Power capability, there are no additional Common Requirements for this Technical Requirement.~~ In relation to the application of this Technical Requirement, the requirements apply at the Connection Point unless otherwise specified in the relevant clause, or the Network Operator or AEMO determines that the Technical Requirement must be measured at a different location for the particular Generating Unit or Generating System, in which case the measurement location must be recorded as part of the relevant Generator Performance Standard.

A12.2.2. Ideal Generator Performance Standard

A12.2.2.1. The Ideal Generator Performance Standard is the same as the Minimum Generator Performance Standard for Active Power capability.

A12.2.3. Minimum Generator Performance Standard

A12.2.3.1. ~~In relation to the application of this Technical Requirement, the requirements apply at the Connection Point unless otherwise specified [Blank]~~

A12.2.3.2. The Generator Performance Standard for Active Power capability must include Temperature Dependency Data up to and including the Maximum Temperature, which must include the Rated Maximum Active Power, maximum ambient temperature specified by the Network Operator, and including ambient temperatures above the Maximum Temperature after which the Active Power capability is reduced:

- (a) for the Generating System measured at the Connection Point; and
- (b) for each Synchronous Generating Unit measured at the Generating Unit terminal.

A12.2.3.3. ~~The maximum ambient temperature specified by the Network Operator will be based on an assessment of where the Generating Units are physically located. [Blank]~~

A12.2.3.4. Subject to clause A12.2.3.5 and energy source availability, the Generating Unit or Generating System, as applicable, must be capable of maintaining Continuous Uninterrupted Operation and meeting all other Technical

~~Requirements while achieving and maintaining Rated Maximum the relevant Active Power output levels at the temperatures specified in A12.2.3.2 for all operating conditions, unless otherwise directed by AEMO or the Network Operator, and capable of maintaining its Rated Maximum Active Power output level, subject to energy source availability.~~

A12.2.3.5. Clause A12.2.3.4 does not apply to the extent that a temporary reduction in Active Power has been agreed to by the Network Operator in order to achieve the required Reactive Power Capability under Maximum Temperature ~~maximum ambient temperature~~ conditions as set out in Part A12.3 of this Appendix 12.

A12.2.3.6. Unless otherwise directed under these WEM Rules, Generating Systems and Generating Units, as applicable, must not exceed the relevant Active Power levels at the temperatures specified in A12.2.3.2.

A12.2.4. Negotiation Criteria

A12.2.4.1. There are no Negotiation Criteria for this Technical Requirement.

A12.3. Technical Requirement: Reactive Power Capability

Explanatory Note

The section is revised to provide clarity on where the requirement is to be measured from and the temperatures and outputs over which the Technical Requirement applies. There is also a consequential change as a result of changes to the Registration framework.

A12.3.1. Common Requirements

- A12.3.1.1. In relation to the application of this Technical Requirement, the requirements apply at the Connection Point unless otherwise specified in the relevant clause, or the Network Operator or AEMO determines that the Technical Requirement must be measured at a different location for the particular Generating Unit or Generating System, in which case the measurement location must be recorded as part of the relevant Generator Performance Standard.
- A12.3.1.2. The Generator Performance Standard must include a Generator Performance Capability Chart, including data ~~for up to and including the Maximum Temperature maximum ambient temperature specified by the Network Operator, and including ambient temperatures above the Maximum Temperature after which the performance is reduced.~~
- A12.3.1.3. There must be no control system limitation, protection system or other limiting device in operation that would prevent the Generating System from providing the Reactive Power output within the area defined in the Generator Performance Capability Chart.
- A12.3.1.4. ~~The maximum ambient temperature specified by the Network Operator will be based on an assessment of where the Generating Units are physically located.~~
[Blank]
- A12.3.1.5. Each Generating System's Connection Point must be capable of permitting the Dispatch of the full Active Power and Reactive Power Capability of the Generating System.

A12.3.2. Ideal Generator Performance Standard

- A12.3.2.1. For all operating conditions including temperatures up to and including the Maximum Temperature, each Generating Unit within the Generating System must be capable of supplying or absorbing Reactive Power continuously of at least the amount equal to the product of the Rated Maximum Active Power output of the Generating Unit at nominal voltage and 0.484 while operating at any level of Active Power output between its maximum Active Power output level as specified in the Temperature Dependency Data under A12.2, and its ~~minimum Rated Minimum~~ Active Power output level ~~as agreed by the Network Operator and AEMO as part of the Generator Performance Standard.~~

...

A12.3.3. Minimum Generator Performance Standard

A12.3.3.1. Subject to clause A12.3.3.3, for all operating conditions including temperatures up to and including the Maximum Temperature, the Generating System must be capable of supplying or absorbing Reactive Power continuously of at least the amount equal to the product of the Rated Maximum Active Power output of the Generating System and 0.329 while operating at any level of Active Power output level between its maximum Active Power output level as specified in the Temperature Dependency Data under A12.2, and ~~minimum~~ Rated Minimum Active Power output level ~~as agreed by the Network Operator and AEMO as part of the Generator Performance Standard~~.

...

A12.3.3.3. ~~Non-Scheduled Generators~~ Transmission Connected Generating Systems containing Intermittent Generating Systems may, with the Network Operator's agreement, achieve the Reactive Power Capability specified in clause A12.3.3.1 by reducing Active Power output when the ambient temperature exceeds 25 degrees Celsius in their location, with the conditions forming part of the Generator Performance Standard.

A12.4. Technical Requirement: Voltage And Reactive Power Control

Explanatory Note

The section is revised to provide clarity on where the requirement is to be measured from and the temperatures and outputs over which the Technical Requirement applies.

A12.4.1. Common Requirements

A12.4.1.1. ~~There are no Common Requirements for this Technical Requirement.~~In relation to the application of this Technical Requirement, the requirements apply at the Connection Point unless otherwise specified in the relevant clause, or the Network Operator or AEMO determines that the Technical Requirement must be measured at a different location for the particular Generating Unit or Generating System, in which case the measurement location must be recorded as part of the relevant Generator Performance Standard.

A12.4.1.2. In relation to the application of this Technical Requirement, unless otherwise specified in the relevant clause, the requirements apply when operating at any Active Power and Reactive Power level as permitted or required under the other Technical Requirements in this Appendix, and at all temperatures up to and including the Maximum Temperature.

A12.4.2. Ideal Generator Performance Standard

Explanatory Note

The clauses below are revised to account for consequential changes of introducing the new common clauses for measurement and temperature, and to include the new defined term Target Setpoint to provide clarity on how the Technical Requirement applies. References to Nameplate Rating have also been replaced with equivalent temperature dependent definitions to provide clarity at which temperature the requirement is defined.

Where reference to an Australian or international standard has been included, Western Power and AEMO will include guidance for Participants on the relevant standards in the guidelines published under clause 3A.4.4.

...

A12.4.2.5. A Generating System must have a voltage Control System that:

- (a) regulates voltage ~~at the Connection Point or another agreed location in the SWIS (including within the Generating System)~~ to within 0.5% of the Target sSetpoint, where that setpoint may be adjusted to incorporate any voltage droop or reactive current compensation agreed with AEMO and the Network Operator;

- (b) regulates voltage in a manner that helps to support network voltages during faults and does not prevent the requirements for voltage performance and stability in the Technical Rules from being achieved;
- (c) allows the voltage to be continuously controllable in the range of at least 95% to 105% of the target voltage (as determined by the Network Operator) ~~at the Connection Point or another location on the SWIS, as specified by the Network Operator~~, without reliance on a Tap-Changing Transformer and subject to the Generator Performance Standards for Reactive Power Capability with the voltage control location agreed with AEMO and the Network Operator; and
- (d) has limiting devices to ensure that a voltage disturbance does not cause a Generating Unit to trip at the limits of its operating capability. The Generating System must be capable of continuous stable operation ~~for indefinite periods~~ while under the control of any limiter. Limiters must not detract from the performance of any stabilising circuits and must have settings applied which are coordinated with all Protection Systems.

...

A12.4.2.7. A Reactive Power, including a Power Factor, Control System must:

- (a) regulate Reactive Power or Power Factor (as applicable) ~~at the Connection Point or another location in the SWIS (including within the Generating System), as specified by the Network Operator~~, to within:
 - (i) for a Generating System operating in Reactive Power mode, 2% of the ~~Rated Maximum Apparent Power Nameplate Rating (in MVA)~~ of the Generating System from the Target Setpoint (expressed in MVA_r); or
 - (ii) for a Generating System operating in Power Factor mode, a Power Factor equivalent to 2% of the ~~Rated Maximum Apparent Power Nameplate Rating (in MVA)~~ of the Generating System from the Target Setpoint (expressed in MVA_r); and
- (b) allow the Reactive Power or Power Factor ~~Target s~~Setpoint to be continuously controllable across the Reactive Power Capability range specified in the relevant Generator Performance Standard.

...

A12.4.2.10. Each Synchronous Generating Unit must have an Excitation Control System that:

- (a) is capable of operating the stator continuously at 105% of nominal voltage when operating at the maximum Active Power output specified in the Temperature Dependency Data provided under A12.2 for the relevant temperature with Rated Maximum Active Power output;
- (b) has an excitation ceiling voltage of at least:

- (i) for a Static Excitation System, 2.3 times; or
 - (ii) for other Excitation Control Systems, 1.5 times,
- the excitation required to achieve generation at the rated output the Nameplate Rating for rated Power Factor, rated speed and nominal voltage in accordance with the relevant Australian or ISO Standard for Synchronous Generating Units;
- (c) has a power system stabiliser with sufficient flexibility to enable damping performance to be maximised, with the stabilising circuit responsive and adjustable over a frequency range from 0.1 Hz to 2.5 Hz; and
 - (d) achieves a minimum equivalent gain of 200.⁵

...

A12.4.3. Minimum Generator Performance Standard

...

All Generating Systems

...

A12.4.3.4. A voltage Control System for a Generating System must:

- (a) regulate voltage at the Connection Point or another location in the SWIS (including within the Generating System), as specified by the Network Operator, to within 2% of the Target sSetpoint, where that setpoint may be adjusted to incorporate any voltage droop or reactive current compensation agreed with AEMO and the Network Operator; and
- (b) allow the voltage Target sSetpoint to be controllable in the range of at least 98% to 102% of the target voltage (as determined by the Network Operator) at the Connection Point or an alternative location, as specified by the Network Operator, subject to the Reactive Power Capability agreed with AEMO and the Network Operator under Part A12.3 of this Appendix 12.

A12.4.3.5. A Generating System's Reactive Power or Power Factor Control System must:

- (a) regulate Reactive Power or Power Factor (as applicable) at the Connection Point or another location in the SWIS (including within the Generating System), as specified by the Network Operator, to within:
 - (i) for a Generating System operating in Reactive Power mode, 5% of the Rated Maximum Apparent Power Nameplate Rating (in MVA) of the Generating System from the Target Setpoint (expressed in MVA_r); or
 - (ii) for a Generating System operating in Power Factor mode, a Power Factor equivalent to 5% of the Rated Maximum Apparent

Power Nameplate Rating (in MVA) of the Generating System
from the Target Setpoint (expressed in MVar);

- (b) allow the Reactive Power or Power Factor Target sSetpoint to be continuously controllable across the Reactive Power Capability defined in the relevant Generator Performance Standard; and
- (c) have limiting devices to ensure that a voltage disturbance does not cause a Generating Unit to trip at the limits of its operating capability. The Generating System must be capable of stable operation for indefinite periods while under the control of any limiter. Limiters must not detract from the performance of any stabilising circuits and must have settings applied, which are coordinated with all Protection Systems, and must be included as part of the Generator Performance Standard.

Synchronous Generating Systems

A12.4.3.6. Each Synchronous Generating Unit within the Generating System, with an Excitation Control System required to regulate voltage must:

- (a) have excitation ceiling voltage of at least 1.5 times the excitation required to achieve generation at the rated output -Nameplate Rating for rated Power Factor, rated speed and nominal voltage in accordance with the relevant Australian or ISO Standard for Synchronous Generating Units; and
- (b) subject to the ceiling voltage requirement, have a Settling Time of less than 7.5 seconds for a 5% voltage disturbance with the Generating Unit synchronised, subject to the Generating Unit being electrically connected to the SWIS and operating at a point where such a voltage disturbance would not cause any limiting device to operate.

A12.5. Technical Requirement: Active Power Control

Explanatory Note

This section has been revised to reflect that the Transmission Connected Generating System is dispatched as a whole, and not the individual elements. The changes to the Ideal Standard now reflect individual Generating System controllability (i.e. capability to respond to fixed targets) within Transmission Connected Generating System, and the overall Transmission Connected Generating System then being subject to dispatch requirements.

The changes to the Minimum Standard reflect controllability and maximum ramp, but do not specifically tie to Facility level dispatch requirements.

A12.5.1. Common Requirements

- A12.5.1.1. All Generating Systems must be capable of meeting the Dispatch Systems Requirements.
- A12.5.1.2. Any arrangements put in place as part of the Arrangement for Access to limit Active Power output in order to manage constraints on the Network must be included as part of the Generator Performance Standard.
- A12.5.1.3. Each Control System must be Adequately Damped.
- A12.5.1.4. Any relevant disconnection settings must be included as part of the Generator Performance Standard.
- A12.5.1.5. Subject to energy source availability and any other agreement by the Network Operator, where dispatched by AEMO a Generating System must be capable of maintaining its Active Power output consistent with its last received dispatch level in the event RME, RCE or Communications are unavailable.
- A12.5.1.6. The requirements in this Part A12.5 do not override any specific Active Power ramping requirements specified in Part A12.6 in response to frequency deviations.
- A12.5.1.7. In relation to the application of this Technical Requirement, unless otherwise specified in the relevant clause, the requirements apply when operating at any Active Power and Reactive Power level as permitted or required under the other Technical Requirements in this Appendix, and at all temperatures up to and including the Maximum Temperature.

A12.5.2. Ideal Generator Performance Standard

- A12.5.2.1. ~~For a Scheduled Generator, Generating System~~ A Non-Intermittent Generating System within a Transmission Connected Generating System must have an Active Power Control System capable of:
 - (a) maintaining and changing its Active Power output in accordance with Target Setpoints ~~its Dispatch Instructions~~;

- (b) ramping its Active Power output linearly from one Target Setpoint level of Dispatch to another; and
- (c) in a thermally stable state, changing Active Power generation output in response to a change in Target Setpoint Dispatch Instruction at a rate not less than 5% of ~~its the Generating Unit's or Generating System's~~ Rated Maximum Active Power per minute.

A12.5.2.2. ~~For a Non-Scheduled Generator, s~~Subject to energy source availability, an Intermittent Generating System within a Transmission Connected Generating System must be able to change its Active Power output in accordance with Target Setpoints, and must not change its Active Power generation output at a rate greater than 10 MW per minute or 15% of the ~~Power Station's aggregate Nameplate Rating~~ Rated Maximum Active Power per minute, whichever is the lower or as agreed with the Network Operator and AEMO.

A12.5.2.3. A Transmission Connected Generating System must be able to meet the Dispatch Systems Requirements.

A12.5.3. Minimum Generator Performance Standard

A12.5.3.1. ~~For a Scheduled Generator, A Non-Intermittent~~ Generating System within a Transmission Connected Generating System must have an Active Power Control System capable of maintaining and changing its Active Power output in accordance with ~~its Dispatch Instructions a Target Setpoint, and must be capable of changing Active Power generation at a rate not less than 5% of its Rated Maximum Active Power per minute.~~

A12.5.3.2. ~~For a Non-Scheduled Generator, s~~Subject to energy source availability, an Intermittent Generating System within a Transmission Connected Generating System must ensure that ~~the any~~ change of Active Power output in a 5 minute period does not exceed a value agreed with AEMO and the Network Operator.

A12.6. Technical Requirement: Inertia and Frequency Control

Explanatory Note

The section is revised to provide clarity on where the requirement is to be measured from and the temperatures and outputs over which the Technical Requirement applies.

A12.6.1. Common Requirements

- A12.6.1.1. All Control Systems must be Adequately Damped.
- A12.6.1.2. The recorded maximum ramp rate for the Generating System must be expressed as the change in Active Power (measured in MW) achievable across 6 seconds.
- A12.6.1.3. Any relevant disconnection settings must be provided as part of the Generator Performance Standard.
- A12.6.1.4. Control Systems on Generating Systems that control Active Power must include permanently installed and operational monitoring and recording equipment for key variables including each input and output, and equipment for testing the Control System sufficient to establish its dynamic operational characteristics.
- A12.6.1.5. After having met the relevant requirements for altering and holding Active Power output to arrest and correct changes in power system frequency, the Generating System, or Generating Units where relevant, must adhere to relevant requirements of A12.5 when returning to regular Active Power output (subject to any agreements under A12.6.1.6).
- A12.6.1.6. Unless otherwise agreed by the relevant Network Operator and AEMO, protection or other schemes that disconnect the Generating System or elements of the Generating System, must not be used in order to meet the requirements of this Part A12.6.
- A12.6.1.7. A Generating System must:
 - (a) have an automatic variable Active Power control characteristic; and
 - (b) where the Generating System contains a Generating Unit with a Turbine Control System, it must include equipment for both speed and Active Power control.
- A12.6.1.8. All Generating Units, or the Generating System, as applicable, must operate in a mode in which it will automatically alter its Active Power output to arrest and correct changes in power system frequency, unless instructed otherwise or approved for testing purposes by AEMO.

A12.6.1.9. The Frequency Dead Band on each Generating Unit, or the Generating System, as applicable, must be no greater than +/-0.025 Hz around 50.0Hz.

A12.6.1.10. Unless otherwise stated in this Part A12.6, the overall required frequency response of each Generating Unit, or Generating System, as applicable, must be settable and be capable of:

- (a) automatically achieving an increase in Active Power output proportional to a change in power system frequency of not less than 5% of the maximum Active Power specified in the Temperature Dependency Data provided under A12.2 ~~Rated Maximum Active Power~~ for each 0.1 Hz reduction in power system frequency from the lower level of Frequency Dead Band, provided the output is above the Rated Minimum Active Power; and
- (b) automatically achieving a reduction in Active Power output proportional to a change in power system frequency of not less than 5% of the maximum Active Power specified in the Temperature Dependency Data provided under A12.2 ~~Rated Maximum Active Power~~ for each 0.1 Hz increase in power system frequency from the upper level of Frequency Dead Band, provided this does not require operation below the Rated Minimum Active Power.

A12.6.1.11. The frequency response capability described in clause A12.6.1.10:

- (a) must not exhibit any step changes in Active Power as the power system frequency changes, unless otherwise agreed by the relevant Network Operator and AEMO under clause A12.6.1.6;
- (b) must commence responding with a delay no greater than that required to ensure stable operation or to allow for control system latency, as agreed by the relevant Network Operator and AEMO;
- (c) must not increase Active Power output in response to an increase in power system frequency; and
- (d) must not decrease Active Power output in response to a decrease in power system frequency.

A12.6.1.12. In relation to the application of this Technical Requirement, the requirements apply at the Connection Point unless otherwise specified in the relevant clause, or the Network Operator or AEMO determines that the Technical Requirement must be measured at a different location for the particular Generating Unit or Generating System, in which case the measurement location must be recorded as part of the relevant Generator Performance Standard.

A12.6.1.13. In relation to the application of this Technical Requirement, unless otherwise specified in the relevant clause, the requirements apply when operating at any Active Power and Reactive Power level as permitted or required under the other

Technical Requirements in this Appendix, and at all temperatures up to and including the Maximum Temperature.

A12.6.2. Ideal Generator Performance Standard

A12.6.2.1. The Ideal Generator Performance Standard requires that control ranges, response times and sustain times, are achieved for Generating Units, or the Generating System, as applicable, such that, subject to energy source availability:

- (a) the required frequency response in clause A12.6.1.10(a) can be complied with for any initial output up to ~~Rated Maximum~~ the maximum Active Power specified in the Temperature Dependency Data provided under A12.2 for the relevant temperature;
- (b) for Synchronous Generating Systems, for any frequency disturbance where the change in power system frequency is sufficient to change the Active Power of the Generating System by at least 5% of its ~~Rated Maximum~~ Rated Active Power, the Generating Unit or Generating System achieves at least 90% of the required frequency response specified in clause A12.6.1.10 within 6 seconds;
- (c) for Asynchronous Generating Systems, for any frequency disturbance where the change in power system frequency is sufficient to change the Active Power of the Generating System by at least 5% of its ~~Rated Maximum~~ Rated Active Power, the Generating Unit or Generating System achieves at least 90% of the required frequency response specified in clause A12.6.1.10 within 2 seconds;
- (d) the required frequency response specified in clause A12.6.1.10 is sustained for not less than a further 10 seconds beyond the timeframes specified in clause A12.6.2.1(b) and clause A12.6.2.1(c), as applicable, subject to a restoration of power system frequency in which case the Active Power output must be changed in proportion to the power system frequency in accordance with the required frequency response specified in clause A12.6.1.10; and
- (e) each Generating Unit's or Generating System's, as applicable, capability to sustain response beyond the timeframe specified in clause A12.6.2.1(d) must be included as part of the relevant Generator Performance Standard.

A12.6.3. Minimum Generator Performance Standard

A12.6.3.1. [Blank]

A12.6.3.2. Subject to energy source availability, a Generating System is required to have control ranges and response times for each Generating Unit, or Generating Systems as applicable, such that:

- (a) it is able to comply with the required frequency response specified in clause A12.6.1.10(a), up to 85% of Rated Maximum Active Power output;
- (b) for initial outputs above 85% of Rated Maximum Active Power output, each Generating Unit's or Generating System's, as applicable, response capability must be agreed with the relevant Network Operator and AEMO, and included as part of the relevant Generator Performance Standard;
- (c) for Synchronous Generating Systems, for any frequency disturbance where the change in frequency is sufficient to change the Active Power of the Generating System by at least 5% of its Rated Maximum ~~Rated~~ Active Power output, the Generating Unit or Generating System achieves at least 60% of the required frequency response specified in clause A12.6.1.10 within 6 seconds, and 90% of the required frequency response specified in clause A12.6.1.10 within 15 seconds;
- (d) for Asynchronous Generating Systems, for any frequency disturbance where the change in frequency is sufficient to change the Active Power of the Generating System by at least 5% of its Rated Maximum ~~Rated~~ Active Power output, the Generating Unit or Generating System achieves at least 60% of the required frequency response specified in clause A12.6.1.10 within 6 seconds, and at least 90% of the required frequency response specified in clause A12.6.1.10 within 15 seconds;
- (e) the required frequency response specified in clause A12.6.1.10 is sustained for not less than a further 10 seconds beyond the latest timeframe specified in clause A12.6.3.2(c) and clause A12.6.3.2(d), as applicable, subject to a restoration of power system frequency in which case the Active Power output must be changed in proportion to the power system frequency in accordance with the required frequency response specified in clause A12.6.1.10; and
- (f) each Generating Unit's or Generating System's, as applicable, capability to sustain response beyond the timeframe specified in clause A12.6.3.2(e) must be included as part of the relevant Generator Performance Standard.

A12.6.4. Negotiation Criteria

A12.6.4.1. A Negotiated Generator Performance Standard must require that there is no requirement for a Generating System to operate with an Active Power output:

- (a) below its Rated Minimum Active Power in response to a rise in the frequency of the SWIS as measured at the Connection Point;
- (b) above ~~its Rated Maximum~~ the relevant maximum Active Power output specified in the Temperature Dependency Data provided under A12.2 for the relevant temperature, in response to a fall in the frequency of the SWIS as measured at the Connection Point; or

- (c) to deliver a rate of change in output exceeding the specified maximum ramp rate.

...

A12.7. Technical Requirement: Disturbance Ride Through for a Frequency Disturbance

Explanatory Note

The section is revised to provide clarity on where the requirement is to be measured from and the temperatures and outputs over which the Technical Requirement applies.

A12.7.1. Common Requirements

- A12.7.1.1. In relation to the application of this Technical Requirement, the requirements apply at the Connection Point unless otherwise specified in the relevant clause, or the Network Operator or AEMO determines that the Technical Requirement must be measured at a different location for the particular Generating Unit or Generating System, in which case the measurement location must be recorded as part of the relevant Generator Performance Standard.
- A12.7.1.2. Any relevant disconnection settings must be provided as part of the Generator Performance Standard.
- A12.7.1.3. Where the relevant Network Operator and AEMO have agreed to a protection, or other scheme, that will disconnect the Generating System or elements of the Generating System, in order to satisfy the requirements of Part A12.6, the operation of those schemes based on their agreed parameters will not be taken to be a breach of the requirements of this Part A12.7.
- A12.7.1.4. In relation to the application of this Technical Requirement, unless otherwise specified in the relevant clause, the requirements apply when operating at any Active Power and Reactive Power level as permitted or required under the other Technical Requirements in this Appendix.

...

A12.8. Technical Requirement: Disturbance Ride Through for a Voltage Disturbance

Explanatory Note

The section is revised to provide clarity on where the requirement is to be measured from and the temperatures and outputs over which the Technical Requirement applies.

A12.8.1. Common Requirements

- A12.8.1.1. In relation to the application of this Technical Requirement, the requirements apply at the Connection Point unless otherwise specified in the relevant clause, or the Network Operator or AEMO determines that the Technical Requirement must be measured at a different location for the particular Generating Unit or Generating System, in which case the measurement location must be recorded as part of the relevant Generator Performance Standard.
- A12.8.1.2. The Generating System and each of its operating Generating Units is required to remain in Continuous Uninterrupted Operation while the Connection Point voltage remains within 90% to 110% of nominal voltage.
- A12.8.1.3. Any relevant disconnection settings must be provided as part of the Generator Performance Standard.
- A12.8.1.4. In relation to the application of this Technical Requirement, unless otherwise specified in the relevant clause, the requirements apply when operating at any Active Power and Reactive Power level as permitted or required under the other Technical Requirements in this Appendix.

...

A12.9. Technical Requirement: Disturbance Ride Through for Multiple Disturbances

Explanatory Note

The section is revised to provide clarity on where the requirement is to be measured from and the temperatures and outputs over which the Technical Requirement applies. The changes also require Participants to advise of any specific temperature limitations in relation to fault current injection that can then be used to support assessment and will be recorded against the Technical Requirement.

Where a Technical Requirement references an Australian or international standard, Western Power and AEMO will include guidance to participants on the relevant standards in the guidelines published under clause 3A.4.4.

The changes to A12.9.2.5 and A.12.9.3.5 provide guidance as to where the initial pre-fault disturbance voltages should be measured from, with the Ideal Standard requiring that the initial level must be within a certain range, and the Minimum Standard allowing for the level to be agreed with Western Power and AEMO as part of negotiation.

[Note: This Technical Requirement uses the term 'fault' to include a fault of the relevant type having a metallic conducting path.]

A12.9.1. Common Requirements

A12.9.1.1. The Common Requirements for disturbance ride through for multiple disturbances as they apply to different Generating Systems, is specified in Table A12.9.1.1:

Type of Generating System	Relevant requirement
Generating System comprised solely of Synchronous Generating Units.	Clause A12.9.1.3, <u>clause A12.9.1.2</u> , clause A12.9.1.4 <u>and</u> clause A12.9.1.5, <u>clause A12.9.1.7 and clause A12.9.1.8</u> .
Generating System comprised solely of Asynchronous Generating Units.	Clause A12.9.1.3, <u>clause A12.9.1.2</u> , clause A12.9.1.4 <u>and</u> clause A12.9.1.6, <u>clause A12.9.1.7 and clause A12.9.1.8</u> .
Generating System comprised of Synchronous Generating Units and Asynchronous Generating Units.	Clause A12.9.1.3, <u>clause A12.9.1.2</u> , and clause A12.9.1.4, <u>clause A12.9.1.7, clause A12.9.1.8</u> and: (a) for that part of the Generating System comprised of Synchronous Generating Units, clause A12.9.1.5; (b) for that part of the Generating System comprised of Asynchronous Generating Units, clause A12.9.1.6.

Table A12.9.1.1: Common Requirements for Disturbance Ride through for Multiple Disturbances

All Generating Systems

A12.9.1.2. Any relevant disconnection settings must be provided as part of the Generator Performance Standard.

All Generating Systems

A12.9.1.3. The Generator Performance Standard must include any operational arrangements to ensure the Generating System, including all operating Generating Units, will meet their agreed performance levels under abnormal Network or Generating System conditions.

A12.9.1.4. When assessing multiple disturbances, a fault that is re-established following operation of automatic reclose Protection Scheme shall be counted as a separate disturbance.

Synchronous Generating Systems and units

A12.9.1.5. For a Generating System comprised solely of Synchronous Generating Units, the reactive current contribution ~~as measured at the Connection Point or another location in the SWIS (including within the Generating System), as specified by the Network Operator,~~ must equal or exceed 250% of the Maximum Continuous Current of the Generating System. For a Synchronous Generating Unit in any other Generating System, the reactive current contribution must equal or exceed 250% of the Maximum Continuous Current of that Synchronous Generating Unit.

Asynchronous Generating Systems

A12.9.1.6. For a Generating System comprised of Asynchronous Generating Units:

- (a) the reactive current contribution ~~as measured at the Connection Point~~ must equal or exceed the Maximum Continuous Current of the Generating System, including all operating Asynchronous Generating Units;
- (b) ~~the reactive current contribution and voltage deviation may be measured at a location other than the Connection Point (including within the relevant Generating System) where agreed with AEMO and the Network Operator, in which case the reactive current contribution and voltage deviation will be assessed at that agreed location; [Blank]~~
- (c) the reactive current contribution required may be calculated using phase to phase, phase to ground or sequence components of voltages. The ratio of the negative sequence to positive sequence components of the reactive current contribution must be agreed with AEMO and the Network Operator for the types of disturbances specified in this Technical Requirement; and
- (d) the Generator Performance Standard must record all conditions (which may include temperature) considered relevant by AEMO and the Network Operator under which the reactive current response is required.

Measurement location and temperature limitations

A12.9.1.7. In relation to the application of this Technical Requirement, the requirements apply at the Connection Point unless otherwise specified in the relevant clause, or the Network Operator or AEMO determines that the Technical Requirement must be measured at a different location for the particular Generating Unit or Generating System, in which case the measurement location must be recorded as part of the relevant Generator Performance Standard.

A12.9.1.8. In relation to the application of this Technical Requirement, unless otherwise specified in the relevant clause, the requirements apply when operating at any Active Power and Reactive Power level as permitted or required under the other Technical Requirements in this Appendix, and the Market Participant responsible for the Transmission Connected Generating System must specify any thermal limitations that may limit the output of the Generating System or Generating Unit in relation to this Technical Requirement.

A12.9.2. Ideal Generator Performance Standard

...

A12.9.2.4. Subject to any changed power system conditions or energy source availability beyond the operator of the Generating System's reasonable control, a Generating System comprised of Synchronous Generating Units, in respect of the faults referred to in clause A12.9.2.2, must supply to, or absorb from, the Network:

- (a) to assist the maintenance of power system voltages during the fault, capacitive reactive current of at least the greater of its pre-disturbance reactive current and 4% of the Maximum Continuous Current of the Generating System including all operating Synchronous Generating Units (in the absence of a disturbance) for each 1% reduction (from the level existing just prior to the fault) of Connection Point voltage or another agreed location in the SWIS (including within the Generating System) during the fault;
- (b) after clearance of the fault, Reactive Power sufficient to ensure that the Connection Point voltage or another agreed location in the SWIS (including within the Generating System) is within the range for Continuous Uninterrupted Operation; and
- (c) from 100 milliseconds after clearance of the fault, Active Power of at least 95% of the level existing just prior to the fault.

Asynchronous Generating Systems

A12.9.2.5. Subject to any changed power system conditions or energy source availability beyond the operator of the Generation System's reasonable control, a Generating System comprised of Asynchronous Generating Units, for the faults

referred to in clause A12.9.2.2, must have equipment capable of supplying to, or absorbing from, the Network:

- (a) to assist the maintenance of power system voltages during the fault:
 - (i) capacitive reactive current in addition to its pre-disturbance level of at least 4% of the Maximum Continuous Current of the Generating System including all operating Asynchronous Generating Units (in the absence of a disturbance) for each 1% reduction of voltage at the Connection Point below a specified threshold level within the under-voltage range of 85% to 90% of nominal voltage, except where a Generating System is directly connected to the SWIS with no step-up or connection Transformer and voltage at the Connection Point is 5% or lower of nominal voltage; and
 - (ii) inductive reactive current in addition to its pre-disturbance level of at least 6% of the Maximum Continuous Current of the Generating System including all operating Asynchronous Generating Units (in the absence of a disturbance) for each 1% increase of voltage at the Connection Point above a specified threshold level within the over-voltage range of 110% to 115% of nominal voltage,

during the disturbance and maintained until Connection Point voltage recovers to between 90% and 110% of nominal voltage, or such other range agreed with the Network Operator and AEMO; and
- (b) from 100 milliseconds after clearance of the fault, Active Power of at least 95% of the level existing just prior to the fault.

...

A12.9.2.8. Subject to a Generating System's thermal limitations as specified in clause A12.9.1.8 and energy source availability, a Generating System must make available at all times:

- (a) sufficient current to maintain rated output in accordance with the relevant Australian or ISO Standard for Asynchronous Generating Units Rated Maximum Apparent Power of the Generating System including all operating Generating Units (in the absence of a disturbance), for all Connection Point voltages above 115% (or otherwise, above the agreed over-voltage range); and
- (b) the Maximum Continuous Current of the Generating System including all operating Generating Units (in the absence of a disturbance) for all Connection Point voltages below 85% (or otherwise, below the agreed under-voltage range),

despite the amount of reactive current injected or absorbed during voltage disturbances, except that AEMO and the Network Operator may agree limits on

active current injection where required to maintain Power System Security and/or the Quality of Supply to other Equipment connected to the SWIS.

A12.9.3. Minimum Generator Performance Standard

...

Asynchronous Generating Systems

A12.9.3.5. Subject to a Generating System's thermal limitations as specified in clause A12.9.1.8 and any changed power system conditions or energy source availability beyond the operator of the Generating System's reasonable control, a Generating System comprised of Asynchronous Generating Units, for the faults referred to in clause A12.9.3.2, must have equipment capable of supplying to, or absorbing from, the Network:

- (a) to assist the maintenance of power system voltages during the fault:
 - (i) capacitive reactive current in addition to its pre-disturbance level of at least 2% of the Maximum Continuous Current of the Generating System including all operating Asynchronous Generating Units (in the absence of a disturbance) for each 1% reduction of voltage at the Connection Point below a specified threshold level agreed by the Network Operator and AEMO within the under-voltage range of 80% to 90% of nominal voltage, except where:
 - 1. voltage at the Connection Point is 15% or lower of nominal voltage; or
 - 2. where the Generating System is directly connected to the SWIS with no step-up or connection Transformer and voltage at the Connection Point is 20% or lower of nominal voltage; and
 - (ii) inductive reactive current in addition to its pre-disturbance level of at least 2% of the Maximum Continuous Current of the Generating System including all operating Asynchronous Generating Units (in the absence of a disturbance) for each 1% increase of voltage at the Connection Point above a specified threshold level agreed by the Network Operator and AEMO within the over-voltage range of 110% to 120% of nominal voltage,

during the disturbance and maintained until the Connection Point voltage recovers to between 90% and 110% of nominal voltage, or such other range agreed with the Network Operator and AEMO; and
- (b) returning to at least 95% of the pre-fault Active Power output, after clearance of the fault, within a period of time agreed by the operator, AEMO and the Network Operator.

...

A12.10. Technical Requirement: Disturbance Ride Through for Partial Load Rejection

Explanatory Note

The section is revised to provide clarity on where the requirement is to be measured from and the temperatures and outputs over which the Technical Requirement applies. There are also some minor wording changes to aid reading and make use of standard defined terms.

A12.10.1. Common Requirements

A12.10.1.1. ~~There are no Common Requirements for this Technical Requirement~~ In relation to the application of this Technical Requirement, the requirements apply at the Connection Point unless otherwise specified in the relevant clause, or the Network Operator or AEMO determines that the Technical Requirement must be measured at a different location for the particular Generating Unit or Generating System, in which case the measurement location must be recorded as part of the relevant Generator Performance Standard.

A12.10.1.2. In relation to the application of this Technical Requirement, unless otherwise specified in the relevant clause, the requirements apply when operating at any Active Power and Reactive Power level as permitted or required under the other Technical Requirements in this Appendix, and at all temperatures up to and including the Maximum Temperature.

A12.10.2. Ideal Generator Performance Standard

A12.10.2.1. A Generating System and each of its operating Generating Units must be capable of Continuous Uninterrupted Operation during and following a sudden reduction in ~~required~~ Active Power generation ~~imposed from the power system as a result of a Contingency Event~~, provided that the reduction is less than 30% of the Generating System's Rated Maximum Active Power and the ~~required~~ Active Power generation remains above the Generating System's Rated Minimum Active Power output level.

A12.10.3. Minimum Generator Performance Standard

A12.10.3.1. A Generating System must be capable of Continuous Uninterrupted Operation during and following a sudden reduction in ~~required~~ Active Power generation ~~imposed from the power system as a result of a Contingency Event~~, provided that the reduction is less than 5% of the Generating System's Rated Maximum Active Power and the ~~required~~ Active Power generation remains above the Generating System's Rated Minimum Active Power output level.

A12.10.4. Negotiation Criteria

A12.10.4.1. There are no Negotiation Criteria for this Technical Requirement.

...

A12.12. Technical Requirement: Quality of Electricity Generated

Explanatory Note

The section is revised to remove the linkages to specified standards that change over time, and instead link to the limits specified by the Network Operator. Western Power will subsequently provide guidance for Participants on the relevant levels in the guidelines published under clause 3A.4.4.

A12.12.1. Common Requirements

A12.12.1.1. A Generating System, when generating and when not generating, must not produce, at any of its Connection Points for generation, voltage imbalance greater than the limits determined by the Network Operator as necessary to achieve the requirements specified for negative phase sequence voltage at the Connection Point in the Technical Rules.

A12.12.2. Ideal Generator Performance Standard

A12.12.2.1. A Generating System, when generating and when not generating, must not produce at any of its Connection Points for generation:

- (a) voltage fluctuation greater than the limits allocated by the Network Operator that are no more onerous than the lesser of the acceptance levels determined in accordance with either of the stage 1 or the stage 2 evaluation procedures defined in AS/NZS 61000.3.7:2001; and
- (b) harmonic voltage distortion greater than ~~the emission limits specified in AS 1359.101 and IEC 60034-1 or~~ emission limits allocated by the Network Operator that are no more onerous than the lesser of the acceptance levels determined in accordance with either of the stage 1 or the stage 2 evaluation procedures defined in AS/NZS 61000.3.6:2001.

A12.12.3. Minimum Generator Performance Standard

A12.12.3.1. A Generating System, when generating and when not generating, must not produce at any of its Connection Points for generation:

- (a) voltage fluctuations greater than limits determined by the Network Operator through the negotiation using the stage 3 evaluation procedure defined in AS/NZS 61000.3.7:2001, with the Market Participant responsible for the Transmission Connected Generating System

agreeing to fund any works necessary to mitigate adverse effects from accepting this emission level; and

- (b) Harmonic voltage distortion greater than ~~the emission limits specified in AS 1359.101 and IEC 60034-1~~ or emission limits determined by the Network Operator through the negotiation using the Stage 3 evaluation procedure defined in AS/NZS 61000.3.6:2001 with the Market Participant responsible for the Transmission Connected Generating System agreeing to fund any works necessary to mitigate adverse effects from accepting this emission level.

A12.12.4. Negotiation Criteria

- A12.12.4.1. A Proposed Negotiated Generator Performance Standard must not prevent the Network Operator meeting each SWIS Operating Standard or contractual obligations to existing holders of Arrangements for Access.

Part 2. Amending Rules to commence on 1 January 2023

Explanatory Note

This part contains Amending Rules that are proposed to commence at 8:00 AM on 1 January 2023, immediately after the commencement of the Amending Rules in Schedule G of the Tranche 5 Amendments.

...

2.16. Monitoring the Effectiveness of the Market

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Explanatory Note

Changes to clause 2.16.2A allow the ERA to provide AEMO a list of WEM Rules that AEMO must monitor for compliance, and new clause 2.16.2AA allows AEMO and the ERA to negotiate on the types of information included (based on practicality and cost) and the time and date this information is provided. The intent of this policy change is to allow the ERA more flexibility in directing AEMO to monitor compliance with Rule changes where AEMO is the party best placed to do so, and for this list of WEM Rules monitoring by AEMO to change over time to remain more relevant as the market evolves. Transparency will be provided to Market Participants on the types of information being provided through the Market Surveillance Data Catalogue (MSDC) and WEM Rules being monitored by AEMO as both of these will be combined and published as one list for transparency.

Changes to 2.16.2E and 2.16.2F are consequential to this policy change.

2.16.2A. By the New WEM Commencement Day, the Coordinator and the Economic Regulation Authority, as relevant, must:

- (a) in the case of the Coordinator and the Economic Regulation Authority, provide to AEMO a ~~combined~~ list of data items to be included by AEMO in the Market Surveillance Data Catalogue, being information required by the Coordinator and the Economic Regulation Authority to perform their functions under these WEM Rules; ~~and~~
- (aA) in the case of the Economic Regulation Authority, provide to AEMO the list of WEM Rules that AEMO must monitor for compliance and report to the Economic Regulation Authority any alleged breaches of; ~~and~~
- (b) publish the combined list of ~~data the~~ items ~~provided to AEMO~~ under clauses 2.16.2A(a) ~~and 2.16.2A(aA)~~ on their respective websites.

2.16.2AA. When developing the list referred to in clause 2.16.2A(aA) prior to New WEM Commencement Day, and for any subsequent updates to that list, the Economic Regulation Authority must:

- (a) agree with AEMO a proposed date and time for each item on the list to commence that allows reasonable time for AEMO to implement the monitoring changes required by the Economic Regulation Authority; and

- (b) consider the practicality and cost for AEMO to monitor each item on the list.
- 2.16.2B. By the New WEM Commencement Day, AEMO must provide access to all data items in the Market Surveillance Data Catalogue, including the items in the combined list of data items provided to AEMO under clause 2.16.2A(a), to the Coordinator and the Economic Regulation Authority.
- 2.16.2D. The Coordinator or the Economic Regulation Authority may request access to historical versions of data items in the Market Surveillance Data Catalogue from AEMO. AEMO must provide access to historical versions of those data items to both the Coordinator and the Economic Regulation Authority (regardless of who made the request), as soon as practicable.
- 2.16.2E. The Coordinator or the Economic Regulation Authority may, from time to time, request AEMO to include new data items in the Market Surveillance Data Catalogue, and the Economic Regulation Authority may update the list referred to in clause 2.16.2A(aA), by:
- (a) updating the combined list of data items under clause 2.16.2A(a) or, in the case of the Economic Regulation Authority, by updating the list referred to in clause 2.16.2A(aA) and providing the updated combined list to AEMO and the Coordinator or Economic Regulation Authority (as relevant); and
 - (b) publishing the updated combined list of ~~data~~ items on their respective websites.
- 2.16.2F. On receipt of an updated combined list of ~~data~~ items under clause 2.16.2E(a) from the Coordinator or the Economic Regulation Authority, AEMO must update the Market Surveillance Data Catalogue as applicable, and advise both the Coordinator and the Economic Regulation Authority of the date on which access to the new data items will be available.

...

Explanatory Note

Clauses 2.16.4 and 2.16.5 will be deleted by the Tranche 5 Amendments on 1 January 2023. However, the clauses need to be reinserted (set to '[Blank]') after their deletion to avoid a gap in the the clause number sequence.

2.16.4. [Blank]

2.16.5. [Blank]

- 2.16.6. Where the Coordinator or the Economic Regulation Authority (as applicable) considers that it is necessary or desirable for the performance of its functions under these WEM Rules, the WEM Regulations or the Electricity Industry Act, or the functions of AEMO under this section 2.16, the Coordinator or the Economic

Regulation Authority (as applicable) may collect additional information from Rule Participants as follows:

...

...

Part 3. Amending Rules with TBA commencement date

Explanatory Note

This part contains Amending Rules that are expected to commence on or shortly before New WEM Commencement Day.

...

1.7. Publication

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Explanatory Note

Clauses 1.7.1 to 1.7.4 are amended to reflect the new Market Information Framework. AEMO, the ERA and the Coordinator will only be required to publish Public Information, which by its nature should be available to any person. Chapter 10 provides flexibility to AEMO, the ERA and the Coordinator regarding the means by which Confidential Information is disclosed.

- 1.7.1. Where AEMO is required by these WEM Rules to publish or release a document or information, then AEMO must make that document or information available on the WEM Website, ~~in a place which is generally accessible by members of the class of persons entitled to access that document or information given AEMO's determination of its confidentiality status in accordance with section 10.2.~~
- 1.7.2. [Blank]
- 1.7.3. Where the Economic Regulation Authority is required by these WEM Rules to publish or release a document or information, then the Economic Regulation Authority must make that document or information available on its website, ~~in a place which is generally accessible by members of the class of persons entitled to access that document or information given AEMO's determination of its confidentiality status in accordance with clause 10.2.~~
- 1.7.3A. Where the Coordinator is required by these WEM Rules to publish or release a document or information, the Coordinator must make that document or information available on the Coordinator's Website, ~~in a place which is generally accessible by members of the class of persons entitled to access that document or information given its confidentiality status in accordance with section 10.2.~~
- 1.7.4. Where a Network Operator (in respect to any WEM Procedures the Network Operator is required to develop and maintain under these WEM Rules) is required by these WEM Rules to publish or release a document or information, then:
- (a) the Network Operator must make that document or information available on its ~~web site, in a place which is generally accessible by members of the class of persons entitled to access that document or information given~~

~~AEMO's determination of its confidentiality status in accordance with section 40.2 website~~; and

- (b) if these WEM Rules require that document or information to be published on the WEM Website:
- i. the Network Operator must promptly notify AEMO when the document or information is published on the Network Operator's ~~web site~~ website;
 - ii. AEMO must, at a minimum, promptly publish a link to the relevant area of the Network Operator's ~~web site~~ website on the WEM Website; and
 - iii. the Network Operator is deemed to have published or released the document or information once the Network Operator has published the document or information on its own ~~web site~~ website, and has notified AEMO.

...

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

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Explanatory Note

Clause 1.47.3 is amended to insert a missing space in the header of the table.

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

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

...

1.48. Specific Transitional Provisions – Intermittent Loads

...

Explanatory Note

Clause 1.48.3 is amended to clarify that the deemed exemption described in the clause only applies to an Energy Producing System that supplies an Intermittent Load prior to New WEM Commencement Day.

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

...

Explanatory Note

Clauses 1.54A.1 and 1.54A.2 are amended to extend the transitional provisions for Standing Data to apply to items that are Rule Participant-specific.

1.54A. Specific Transitional Provisions – Standing Data

- 1.54A.1. Where a Rule Participant is required to provide new Standing Data or modify current Standing Data in respect to a Rule Participant or Facility pursuant to the Tranches 2 and 3 Amending Rules (as defined in clause 1.43.1) or any other Amending Rules made by the Minister under regulation 7(5) of the WEM Regulations by a notice published in the Government Gazette prior to the New WEM Commencement Day, the Rule Participant must do so in accordance with the processes and by the times specified by AEMO under clause 1.54A.2.
- 1.54A.2. Not less than four months before the New WEM Commencement Day, AEMO must publish on the WEM Website:
- (a) the Standing Data required to be provided to AEMO for a Rule Participant or Facility in relation to the Post-Amended Rules (as defined in clause 1.47.1); and
 - (b) the form and manner in which the Standing Data referred to in clause 1.54A.2(a) is to be provided to AEMO.

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2.8 Review of Coordinator Rule Amendment Decisions, Ministerial Approval and Coming into Force of Rule Amendments

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Explanatory Note

The list of Protected Provisions has been updated to only include clauses that contain responsibilities for, or functions of, the Coordinator or Minister for Energy.

This ensures that the purpose of the Protected Provisions remain consistent with their original intent – to ensure that where there is a potential conflict of interest there is Ministerial oversight of the decision being made – in the context of the current WEM governance arrangements.

~~2.8.13. The following clauses are Protected Provisions:~~

- ~~(a) clauses 1.1 to 1.3 and 1.5 to 1.9;~~
- ~~(b) clauses 2.1 to 2.25, 2.28, 2.31.1, 2.31.3, 2.31.6, 2.34.1 and 2.36.1;~~
- ~~(c) clauses 3.8.4 3.15, 3.18.18 and 3.18.19;~~
- ~~(d) clauses 4.1.4 to 4.1.12, 4.1.15 to 4.1.19, 4.1.21, 4.1.24, 4.5.10, 4.5.11, 4.5.15 to 4.5.20, 4.5A, 4.13.10, 4.13.10A, 4.13.10B, 4.13.11, 4.13.11A, 4.13A.15, 4.13A.16 4.16, 4.24.1, 4.24.2, 4.24.12, and 4.24.19;~~
- ~~(e) [Blank]~~
- ~~(f) clauses 9.13.1, 9.16.3, 9.16.4 and 9.20.2;~~
- ~~(g) clauses 10.1.1, 10.1.2, 10.2.1, 10.2, 10.3 and 10.4.; and~~
- ~~(h) any other clauses of these WEM Rules that must not be amended, repealed or replaced without the approval of the Minister in accordance with the WEM Regulations.~~

2.8.13. The following clauses are Protected Provisions:

- (a) clauses 1.4.1, 1.4.2, 1.6.2, 1.7.3A, 1.8.1, 1.8.3, 1.8.4, 1.28.1 to 1.28.3, 1.28.5, 1.28.6, 1.42.2, 1.42.3, 1.42.5 to 1.42.7, 1.42.9, 1.42.10, 1.42.28, 1.43A.2, 1.43A.4 to 1.43A.6;
- (b) clauses 2.2D.1, 2.3.1, 2.3.2 to 2.3.5A, 2.3.6, 2.3.7A to 2.3.11, 2.3.13, 2.3.16, 2.4.1 to 2.4.4, 2.5.1C, 2.5.2 to 2.5.3A, 2.5.4 to 2.5.15, 2.6.1, 2.6.3, 2.6.4, 2.7.2 to 2.7.4, 2.7.6 to 2.7.8, 2.8.1 to 2.8.14, 2.9.2CB, 2.9.2F, 2.9.4, 2.9.5, 2.9.7C, 2.10.1, 2.10.2A, 2.10.3, 2.10.5E, 2.10.7, 2.10.10, 2.10.12E, 2.10.13, 2.10.17 to 2.10.20, 2.11.1 to 2.11.4, 2.16.2A, 2.16.2D, 2.16.2E, 2.16.6, 2.16.7, 2.16.13A, 2.16.13B, 2.16.13D to 2.16.14, 2.16.15A, 2.21.11, 2.21.12, 2.24.5B to 2.24.5E, 2.24.6A, 2.25.1C, 2.44.1;
- (c) clauses 3.11A.1 to 3.11A.10, 3.15.1 to 3.15.5, 3.18GA.1 to 3.18GA.3;
- (d) clauses 4.5A1 to 4.5A16, 4.13B.1 to 4.13B.6, 4.24.19;
- (e) clauses 10.1.1, 10.2.1, 10.2.3, 10.2.6, 10.2.8 to 10.2.12, 10.3.1 to 10.3.4, 10.4.1, 10.4.2, 10.4.5, 10.4.7 to 10.4.13, 10.4.16 to 10.4.21, 10.4.25, 10.4.26, 10.5.1 to 10.5.14 ; and
- (f) any other clauses of these WEM Rules that must not be amended, repealed or replaced without the approval of the Minister in accordance with the WEM Regulations.

...

2.13. Compliance Monitoring and Enforcement

...

Explanatory Note

Clause 2.13.6 is amended to remove the requirement for the ERA to disclose the types of market related information provided to it by AEMO, as amendments to clause 2.16.2A require the information that AEMO must routinely provide to the ERA to be included in the Market Surveillance Data Catalogue, which is required to be published on the Coordinator and ERA's websites in accordance with 2.16.2A(b). This list should contain all data required by the ERA for monitoring and compliance purposes, and will be updated regularly if new information requirements are identified.

The second part of 2.13.6, which requires additional publication if the ERA requests additional types of market related data, information or documents in relation to a specific Rule Participant (or group of Rule Participants) has been retained.

~~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; [Blank]~~
- ~~(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).~~~~

2.13.6 Where the Economic Regulation Authority requests AEMO to provide the Economic Regulation Authority with market related data, information or documents in accordance with clause 2.13.4 and the market related data, information or documents:

- (a) is not one of the types disclosed in the combined list referred to in clause 2.16.2A(b); and
- (b) relate to a specific Rule Participant (or group of Rule Participants),

then the Economic Regulation Authority must notify that Rule Participant (or group of Rule Participants).

AEMO monitoring of compliance

Explanatory Note

The amendments to 2.13.7(a) and 2.13.7(b) are consequential to changes to 2.16.2A and 2.16.2AA, requiring AEMO to monitor Rule Participants behaviour for compliance with the WEM Rules that the ERA has asked AEMO to monitor. The intent of this policy change is to allow the ERA more flexibility in the WEM Rules that it requests AEMO to monitor over time.

The amendments to 2.13.7(e) are for clarity.

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 the WEM Rules specified in the list referred to in clause 2.16.2A(aA), as agreed by the Economic Regulation Authority and AEMO in accordance with the requirements in clause 2.16.2AA;
- (b) ~~monitor Rule Participant's behaviour for compliance with the WEM Procedure referred to in clause 2.29.9A; [Blank]~~
- (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 in accordance with the list of WEM Rules that AEMO must monitor for compliance provided under clause 2.16.2A(aA) 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 and report to the Economic Regulation Authority any 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) and report to the Economic Regulation Authority.~~

...

Explanatory Note

Clause 2.13.15A is updated to correct a clause reference error.

2.13.15A. Clauses 2.13.13-14, 2.13.14 and 2.13.15 do not apply in respect of alleged breaches of clauses 3A.10.6, 3A.11.21(a), 3A.11.21(b), 3A.11.21(c) and 3A.12.2.

...

Explanatory Note

Clause 2.13.52 is updated as a consequential change to reflect new drafting in Chapter 10.

- 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 sections~~ 10.2, 10.4 and 10.5.

...

2.15. Monitoring and Reporting Requirements

...

Explanatory Note

The amendments to section 2.15 in the Tranche 2 & Tranche 3 Amending Rules made clause 2.15.4 the last substantive clause in the section and deleted clauses 2.15.5-2.15.6C inclusive. Clauses 2.15.7 to 2.15.9 inclusive are therefore deleted because they are no longer required.

- 2.15.4. AEMO must develop a WEM Procedure to set out:

...

~~2.15.7. [Blank]~~

~~2.15.8. [Blank]~~

~~2.15.9. [Blank]~~

2.16. Monitoring the Effectiveness of the Market

...

Explanatory Note

Clause 2.16.9 is amended to append “and” to the end of clause 2.16.9(a).

- 2.16.9. The Economic Regulation Authority must investigate any market behaviour if it considers that the behaviour has resulted in the market not functioning effectively. The Economic Regulation Authority, with the assistance of AEMO, must monitor:
- (a) the criteria and processes used by AEMO for the procurement of Essential System Services through the Real-Time Market, the SESSM, and under any contracts entered into by AEMO; and
 - (b) inappropriate and anomalous market behaviour, including behaviour related to market power and the exploitation of shortcomings in the WEM Rules or WEM Procedures by Rule Participants.

...

2.18. Disputes

Explanatory Note

Clause 2.18.1 is updated to exclude disputes about Market Information, which are dealt with under section 10.5.

2.18.1. The dispute process set out in sections 2.18, 2.19 and 2.20 applies to any dispute concerning:

- (a) the application or interpretation of these WEM Rules;
- (b) the failure of Rule Participants to reach agreement on a matter where these WEM Rules require agreement or require the Rule Participants to negotiate in good faith with a view to reaching agreement;
- (c) payment of moneys under, or the performance of any obligation under, these WEM Rules,

but does not apply to:

...

- (h) a dispute in respect of a decision by AEMO to grant or refuse an extension of time for a Market Participant responsible for an Existing Transmission Connected Generating System to:
 - i. submit a proposed Generator Monitoring Plan; or
 - ii. have a Generator Monitoring Plan approved by AEMO; ora dispute which is being dealt with under the dispute resolution mechanism for Existing Transmission Connected Generating Systems contained in section 1.42-; and

(i) disputes about the classification, release or disclosure of Market Information arising under Chapter 10.

...

2.22A. Determination of AEMO's budget

Explanatory Note

Clause 2.22A.2A(d) is amended to insert the word 'the' before the words 'Market Participant Market Fee rate'.

2.22A.2A. A submission by AEMO under clause 2.22A.2 must be made and processed in accordance with the following timelines:

...

- (d) where the Economic Regulation Authority does not make a determination by the date in clause 2.22A.2A(c) or clause 2.22A.2B(c), the Market Participant Market Fee rate determined in accordance with section 2.24 for

the current Financial Year will continue to apply until the Economic Regulation Authority makes a determination.

...

Explanatory Note

The Tranches 2 and 3 Amendments and Tranche 5 Amendments include changes to the Market Fee-related provisions of the WEM Rules that are due to commence on New WEM Commencement Day.

Sections 2.24 and 2.25 are further amended to account for changes to the WEM governance arrangements that commenced on 1 July 2021.

Additionally, clause 2.25.3 is amended to account for the possibility that, as a result of the settlement Adjustment Process, the Economic Regulation Authority and the Coordinator may have to pay back part of the Market Participant Regulator Fees and Market Participant Coordinator Fees previously received. The proposed approach is that AEMO will:

- make any such payment on behalf of the Economic Regulation Authority and the Coordinator; and
- reduce the amount paid on behalf of the Economic Regulation Authority and the Coordinator from the Market Participant Coordinator Fees and the Market Participant Regulator Fees that coincide with the adjustment process.

This process is proposed to eliminate the risk that AEMO may short pay the market because of an adjustment to the Market Fees, recognising that the Economic Regulation Authority and the Coordinator are not Rule Participants and therefore are not subject to the timelines and obligations set out in Chapter 9 of the WEM Rules.

2.24. Determination of Market Fees

2.24.1. The Market Fees charged by AEMO are:

- (a) Market Participant Market Fees, Market Participant Coordinator Fees and Market Participant Regulator Fees the rates of which are determined in accordance with this section 2.24;
- (b) Application Fees in accordance with section 2.33 and clauses 2.31.2, 4.9.3(c), 4.26.2CC and 4.28.9B; and
- (c) a Reassessment Fee in accordance with clause 4.11.11.

2.24.2. Before 30 June each year, AEMO must determine and publish the level of the Market Participant Market Fee rate, Market Participant Coordinator 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~~ 2.22A.7, and information provided by the Economic Regulation Authority under clause 2.24.6 (if any), and information provided by the Coordinator under clause 2.24.6A (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. Where the

Coordinator has not provided AEMO with the information required under clause 2.24.6A by the date which is five Business Days prior to 30 June, AEMO will determine and publish the expected level of Market Participant Coordinator Fee rate based on the most recent information provided to AEMO by the Coordinator under clause 2.24.6A.

- 2.24.2A. AEMO must determine and publish a level of revised Market Participant Market Fee rate, Market Participant Coordinator 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 or the Coordinator provides AEMO with the information required under clause 2.24.6A later than the date which is five Business Days prior to 30 June.
- 2.24.2B. A revised Market Participant Market Fee rate, Market Participant Coordinator Fee rate and Market Participant Regulator Fee rate will supersede any expected Market Participant Market Fee rate, Market Participant Coordinator Fee rate and Market Participant Regulator Fee rate and are recoverable from Market Participants in arrears with effect from the start of the Financial Year to which they apply.
- 2.24.3. At the same time as AEMO publishes a level of revised Market Participant Market Fee rate, Market Participant Coordinator Fee rate or Market Participant Regulator Fee rate (as applicable), AEMO must also publish an estimate of the total amount of revenue to be earned from:
- (a) Market Participant Market Fees collected 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~~ 2.22A.7 or as adjusted under clause 2.24.2A;
- (b) Market Participant Coordinator Fees collected for:
- i. the Coordinator's functions under these WEM Rules;
 - ii. the costs associated with the remuneration and other expenses for the independent Chair of the Market Advisory Committee, and
 - iii. in the Coordinator's discretion, costs associated with the remuneration and other expenses of the representatives of small-use consumers on the Market Advisory Committee.

where the amount to be earned for those services is equivalent to the costs identified by the Coordinator as costs incurred in the performance of the Coordinator's functions under these WEM Rules or the WEM Regulations, where the amount must be consistent with the relevant amount notified in accordance with clause 2.24.6A; and

- (c) Market Participant Regulator Fees collected for the Economic Regulation Authority's monitoring, compliance, enforcement and regulation services where the amount must be consistent with the relevant amount notified in accordance with clause 2.24.6.:
- ~~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, Market Participant Coordinator Fee rate and Market Participant Regulator Fee rate should be set at a level that AEMO estimates will earn revenue equal to the relevant estimate of revenue under clause 2.24.3.
- 2.24.5. The Economic Regulation Authority may recover a portion of its budget determined by the Minister responsible for the Economic Regulation Authority which corresponds to the costs of the Economic Regulation Authority in undertaking its Wholesale Electricity Market related functions and other functions under these WEM Rules, and 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.~~

2.24.5B. The Coordinator may recover a portion of her or his budget determined by the Minister responsible for the Coordinator which corresponds to the costs of the Coordinator in undertaking her or his functions under these WEM Rules (including costs referred to in clause 2.24.3(b)) from the collection of Market Participant Coordinator Fees under these WEM Rules.

2.24.5C. The Coordinator must:

- (a) identify in ~~its~~ her or his budget the proportion of ~~its~~ her or his costs that relate to the performance of ~~its~~ her or his functions under these WEM Rules; and
- (b) subject to clause 2.24.5E, publish on the Coordinator's Website the proportion of costs corresponding to the functions described in clause 2.2D.1.

2.24.5D. Where the revenue earned via Market Participant Coordinator Fees in the previous Financial Year is greater than or less than the Coordinator expenditure related to the functions described in clause 2.24.5B for that Financial Year, the current year's budget must take this into account by decreasing the budgeted revenue by the amount of the surplus or adding to the budgeted revenue the amount of any shortfall, as the case may be.

2.24.5E. For the purposes of clause 2.24.5C(b), the Coordinator need not separately publish the proportion of costs corresponding to the function described in clause 2.2D.1(d) and may consolidate the costs corresponding to the following groups of functions:

- (a) the functions described clauses 2.2D.1(a) and 2.2D.1(b); and
- (b) the functions described in clauses 2.2D.1(c), and 2.2D.1(f) to 2.2D.1(i) inclusive.

2.24.6. By the date which is five Business Days prior to 30 June each year, the Economic Regulation Authority must notify AEMO of the dollar amount that the Economic Regulation Authority may recover under clause 2.24.5.

2.24.6A. By the date which is five Business Days prior to 30 June each year, the Coordinator must notify AEMO of the dollar amount that the Coordinator may recover under clause 2.24.5B.

2.24.7. The level of each Application Fee:

- (a) must reflect the estimated average costs to AEMO of processing that type of application;
- (b) must be consistent with the Allowable Revenue approved by the Economic Regulation Authority; and

- (c) may be different for different classes of Rule Participant and different classes of facility.

2.25. Payment of Market Fees

- 2.25.1. AEMO must charge a Market Participant the relevant payment amount for Market Participant Market Fees, Market Participant Coordinator Fees and Market Participant Regulator Fees for a Trading Week in accordance with ~~clause section~~ 9.12.
- 2.25.1A. AEMO is an agent for the collection of Market Participant Coordinator Fees and Market Participant Regulator Fees payable by Market Participants to AEMO.
- 2.25.1B. The Economic Regulation Authority must, if requested by AEMO, do all things reasonably necessary (including entering into any agreements) to enable AEMO to give effect to clause 2.25.1A.
- 2.25.1C. The Coordinator must, if requested by AEMO, use reasonable endeavours to cooperate with AEMO, as AEMO endeavours to give effect to clause 2.25.1A.
- 2.25.2. Each Market Participant must pay the relevant payment amount for Market Participant Market Fees, Market Participant Coordinator Fees and Market Participant Regulator Fees in accordance with Chapter 9.
- 2.25.3. Following receipt of a payment contemplated by clause 2.25.2, AEMO must:
- ~~(a) 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.~~
 - (a) transfer to the fund established under clause 9.18.9 the payment received as calculated in clause 9.13.2;
 - (b) pay the Economic Regulation Authority the payment received as calculated in clause 9.13.3 adjusted for any payments AEMO has made on behalf of the Economic Regulation Authority under clause 9.15.8 that have not been accounted for in a previous payment to the Economic Regulation Authority under this clause 2.25.3(b); and
 - (c) pay the Coordinator the payment received as calculated in clause 9.13.4 adjusted for any payments AEMO has made on behalf of the Coordinator under clause 9.15.9 that have not been accounted for in a previous payment to the Coordinator under this clause 2.25.3(c).
- 2.25.4. [Blank]
- 2.25.5. Rule Participants must pay the relevant Application Fee upon submitting an application form in accordance with clause 2.31.2, or in accordance with clause 4.9.3, as applicable.

...

2.27. Determination of Loss Factors

...

Explanatory Note

Clause 2.27.5A is amended to remove the reference to Demand Side Programmes, because they are no longer included in the Dispatch Algorithm and so do not require a single Loss Factor.

2.27.5A. For each ~~Demand Side Programme and~~ Interruptible Load, AEMO must use a Loss Factor of 1.

...

Explanatory Note

Clause 2.27.15 is amended to use the new registration taxonomy.

2.27.15. A Market Participant may apply to AEMO for a reassessment of any Transmission Loss Factor or Distribution Loss Factor applying to a ~~Scheduled Generator, Non-Scheduled Generator, Interruptible Load~~ Scheduled Facility, Semi-Scheduled Facility, Non-Scheduled Facility or Non-Dispatchable Load registered to that Market Participant. The following requirements apply to each application for reassessment:

...

...

Explanatory Note

Clause 2.27.17 is amended to insert a full stop at the end of the clause.

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.

2.28. Rule Participants

...

Explanatory Note

Clause 2.28.5 is amended to reverse the change made in the Tranche 2 & Tranche 3 Amending Rules. The original clause is restored because the removal of the ability for a Network Operator to be registered in more than one Rule Participant class may adversely affect current Market Participants.

2.28.5. ~~[Blank]~~ Subject to clause 2.28.16, a person registered as a Network Operator may be registered as a Rule Participant in another class or other classes.

...

Explanatory Note

Clause 2.28.16 is amended to insert a missing comma after the numerals '2.28.7'.

- 2.28.16. AEMO may determine that a person is exempted from the requirement to register in accordance with clauses 2.28.2, 2.28.6, 2.28.7, 2.28.10 or 2.28.13. An exemption may be given subject to any conditions AEMO considers appropriate and may, upon prior reasonable notice, be revoked at any time.

Explanatory Note

Clause 2.28.16A is amended to:

- reverse the change made to clause 2.28.16A(a) in the Tranches 2 and 3 Amendments, because an Applicant should not always have to nominate an Intermediary when seeking an exemption from the requirement to register as a Rule Participant (e.g. when the reason for the exemption is that the Applicant's Facility does not need to be registered);
- ensure an Applicant undertakes all necessary steps before submitting a revocation notice under clause 2.28.16A(d), to ensure the revocation of the Intermediary does not occur before the necessary steps to replace it have been completed; and
- improve consistency with the drafting style of the WEM Rules.

2.28.16A. For the purposes of clause 2.28.16:

- (a) ~~A~~a person (the "Applicant") who applies to AEMO for an exemption under clause 2.28.16 from the requirement to register ~~must~~ may:
- i. notify AEMO of the identity of a person (an "**Intermediary**") to be registered instead of the Applicant; and
 - ii. provide AEMO with the written consent of the Intermediary to act as Intermediary in a form reasonably acceptable to AEMO;
- (b) ~~If~~if an application for exemption made in accordance with clause 2.28.16A(a) is granted by AEMO in accordance with clause 2.28.16 then:
- i. provided the Intermediary satisfies all relevant registration requirements that the Applicant would have been required to satisfy, AEMO must register the Intermediary as a Rule Participant as if it were the Applicant;
 - ii. the Intermediary will be considered for the purposes of these WEM Rules to be the Applicant;
 - iii. all references in these WEM Rules to the Applicant will be deemed to be references to the Intermediary (unless the context requires otherwise);
 - iv. all acts, omissions, statements, representations and notices of the Intermediary in its capacity as the Rule Participant under these WEM Rules will be deemed to be the acts, omissions, statements, representations and notices of the Applicant;

- v. the Intermediary and the Applicant will be jointly and severally liable for the acts, omissions, statements, representations and notices of the Intermediary in its capacity as the Rule Participant under these WEM Rules;
 - vi. AEMO or any other Rule Participant may fulfil any obligations to the Applicant under these WEM Rules by performing them in favour of the Intermediary;
 - vii. the Applicant must procure, and where necessary must facilitate, the Intermediary's compliance with its obligations under these WEM Rules, including any obligations that, but for the exemption, would be placed on the Applicant; and
 - viii. the Applicant must, where necessary, participate in and abide by the outcome of any dispute process under sections 2.18 to 2.20;
- (c) ~~For~~ for the purposes of enforcing clauses 2.28.16A(b)(vii) and (viii), a reference in these WEM Rules to "Rule Participant" includes the Applicant;
- (d) ~~The~~ the Applicant may revoke the appointment of the Intermediary by giving notice of the revocation to AEMO and, prior to giving such notice to AEMO:
- i. where the Applicant wishes to appoint a replacement Intermediary, ~~giving notice of the revocation of the appointment of the current Intermediary to AEMO and, prior to giving such notice to AEMO:~~
 - 1. providing the notices referred to in clauses 2.28.16A(a)(i) and 2.28.16A(a)(ii) to AEMO; ~~and~~
 - 2. obtaining AEMO's consent to be exempted from registration in accordance with clause 2.28.16; ~~or~~
 - 3. ensuring that all relevant Registered Facilities or Intermittent Loads that were registered to the current Intermediary have been transferred to the replacement Intermediary; and
 - 4. ensuring that the replacement Intermediary has notified AEMO of the change of circumstances for Credit Limit determination purposes in accordance with clause 2.37.8; or
 - ii. where clause 2.28.16A(d)(i) does not apply:
 - 1. registering as a Rule Participant in the Market Participant class; ~~prior to revoking the appointment of the Intermediary; and~~
 - 2. ~~giving notice of the revocation of the appointment of the Intermediary to AEMO.~~
 - 2. ensuring that all relevant Registered Facilities or Intermittent Loads that were registered to the current Intermediary have been transferred to the Applicant; and

3. notifying AEMO of the change of circumstances for Credit Limit determination purposes in accordance with clause 2.37.8;

- (e) ~~At~~ at 8:00 AM, 2 Business Days after AEMO receives notice of the revocation of the appointment of an Intermediary in accordance with clauses 2.28.16A(d)(i) or 2.28.16A(d)(ii), the Intermediary will cease to be considered the Applicant's Intermediary for the purposes of these WEM Rules and the Applicant will not be liable under clause 2.28.16A(b)(v) for any acts, omissions, statements, representations or notices of the Intermediary occurring after that time~~;~~;
- (f) ~~If~~ if the Applicant revokes the appointment of an Intermediary, the exemption granted by AEMO to the Applicant as contemplated by clause 2.28.16A(b) ceases at the time the Intermediary ceases to be the Applicant's Intermediary in accordance with clause 2.28.16A(e)~~;~~ and
- (g) AEMO may permit the Applicant to designate the Intermediary as the Applicant's Intermediary with respect to one or more Facilities which the Applicant owns, operates or controls.

Explanatory Note

Clause 2.28.16B is amended to replace "Market Generator" with "Market Participant" and correct a typographical error in clause 2.28.16B(d).

2.28.16B. Without limiting the generality and the operation of clause 2.28.16, AEMO may exempt under clause 2.18.16 a person who owns, controls or operates a generation system which has a rated capacity that equals or exceeds 10 MW and is electrically connected to a transmission system or distribution system which forms part of the South West Interconnected System, or is electrically connected to that system, from the requirement to register as a Rule Participant in the Market ~~Generator~~ Participant class, in respect of that generation system, where all of the following are satisfied:

- (a) positive MWh quantities measured by the interval meter or meters associated with that generation system are not reasonably expected to exceed 5 MWh in any Trading Interval;
- (b) negative MWh quantities measured by the interval meter or meters associated with that generation system are not reasonably expected to increase by more than 5 MWh in any Trading Interval in the event of an outage of that generating system;
- (c) AEMO has determined that it does not require information about the relevant generation system to ensure Power System Security and Power System Reliability are maintained;
- (d) ~~The~~ the meter or meters measuring the generation system remains registered by an existing Market Participant; and

- (e) AEMO determines that with the exemption the cumulative effect of all exemptions given under this clause 2.28.16B is consistent with the Wholesale Market Objectives,

and AEMO may give the exemption subject to any conditions AEMO considers appropriate and may revoke the exemption if AEMO determines that any of these conditions, or any of the conditions in this clause 2.28.16B, ceases to be satisfied.

...

2.29. Facility Registration Classes

...

Explanatory Note

Clause 2.29.4D is amended to correct a clause reference error.

2.29.4C. Subject to clause 2.29.4E, a person who intends to own, control or operate a Facility with a System Size that is less than 5 MW and is or will be electrically connected to a transmission system or distribution system which forms part of the South West Interconnected System, or is electrically connected to that system, is exempted from the requirement to register the Facility in a Facility Class.

2.29.4D. Clause 2.29.4C does not apply where AEMO determines, in accordance with the WEM Procedure specified in clause ~~2.28.21~~ 2.29.4N, that a Facility, containing an Energy Producing System, must be registered in a Facility Class for the purposes of Power System Security and Power System Reliability.

...

Explanatory Note

Clause 2.29.4K is amended to append “and” to the end of clause 2.29.4K(a).

2.29.4K. In determining whether a Facility should be registered as a Scheduled Facility or a Semi-Scheduled Facility, AEMO must take into account the extent to which the relevant Facility is controllable as follows:

- (a) a Scheduled Facility must be able to respond to a Dispatch Target from AEMO such that it can maintain its Injection or Withdrawal within its Tolerance Range for a specified period; and
- (b) a Semi-Scheduled Facility must be able to reduce the value of its Injection or increase the value of its Withdrawal to comply with a Dispatch Cap issued by AEMO.

...

2.30. Facility Aggregation

...

Explanatory Note

Clause 2.30.8 is amended to correct a typographical error.

2.30.8. Where AEMO considers that a change in one or more of the criteria in clause 2.30.5 means that an Aggregated Facility should no longer be aggregated, AEMO must notify the relevant Rule Participant of:

- (a) its decision and the reasons for its decision; and
- (b) the date on which the Aggregated Facility will be considered to have been disaggregated.

...

Explanatory Note

Clause 2.30.11 is deleted because the requirement for AEMO to document the Facility aggregation and disaggregation processes is covered in clause 2.31.25(b).

~~2.30.11. AEMO must document the facility aggregation and disaggregation process in a WEM Procedure.~~

Explanatory Note

Clause 2.30A is deleted in the Tranches 2 and 3 Amendments (Schedule C). However, as section 2.30B is being retained, section 2.30A is re-inserted as [Blank].

~~2.30A. [Blank]~~

~~2.30B. Intermittent Load~~

...

Explanatory Note

Clause 2.30B.3(g) is amended to correct a clause reference error.

Clause 2.30B.3(i) is amended to reflect the renumbering of Standing Data items in Appendix 1.

2.30B.3. The Market Participant for a Load or part of a Load to be treated as an Intermittent Load must, in addition to any Standing Data for the Facility containing the Load, provide, and ensure remains accurate, the following data in regard to the Facility:

...

- (g) at the option of the Market Participant, information regarding protection schemes at the Facility, including whether the Facility is configured to

automatically adjust load or generation where a Contingency Event, or an event behind the relevant connection point, affects the Energy Producing System, and evidence to support that configuration as required in the WEM Procedure referred to in clause ~~2.28.21~~ 2.29.4N;

- (h) the instantaneous output or consumption of the Energy Producing System referred to in clause 2.30B.2(a) measured in accordance with the WEM Procedure referred to in clause 2.36A.5, with separate measurements for each separate electricity producing unit in the Energy Producing System; and
- (i) the maximum level of Intermittent Load for the Facility referred to in Appendix ~~1(f)(vii)~~ 1(g)(ii); and
- (j) the Contract Maximum Demand associated with the Facility.

...

Explanatory Note

Clause 2.30B.8F is amended to:

- clarify that the test in the clause applies to any continuous 12-month period; and
- remove the unnecessary and potentially misleading reference to “the maximum Injection”.

2.30B.8F. Where the Injection of a Facility containing an Intermittent Load exceeds the Nominated Excess Capacity in more than 120 Dispatch Intervals in any continuous 12-month period, the Market Participant must update the Nominated Excess Capacity provided under clause 2.30B.3(e) ~~to reflect the maximum Injection~~.

...

Explanatory Note

Clause 2.30B.10 is amended to correct minor typographical errors.

2.30B.10. Where the Load was deemed to be an Intermittent Load under clause 1.48.2, for the purpose of defining Metered Schedules associated with the interval meter measuring the Facility containing the Intermittent Load, the following methodology is to apply:

- (a) ~~Define~~ define for each Trading Interval:
 - i. NMQ to be the net metered energy measured by the meter where a positive amount indicates supply and a negative amount indicates consumption;
 - ii. NS to be the net supply (supply as a positive value plus consumption as a negative value) measured by the Intermittent Load meter which corresponds to supply and consumption, excluding consumption by Intermittent Loads, by Market Participants, and by Market Participant Facilities which are

separately metered for the purpose of settlement under these WEM Rules. This may have a positive or negative value;

- iii. NL to be the maximum possible consumption behind that meter due to consumption which is not Intermittent Load but which is measured only by the meter which also measures the Intermittent Load. This has a negative value;
- iv. [Blank];
- v. if the Load is part of a Registered Facility, MSG to be the greater of zero and the maximum energy output from the Registered Facility in excess of that required to supply the Intermittent Load based on Standing Data and measured only by the Intermittent Load meter. This has a positive value; and
- vi. AMQ to be the adjusted meter quantity which equals NMQ less NS;

(b) if the Load is not part of a Registered Facility then:

- i. if AMQ is less than or equal to NL then:
 - 1. for the purpose of defining its Metered Schedule the metered quantity associated with the Intermittent Load is AMQ minus NL; and
 - 2. for the purpose of defining its Metered Schedule the metered quantity associated with non-Intermittent Loads only measured by the Intermittent Load meter is NL;
- ii. if AMQ is greater than NL but less than zero then:
 - 1. for the purpose of defining its Metered Schedule the metered quantity associated with the Intermittent Load is zero; and
 - 2. for the purpose of defining its Metered Schedule the metered quantity associated with non-Intermittent Loads only measured by the Intermittent Load meter is AMQ; and
- iii. if AMQ is greater than or equal to zero then:
 - 1. for the purpose of defining its Metered Schedule the metered quantity associated with the Intermittent Load is AMQ; and
 - 2. for the purpose of defining its Metered Schedule the metered quantity associated with non-Intermittent Loads only measured by the Intermittent Load meter is zero; and

(c) if the Load is part of a Registered Facility then:

- i. if AMQ is less than or equal to NL then:

1. for the purpose of defining its Metered Schedule the metered quantity associated with the Intermittent Load is AMQ minus NL;
 2. for the purpose of defining its Metered Schedule the metered quantity associated with non-Intermittent Loads measured only by the meter that also measures the Intermittent Load is NL; and
 3. for the purpose of defining its Metered Schedule the metered quantity associated with the Registered Facility measured only by the meter that also measures the Intermittent Load is zero;
- ii. if AMQ is greater than NL but less than or equal to zero then:
1. for the purpose of defining its Metered Schedule the metered quantity associated with the Intermittent Load is zero;
 2. for the purpose of defining its Metered Schedule the metered quantity associated with non-Intermittent Loads measured only by the meter that also measures the Intermittent Load is AMQ; and
 3. for the purpose of defining its Metered Schedule the metered quantity associated with the Registered Facility measured only by the meter that also measures the Intermittent Load is zero;
- iii. if AMQ is greater than zero but less than or equal to MSG then:
1. for the purpose of defining its Metered Schedule the metered quantity associated with the Intermittent Load is zero;
 2. for the purpose of defining its Metered Schedule the metered quantity associated with non-Intermittent Loads measured only by the meter that also measures the Intermittent Load is zero; and
 3. for the purpose of defining its Metered Schedule the metered quantity associated with the Registered Facility measured only by the meter that also measures the Intermittent Load is AMQ; and
- iv. if AMQ is greater than MSG then:
1. for the purpose of defining its Metered Schedule the metered quantity associated with the Intermittent Load is AMQ minus MSG;
 2. for the purpose of defining its Metered Schedule the metered quantity associated with non-Intermittent Loads

measured only by the meter that also measures the Intermittent Load is zero; and

3. for the purpose of defining its Metered Schedule the metered quantity associated with the Registered Facility measured only by the meter that also measures the Intermittent Load is MSG.

Explanatory Note

Clause 2.30B.11 is amended to correct a minor typographical error.

2.30B.11 Where an application for a Load or part of a Load to be treated as an Intermittent Load was accepted by AEMO under clause 2.30B.6 on or after the New WEM Commencement Day, for the purpose of defining Metered Schedules associated with the interval meter measuring the Facility containing the Intermittent Load, the following methodology is to apply:

- (a) define for each Trading Interval:
 - i. NMQ to be the net metered energy measured by the meter in Meter Data Submissions where a positive amount indicates supply and a negative amount indicates consumption;
 - ii. NS to be the net supply (supply as a positive value plus consumption as a negative value) measured by the Intermittent Load meter which corresponds to supply and consumption, excluding consumption by Intermittent Loads, by Market Participants, and by Market Participant Facilities which are separately metered in Meter Data Submissions for the purpose of settlement under these WEM Rules. This may have a positive or negative value; and
 - iii. AMQ to be the adjusted meter quantity which equals NMQ less NS;
- (b) where the Intermittent Load is part of a Registered Facility:
 - i. where AMQ is positive, indicating supply:
 1. the Metered Schedule for the Registered Facility is AMQ; and
 2. the Metered Schedule for the Non-Dispatchable Load is zero; or
 - ii. where AMQ is negative, indicating consumption:
 1. the Metered Schedule for the Registered Facility is zero; and
 2. the Metered Schedule for the Non-Dispatchable Load is AMQ; or
- (c) where the Intermittent Load is not part of a Registered Facility, the Metered Schedule for the Non-Dispatchable Load is AMQ.

...

2.31. Registration Process

...

Explanatory Note

The Tranche 5 Amendments include an Amending Rule to delete and replace clause 2.31.4A. However, because the clause does not currently exist, the Tranche 6 Amendments will include an Amending Rule to insert the required clause and the Tranche 5 Amending Rule will not commence.

2.31.4A. If AEMO requests information from an applicant under clause 2.31.4 and the applicant does not provide the information to AEMO within 20 Business Days of the date of AEMO's request, the applicant will be deemed to have withdrawn the application.

...

Explanatory Note

Clause 2.31.17 is amended to simplify the wording.

2.31.17. The fact that a person has ceased to be registered ~~in any Rule Participant class as a Rule Participant~~ does not affect any right, obligation or liability of that person under these WEM Rules which arose prior to the cessation of its registration.

...

Explanatory Note

Clauses 2.32.7A is amended to correct a clause reference error.

2.32.7A. AEMO may at any time review whether a Rule Participant registered in the classes outlined in clauses ~~2.28.1(b) or 2.28.2(b)~~ 2.28.1(a) or 2.28.1(b) continues to meet all of the criteria specified in clause 2.28.19.

...

Explanatory Note

Clauses 2.32.7BA is amended to reflect changes made in March 2017 to the Corporations Act, which removed the definition of 'externally-administered body corporate'.

2.32.7BA. If AEMO becomes aware that a Rule Participant has become ~~an externally-administered body corporate~~ a Chapter 5 body corporate (as defined in the Corporations Act), or is under a similar form of administration under any laws applicable to it in any jurisdiction, then AEMO must, as applicable:

- (a) where AEMO intends to issue a Suspension Notice, issue the Suspension Notice to the ~~externally-administered body corporate~~ Chapter 5 body corporate and the External Administrator, which may include directions that

would have given in a notice to the relevant Rule Participant pursuant to clause 2.32.1; or

- (b) where AEMO intends to issue a Registration Correction Notice, issue the Registration Correction Notice to the ~~externally-administered body corporate~~ Chapter 5 body corporate and the External Administrator, specifying details that it would have specified in a notice to the relevant Rule Participant pursuant to clause 2.32.7C; or
- (c) notify the Economic Regulation Authority that the Rule Participant is ~~an externally-administered body corporate~~ a Chapter 5 body corporate or has had an External Administrator appointed, and that AEMO is not required to, as applicable:
 - i. issue a Suspension Notice to the Rule Participant pursuant to clause 2.32.1; or
 - ii. issue a Registration Correction Notice to the Rule Participant pursuant to clause 2.32.7B(b).

...

2.33. The Registration Forms

...

Explanatory Note

Clause 2.33.1(h) is amended to remove the reference to information described in Appendix 1(f), because this information is not provided via the Rule Participant registration application form.

- 2.33.1. AEMO must prescribe a Rule Participant registration application form that requires an applicant to provide the following:
- (a) the relevant non-refundable Application Fee;
 - (b) whether the applicant is already a Rule Participant;
 - (c) contact details for the applicant;
 - (d) invoicing details for the applicant;
 - (e) tax information from the applicant required by law;
 - (f) the class of Rule Participant to which the application relates;
 - (g) if the applicant is seeking an exemption from the requirement to register as a Rule Participant;
 - (h) if the application relates to the sale of electricity to Contestable Customers by an applicant for the Market Participant class, evidence that the applicant holds an Arrangement for Access for the purpose of taking power from the electricity grid;
 - i. ~~evidence that the applicant holds an Arrangement for Access for the purpose of taking power from the electricity grid; and~~

ii. ~~the information described in Appendix 1(f);~~

- (i) confirmation of the implementation of any processes or systems required by these WEM Rules for the Rule Participant class to which the application relates;

...

...

Explanatory Note

Clause 2.33.8(d) is amended to correct a clause reference error.

2.33.8. AEMO must prescribe a Facility Class reassessment application form that requires an applicant to provide the following:

- (a) the relevant non-refundable Application Fee;
- (b) the name of the Registered Facility to which the application relates;
- (c) the proposed Facility Class, which must be either Scheduled Facility, Semi-Scheduled Facility or Non-Scheduled Facility, and a proposed date on which the reassessment is to take effect;
- (d) evidence to AEMO's satisfaction that ~~the conditions of clause 2.29.7 are met;~~ Registered Facility meets the conditions specified in clause 2.29.6;
- (e) information required by AEMO to reassess the Facility Class;
- (f) such other information AEMO requires to process the application; and
- (g) a statement that the information provided is accurate.

2.34. Standing Data

...

Explanatory Note

Clause 2.34.3 is amended to remove the reference to sections 6.2A (Standing Bilateral Submission Timetable and Process) and 6.3C (Standing STEM Submission Timetable and Process), because Standing Bilateral Submissions and Standing STEM Submissions will not be classified as Standing Data.

2.34.3. A Rule Participant that seeks to change its Standing Data, ~~other than Standing Data changed in accordance with the processes set out in sections 6.2A or 6.3C,~~ must notify AEMO of:

- (a) the revisions it proposes be made to its Standing Data;
- (b) the reason for the change; and
- (c) the date from which the revision will take effect.

Explanatory Note

Clause 2.34.4 is amended to clarify that this clause applies for any Outage, whether approved or not.

- 2.34.4. Notwithstanding clauses 2.34.2 and 2.34.3, a Rule Participant is not required to notify AEMO of changes to Standing Data where the changes reflect a temporary change in the capacity or capability of a Registered Facility resulting from ~~either a Planned Outage, proposed Planned Outage or Forced Outage~~ an Outage.

...

Explanatory Note

Clause 2.34.7 has been modified, including new subclause (b) which gives AEMO the power to reject a change in Standing Data where Standing Data (parameter) is already required to be provided under another rule requirement (e.g. section 2.34A) to ensure participants do not create or change certain Standing Data where a pre-process or approval is required. For example, if the Facility was accredited for FCESS, the Standing Data value submitted (post-accreditation) does not differ to value the Facility was accredited for.

The clause is further amended to require (not just permit) AEMO to reject such changes.

- 2.34.7. AEMO ~~may reject a change~~:
- (a) may reject a change in any Standing Data if it considers that an inadequate explanation, including test results, was provided to justify the change in Standing Data; ~~or~~ and
 - (b) must reject a change where the Standing Data, including Standing Data relating to the accreditation of a Facility to provide a Frequency Co-optimised Essential System Service in accordance with section 2.34A, is required to:
 - i. be modified in accordance with processes in these WEM Rules other than the processes in this section 2.34; or
 - ii. firstly be approved by AEMO through processes in these WEM Rules other than the processes set out in this section 2.34, and AEMO has not given its approval to the change in Standing Data in accordance with those other processes.

...

Explanatory Note

Clause 2.34.8 is amended to remove the reference to sections 6.2A (Standing Bilateral Submission Timetable and Process) and 6.3C (Standing STEM Submission Timetable and Process), because Standing Bilateral Submissions and Standing STEM Submissions will not be classified as Standing Data.

- 2.34.8. ~~Other than Standing Data changed in accordance with the processes set out in sections 6.2A or 6.3C~~, AEMO must notify the Rule Participant of its acceptance or rejection of the change in Standing Data as soon as practicable, and no later than three Business Days after the later of:

- (a) the date of notification described in clause 2.34.3; and
- (b) if AEMO makes a request under clause 2.34.6, the date on which the information requested is received by AEMO.

...

Explanatory Note

Clause 2.34.11 is amended to remove the references to persons that are exempt from the requirement to register as a Rule Participant, because the clause relates to the provision of Standing Data and only Rule Participants provide Standing Data to AEMO.

2.34.11. AEMO may require that a Rule Participant, ~~or a person that is exempt from the requirement to register as a Rule Participant,~~ provide updated Standing Data for any of its Facilities if AEMO considers the information provided by the Rule Participant ~~or the exempt person~~ to be inaccurate or no longer accurate.

...

Explanatory Note

Clause 2.34.12B only allows information requests for Facilities exempted under clause 2.29.4B or 2.29.4C. The references to clauses 2.29.4B and 2.29.4C are removed to allow AEMO to request information regarding the Facility where any exemption exists.

2.34.12B. Where a person is exempted from the requirement to register a Facility ~~pursuant to clauses 2.29.4B or 2.29.4C,~~ AEMO may request information regarding the Facility from that person to assess whether the exemption should be revoked and the information must be provided to AEMO by the time specified in the request.

...

Explanatory Note

Clause 2.34.14 is amended to simplify the rules around the commencement of changes to Standing Data items.

~~2.34.14. AEMO must commence using revised Standing Data:~~

- ~~(a) from 8:00 AM on the Scheduling Day following AEMO's acceptance of revised Standing Data resulting from an application under clause 6.6.9, with the exception that the previous Standing Data remains current for the purpose of settling the Trading Day that commences on the Scheduling Day following AEMO's acceptance of the revised Standing Data;~~
- ~~(b) from 8:00 AM on the later of:
 - ~~i. the date proposed by the Rule Participant; or~~
 - ~~ii. the date two days following the end of the Trading Day on which AEMO accepted the revised Standing Data; and~~~~
- ~~(c) as soon as practicable in the case of any other revised Standing Data.~~

2.34.14. Revised Standing Data that is accepted by AEMO takes effect from 8:00 AM on the later of:

(a) the date proposed by the Rule Participant; or

(b) the second day after the day on which AEMO accepts the revised Standing Data.

Explanatory Note

Clause 2.34.15 is deleted because it is the last clause in section 2.34 and is no longer required.

~~2.34.15. [Blank]~~

...

2.34A. Essential System Service Accreditation

...

Explanatory Note

Clause 2.34A.6 is amended to include the Restoration Profile of a Interruptible Load as a Frequency Co-optimised Essential System Service Accreditation Parameter. The information is included in an application for FCESS accreditation under clause 2.34A.3(e), and should be maintained through the accreditation process under section 2.34A rather than only through the Standing Data process under section 2.34.

2.34A.6. If AEMO approves an application for accreditation of a Facility made pursuant to clause 2.34A.2, it must, as soon as possible, inform the Market Participant, together with notification of any required amendments, including revised or additional parameters or settings, and the Market Participant must include the following information in its Standing Data for the Facility, or in such other place as specified in the WEM Procedure referred to in clause 2.34A.13, in respect of each Frequency Co-optimised Essential System Service referred to in clause 2.34A.1 that the Facility is accredited to provide:

- (a) the maximum quantity of each applicable Frequency Co-optimised Essential System Service for each relevant Facility operating configuration;
- (b) the Standing Enablement Minimum and Standing Enablement Maximum for each relevant Facility operating configuration;
- (c) the Standing Low Breakpoint and Standing High Breakpoint for each relevant Facility operating configuration;
- (d) where the Facility is accredited to provide Contingency Reserve:
 - i. the Facility Speed Factor (which must be based on the Facility's actual or modelled response to a local frequency excursion determined in accordance with the WEM Procedure referred to in clause 2.34A.13); ~~and~~

- ii. whether the Facility is subject to the Maximum Contingency Reserve Block Size; and
- iii. where the Facility is an Interruptible Load, the Restoration Profile of the Interruptible Load if applicable;
- (e) where the Facility is accredited to provide Regulation or RoCoF Control Service, a Facility Performance Factor of one for each of these Essential System Services; and
- (f) any other performance parameters that may be specified in the WEM Procedure referred to in clause 2.34A.13.

...

Explanatory Note

The requirement to publish Rule Participant data is relocated from clause 10.5.1(c) to new clause 2.34B.1 in new section 2.34B as below, with some minor changes:

- the requirement for AEMO to publish specific contact details such as a mailing address has been updated to be more generic (clause 2.34B.1(b));
- the requirement for AEMO to publish details of licences held has been removed as this is on the ERA's public register; and
- the publication requirements for Intermittent Loads and Registered Facilities have been updated to more accurately reflect the information held by AEMO (clauses 2.34B.1(e) and 2.34B.1(f)).

2.34B. Rule Participant Data

2.34B.1. AEMO must publish details of all Rule Participants, including:

- (a) name;
- (b) contact details;
- (c) the name and title of a contact person;
- (d) applicable Rule Participant classes;
- (e) names and System Sizes of Registered Facilities; and
- (f) names of Intermittent Loads and the associated maximum capacity from the Energy Producing Systems which supply them, as described in clause 2.30B.3(a).

...

2.35. Dispatch Systems Requirements

Explanatory Note

Clause 2.35.1 is amended to use standard capitalisation for "Semi-Scheduled".

2.35.1. Market Participants with Scheduled Facilities, ~~Semi-scheduled~~ 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.

...

2.36. **AEMO Systems Requirements**

...

2.36.5. AEMO must document the data and IT interface requirements, including security standards in respect of systems required for Market Participants to operate in the Wholesale Electricity Market in a WEM Procedure.

Explanatory Note

The requirements for AEMO to publish information on the systems it uses for the STEM and Settlement have been moved from clause 10.5.1(zG) to new clause 2.36.5A as per below.

2.36.5A. AEMO must publish documentation of the functionality of:

(a) the STEM Auction software; and

(b) the Settlement System Software.

...

3.2. **Technical Envelope, Security and Equipment Limits**

...

Explanatory Note

Clauses 3.2.5 to 3.2.7 (inclusive) were deleted and replaced in the Tranche 2 & 3 Amendments (Schedule C) with clause 3.2.6 being inadvertently omitted, therefore it is being re-inserted.

3.2.6. AEMO must establish and modify the Technical Envelope in accordance with clause 3.2.5 and the WEM Procedure specified in clause 3.2.7.

...

3.4. **Satisfactory and Secure Operating States**

Explanatory Note

Schedule C, paragraph 43.2 of the Tranches 2 and 3 Amendments seeks to replace clauses 3.4.1 to 3.4.9 but inadvertently deletes 'clauses 3.4.1 to 3.9'. The *Wholesale Electricity Market Amendment (Miscellaneous Amendments No. 2) Rules 2021* (Miscellaneous 2 Amendments) include further changes to clause 3.4.4 and a new clause 3.4.5A.

To ensure the intended outcome, the Amending Rules in the Tranches 2 and 3 Amendments and Miscellaneous 2 Amendments will not commence. Instead the Tranche 6 Amendments will include the following changes to replace the existing clauses 3.4.1-3.4.9 as intended.

~~3.4.1. The SWIS is in a High Risk Operating State when AEMO considers that any of the following circumstances exist, or are likely to exist within the next fifteen minutes, or are likely to exist at a time beyond the next fifteen minutes; and actions other than those allowed under the Normal Operating State must be implemented immediately by AEMO so as to moderate or avoid the circumstance:~~

- ~~(a) there is a violation of the Spinning Reserve requirements determined in accordance with section 3.11;~~
- ~~(b) insufficient Load Following range is available to meet the requirements determined in accordance with section 3.11;~~
- ~~(c) there is a voltage deviation of greater than $\pm 6\%$ from the values determined in accordance with clause 3.1.2;~~
- ~~(d) there is a frequency deviation of greater than ± 0.12 Hz from the values determined in accordance with clause 3.1.1 at an energised busbar at any switchyard or substation of the SWIS;~~
- ~~(e) a transmission line is overloaded but the overload can be managed for the timeframe during which the overload is expected to be rectified;~~
- ~~(f) there is a short circuit condition that could result in equipment fault levels being exceeded;~~
- ~~(g) there would be an overload, under voltage situation or threat to the stability of the power system if a credible contingency occurred;~~
- ~~(h) AEMO is aware that one or more Market Participants have been notified by fuel suppliers and/or fuel transporters that a fuel shortfall is likely in relation to one or more Registered Facilities, where such fuel shortfall will limit the availability of generation during the next 24 hours, and where this might affect Power System Security or Power System Reliability;~~
- ~~(i) imminent generator unavailability that would cause supply to fall below load;~~
- ~~(j) significant SCADA system degradation is occurring which limits AEMO's ability to control the power system (including by issuing instructions to a Network Operator) or a Network Operator's ability to control the power system;~~
- ~~(k) there is a major bushfire or storm near, or forecast to be near, elements of the SWIS; and~~
- ~~(l) any other circumstance which would, in AEMO's reasonable opinion, threaten Power System Security or Power System Reliability.~~

~~3.4.2. When the SWIS is in a High Risk Operating State, AEMO must:~~

- ~~(a) not require Registered Facilities to operate inconsistently with the Security Standards or their Equipment Limits for the High Risk Operating State; and~~
 - ~~(b) schedule and dispatch (or cause to be scheduled and dispatched) Ancillary Services appropriate for the High Risk Operating State in accordance with Ancillary Service Requirements.~~
- ~~3.4.3. When the SWIS is in a High Risk Operating State, AEMO may:~~
- ~~(a) cancel or defer Planned Outages that have not yet commenced;~~
 - ~~(b) require the return to service in accordance with the relevant Outage Contingency Plan of Network equipment undergoing Planned Outages, or take other measures contained in the relevant Outage Contingency Plan for any Registered Facility; and~~
 - ~~(c) utilise the overload capacity of Scheduled Generators (as indicated in Standing Data).~~
- ~~3.4.4. AEMO may take any other actions as it considers are required, consistent with good electricity industry practice, to ensure the SWIS returns to a Normal Operating State provided it acts with as little disruption to electricity supply and seeks to return to issuing Dispatch Instructions in the priority set out in clause 7.6.1C as soon as is reasonably practicable in the circumstances.~~
- ~~3.4.5. AEMO must ensure the SWIS returns from a High Risk Operating state to a Normal Operating State as soon as practicable.~~
- ~~3.4.6. When the SWIS is in a High Risk Operating State, Rule Participants must:~~
- ~~(a) subject to clause 3.4.7, comply with directions issued by AEMO in accordance with clauses 3.4.3 and 3.4.4; and~~
 - ~~(b) otherwise, use reasonable endeavours to assist AEMO to ensure the SWIS returns to a Normal Operating State.~~
- ~~3.4.7. A Rule Participant is not required to comply with directions issued by AEMO, issued in accordance with clauses 3.4.3 or 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 it must inform AEMO immediately.~~
- ~~3.4.9. AEMO may include in the WEM Procedure specified in clause 3.2.7 guidelines describing matters it will consider in making a determination under clause 3.4.1.~~
- 3.4.1. The SWIS is in a Satisfactory Operating State when the SWIS is operating in accordance with all relevant requirements of the Technical Envelope.

3.4.2. The SWIS is in a Secure Operating State when the SWIS is able to return to a Satisfactory Operating State following a Credible Contingency Event in accordance with the Power System Security Principles and the requirements of the Technical Envelope.

3.4.3. The Power System Security Principles are:

- (a) the power system should be operated such that it is and will remain in a Secure Operating State to the extent practicable;
- (b) following a Contingency Event, AEMO should take all reasonable actions to return to a Secure Operating State as soon as possible, and in any case within 30 minutes, other than during a Low Reserve Condition or when in an Emergency Operating State;
- (c) sufficient Inertia should be available to meet applicable Inertia Requirements; and
- (d) sufficient capability should be maintained at applicable locations in the SWIS to meet the applicable Power System Stability Requirements, including any System Strength Requirements.

3.4.4. In order to restore and maintain Power System Security or Power System Reliability, AEMO may, in addition to the provisions specified in Chapter 7:

- (a) reject Planned Outages that have not yet commenced;
- (b) issue Outage Recall Directions;
- (c) utilise the overload capacity of Scheduled Facilities (as indicated in Standing Data); 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, in which case AEMO must first consult with the relevant Network Operator, to operate network equipment, or equipment under a Network Operator's control or direction, in specific ways; or
- (f) direct a Network Operator, in which case AEMO must first consult with the relevant Network Operator, to disconnect generating equipment, load and/or other equipment connected to the Network Operator's network.

3.4.5. AEMO may take any other actions it considers are required, consistent with good electricity industry practice, in order to maintain Power System Security or Power System Reliability, having regard to the provisions specified in Chapter 7.

3.4.5A. Where AEMO issues a direction under clauses 3.4.4(d), 3.4.4(e) or 3.4.4(f) or takes any other action under clause 3.4.5, AEMO must record:

- (a) the date and time of the direction or action;

- (b) the name of the Registered Facility or relevant equipment impacted by the direction or action;
- (c) the nature of the direction or action; and
- (d) the reasons for the direction or action.

3.4.6. Rule Participants must:

- (a) subject to clause 3.4.7, comply with directions issued by AEMO in accordance with clause 3.4.4; and
- (b) use reasonable endeavours to assist AEMO to ensure the SWIS remains in a Satisfactory Operating State or Secure Operating State, including providing information and coordinating with AEMO on directions as required by AEMO.

3.4.7. A Rule Participant is not required to comply with a direction issued by AEMO, in accordance with clause 3.4.4, if such compliance would endanger the safety of any person, damage equipment, or breach any applicable law.

3.4.8. Where a Rule Participant cannot comply with a direction issued by AEMO in accordance with clause 3.4.4 it must notify AEMO immediately and provide the reasons why it cannot comply with the direction.

3.5. Emergency Operating State

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Explanatory Note

Clauses 3.5.5, 3.5.6, and 3.5.8 are amended to reflect that the SWIS can be in an Emergency Operating State and a Satisfactory Operating State at the same time.

- 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~~ from the Emergency 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~~ from the Emergency Operating State.

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3.7. System Restart

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Explanatory Note

Clause 3.7.19 is updated to reflect the revised Market Information Framework. AEMO develops the System Restart Plan and as such will be the Information Manager for this type of Market Information and will be able to disclose as appropriate or required.

- 3.7.19. The System Restart Plan, and any revisions following a review in accordance with clause 3.7.10 or clause 3.7.11, are ~~AEMO Confidential Confidential Information~~. Notwithstanding ~~the AEMO Confidential~~ this classification, AEMO may disclose information contained in the System Restart Plan with System Restart Service Providers and prospective System Restart Service Providers, where AEMO considers that disclosure would support provision of a System Restart Service.

...

3.11A. Triggering Procurement of Non-Co-optimised Essential System Services (NCESS)

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Explanatory Note

Section 3.11A is expected to be replaced on New WEM Commencement Day by the *Wholesale Electricity Market Amendment (Tranche 5 Amendments) Rules 2021* (Schedule I, paragraph 17.1). Following this replacement, further amendments will be required to reapply the changes described in Part 1 of this Exposure Draft to clauses 3.11A.2 (which replaces clauses 3.11A.2 and 3.11A.2A) and 3.11A.3(b).

- 3.11A.2. ~~Where If~~ AEMO or a Network Operator reasonably considers that one or more of the following events has occurred or applies, ~~the Network Operator or AEMO (or, at their discretion, both of them), must make a submission (jointly or separately) to request the Coordinator to determine whether or not to trigger an NCESS procurement process in accordance with section 3.11B:~~

- (a) if the forecasted or actual magnitude and frequency of Energy Uplift Payments in the WEM increases to an uneconomic level (assuming locational and situational market power is being controlled under the relevant processes), this indicates a locational constraint in the network and a case may be made to procure locational services to relieve the network constraint;
- (b) frequent AEMO Intervention Events to relieve non-frequency control constraints such as loss of reactive power or system strength indicates a network security problem, and a case could be made to procure a locational security NCESS;
- (c) if network planning assumptions change at any time during the network planning timeframe (for example, demand is lower or higher than forecast), it may signal the need for an emerging service such as reactive power support or voltage stability which could be provided by non-network services located in the relevant part of the network;
- (d) a modification to an existing Power System Security or Power System Reliability standard or the introduction of a new Power System Security or Power System Reliability standard within a network planning cycle may trigger the need to procure a NCESS; or
- (e) AEMO considers, in the course of its normal power system operations, that a significant threat to Power System Security or Power System Reliability exists or is emerging, and the existing mechanisms under these WEM Rules may not be sufficient to address the threat.

then:

- (f) AEMO must notify Western Power, or the Network Operator must notify AEMO (as applicable), of each event that AEMO or the Network Operator (as applicable) considers has occurred or applies, as soon as practicable but in any event before making a submission under clause 3.11A.2(g); and
- (g) AEMO or the relevant Network Operator (or, at their discretion, both of them) must make a submission (jointly or separately) to request the Coordinator to determine whether to trigger an NCESS procurement process in accordance with section 3.11B.

3.11A.3. A submission by a Network Operator or AEMO under clause 3.11A.2 must:

- (a) be in writing;
- (b) be made by a date that the Network Operator or AEMO, as applicable, reasonably considers allows sufficient time to enable the NCESS procurement process set out in section 3.11B to be conducted; and
- (c) contain sufficient information and analysis regarding the potential or actual impact on Power System Security, Power System Reliability or costs for each trigger event in clause 3.11A.2 that is specified in the submission to enable the Coordinator to consider the factors outlined in clause 3.11A.7.

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3.11B. Procuring Non-Co-optimised Essential System Services

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Explanatory Note

Clauses 3.11B.5 and 3.11B.7 are amended in response to stakeholder concerns that unless the information in the new clause 3.11B.5(eA) is provided the AEMO would not be able decide whether the proposed Facility is capable of being assigned Certified Reserve Capacity and Capacity Credits. Further, clause 3.11B.7 is included to enable a proponent to request reimbursement of any Capacity Cost Refunds it must pay as a direct consequence of the enablement or dispatch of the NCESS (e.g. in the event NCESS services provided by storage are enabled outside of the ESR obligation intervals).

3.11B.5. An NCESS Service Specification must, at a minimum, include:

- (a) the service requirements;
- (b) the expected technical capability of a facility or equipment that may be able to provide the service;
- (c) where applicable, the likely network location where the service is to be provided;
- (d) the maximum quantity of the service required;
- (e) the timing expected commencement and duration of the service;
- (eA) reasonable expectation of the frequency of service utilisation, the expected duration of each utilisation and when the service is expected to be utilised during typical days;
- (f) any operational requirements or limitations;
- (g) the material contractual terms associated with the NCESS, including required pricing structure;
- (h) the selection criteria that may apply to the NCESS Submissions; and
- (i) any other relevant matters.

...

3.11B.7. An NCESS Submission form must, at a minimum, include:

- (a) the name and type of facility or equipment, and whether it is registered or intending to register under the WEM Rules;
- (b) the name of the Market Participant, or service provider, as applicable, in respect to the facility or equipment;
- (c) the quantity of service the facility or equipment will provide for the NCESS;
- (d) the timing and duration of the service availability for the NCESS;
- (e) the location of the facility or equipment on the network;

- (f) any operational requirements or limitations that must be respected for use of the facility or equipment for the NCESS;
- (g) where the NCESS Submission is made in respect to a type of technology that would ordinarily be capable of being assigned Certified Reserve Capacity, the information required to be provided by the Market Participant or service provider to demonstrate that it will be able to meet the relevant requirements in clause 4.10.1 for at least the first Reserve Capacity Cycle coinciding with the period of the NCESS Contract;
- (gA) where the NCESS Submission is made in respect to a type of technology that would not ordinarily be capable of being assigned Certified Reserve Capacity, the information required to be provided by the Market Participant or service provider to demonstrate that it is not able to meet the relevant requirements of clause 4.10.1;
- (h) whether the facility or equipment participates, or will participate, in Central Dispatch or is accredited or will be accredited under these ~~Market~~ WEM Rules to provide an Essential System Service;
- (i) the fixed costs for that facility or equipment applicable for the period of the NCESS Contract, including any Capacity Credit payments expected or received;
- (iA) if the facility or equipment would ordinarily be capable of being assigned Certified Reserve Capacity, whether the Market Participant, or service provider, would require any reimbursement of any Capacity Cost Refunds it must pay as a direct consequence of the enablement or dispatch of the NCESS;
- (j) the highest price at which the facility or equipment will provide the NCESS when enabled or dispatched; and
- (k) any other payment that the facility or equipment requires to provide the NCESS.

...

3.15. Review of Essential System Service Process and Standards

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Explanatory Note

Clause 3.15.1C(b) is amended to use the correct defined term.

3.15.1C. A review conducted pursuant to clause 3.15.1A or clause 3.15.1B must include:

- (a) technical analyses determining the relationship between the quantity of Essential System Service scheduled and dispatched against the technical parameters in the Frequency Operating Standards;

- (b) economic analyses determining the relationship between technical parameters (including, without limitation, frequency operating bands and Oscillation Control Constraint Equation parameters) and overall cost of supply of energy and Essential System Services;
- (c) a cost-benefit study on the effects on the Network and Market Participants of providing and using higher or lower levels of each Essential System Service;
- (d) identification of the costs and benefits of changing technical parameters, including the potential for increasing or decreasing the overall cost to supply energy and Essential System Services;
- (e) a review of the processes and effectiveness of the SESSM if it was triggered during the review period; and
- (f) a public consultation process.

...

Explanatory Note

Clause 3.15.5 is amended to reflect that it is the Coordinator instead of the Economic Regulation Authority who is required to undertake certain actions under clause 3.15.3.

- 3.15.5. If the Coordinator recommends any changes in a report published under clause 3.15.3, the ~~Economic Regulation Authority~~ Coordinator must, as relevant:
- (a) draft a Rule Change Proposal in accordance with clause 2.5.1 to implement those changes;
 - (b) draft a suitable Procedure Change Proposal and progress it using the Procedure Change Process in section 2.10; or
 - (c) recommend to AEMO that it amend a WEM Procedure which these 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.

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Explanatory Note

Clause 3.15A.21(c) is amended to use the correct defined term.

- 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~~ SESSM Availability Payment.

Explanatory Note

Clause 3.15A.22(a) is amended to use the correct defined term.

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~~ SESSM Availability Quantity of the Facility to its historic quantities offered in the Real-Time Market over the past 12 months in Dispatch Intervals within the SESSM Service Timing;

...

...

Explanatory Note

Clause 3.15A.35 is amended to correct a clause reference error.

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);~~ 2.13.36(a); and
- (b) determine that a breach has taken place, in which case the Economic Regulation Authority may issue a penalty notice in accordance with the WEM Regulations.

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Explanatory Note

Clause 3.15A.37 is updated to reflect the revised Market Information framework. Rule Participant Market Restricted means information is available to AEMO, the Coordinator, the Electricity Review Board, the ERA, other regulators and the specific Rule Participant. Under the Confidential Information classification these parties will still be able to access this information as necessary.

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~~ Confidential Information.

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3.15B. Expressions of Interest for Essential System Services

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Explanatory Note

Clause 3.15B.4 is updated to reflect the relocation of requirements for publishing data related to FCESS from Chapter 10 to Chapter 7.

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)~~ 10.6.1(l) and 10.6.1(m); and
- (e) the location on the WEM Website of the expression of interest form referred to in clause 3.15B.5.

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Explanatory Note

Clause 3.15B.7 is updated to reflect the revised Market Information framework. Rule Participant Market Restricted means information is available to AEMO, the Coordinator, Electricity Review Board, the ERA, other regulators and the specific Rule Participant. Under the Confidential Information Classification these parties will still be able to access this information as necessary.

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 Confidential Information~~.

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Explanatory Note

Clause 3.15B.9 is amended to remove the reference to clauses 3.15.1A and 3.15.1B, which incorrectly suggest that the ERA is responsible for the review of the ESS Standards and the basis for setting ESS requirements.

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.

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3.17. Low Reserve Conditions

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Explanatory Note

Clause 3.17.10 is updated to reflect the revised Market Information framework. Rule Participant Market Restricted means information is available to AEMO, the Coordinator, Electricity Review Board, the ERA, other regulators and the specific Rule Participant. Under the Confidential Information classification these parties will still be able to access this information as necessary.

- 3.17.10. ~~AEMO must set the confidentiality status of any~~ Any information provided by a Rule Participant in response to a request under clause 3.17.8 ~~as Rule Participant Market Restricted is Confidential Information.~~

...

Explanatory Note

Several changes are proposed to sections 3.18 to 3.22 to:

- clarify the information requirements for Outage Plans and Forced Outages, including:
 - the requirements for Facilities containing multiple Facility Technology Types/Separately Certified Components;
 - the specification of Outage Periods; and
 - the specification of periods within an Outage Period during which an Outage Facility may be temporarily returned to service (“Outage Return to Service Periods”);
- clarify the rules around making changes to Outage Plans;
- clarify the publication requirements for Outages;
- refine the Outage quantity calculations in clauses 3.21.6 to 3.21.8C; and
- correct the usage of defined terms throughout the sections.

3.18. Outages

Explanatory Note

Clause 3.18.1 is amended to use standard capitalisation for “Self-Scheduling”.

- 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~~ 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.

Explanatory Note

Clause 3.18.3 is amended to clarify:

- that Outages of components of an Outage Facility (e.g. a specific Facility Technology Type) are covered by the Equipment Limits of that Facility;
- that the limitation around having to submit Outages for Semi-Scheduled Facilities and Non-Scheduled Facilities applies only to Facilities that contain an Intermittent Generating System;
- the references to Standing Data items in clause 3.18.2(c)(ii); and
- that the temperature de-rating limitations specified in clause 3.18.2(d) do not only apply to Scheduled Facilities.

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 an NCESS Contract or SESSM Award.
- (b) applies to each Outage Capability expected from the Outage Facility as specified in the WEM Procedure referred to in clause 3.18.4;
- (c) does not occur for ~~the an~~ Outage Capability in respect of energy of a ~~Semi-scheduled Semi-Scheduled Facility or Non-scheduled Non-Scheduled Facility that is intermittent~~ contains an Intermittent Generating System where:
- i. there is a shortfall of the intermittent energy source used by the ~~Semi-scheduled Facility or Non-scheduled Facility~~ Intermittent Generating System to generate electricity; or
 - ii. the average ~~MW de-rating~~ reduction of Remaining Available Capacity over the relevant Dispatch Interval is less than:
$$\min(0.1 \times \text{Nameplate_Capacity}, 10)$$

where Nameplate_Capacity is the ~~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, total nameplate capacity of the Facility’s Energy Producing System~~ specified under Appendix 1(c)(i) or Appendix 1(d)(i), as applicable;

- (d) does not occur for the energy Outage Capability of a ~~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; and
- (e) [Blank]
- (f) does not occur for any Facility where that Facility has failed to comply with a Dispatch Instruction in circumstances detailed in the WEM Procedure referred to in clause 3.18.4.

Explanatory Note

Clause 3.18.4 is amended to provide reference to specific information requirements that must be included in Outage publication, as described in amended clauses 3.22.1, 3.22.1A and 3.22.2.

3.18.4. AEMO must develop a WEM Procedure dealing with:

...

- (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, which must include the information in clauses 3.22.1, 3.22.1A and 3.22.2; and
- (i) any other matters relating to this section 3.18 and sections 3.18A to 3.21.

Explanatory Note

The section 3.18A heading is amended to use standard capitalisation for “Self-Scheduling”.

3.18A. Equipment List and ~~Self-scheduling Self-Scheduling~~ Outage Facilities

...

Explanatory Note

Clauses 3.18A.6 to 3.18A.10 are amended to use standard capitalisation for “Self-Scheduling”. Clause 3.18A.10 is also amended to insert the missing word “must”.

3.18A.6. AEMO must maintain a list of ~~Self-scheduling 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 Self-Scheduling~~ **Outage Facility List**”).

3.18A.7. AEMO must publish the ~~Self-scheduling 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 Self-Scheduling~~ Outage Facility List, or otherwise determines that a change is required to the ~~Self-scheduling Self-Scheduling~~ Outage Facility List, update the ~~Self-scheduling Self-Scheduling~~

Outage Facility List to address the error or reflect the change and publish the updated ~~Self-scheduling~~ Self-Scheduling Outage Facility List on the WEM Website.

- 3.18A.8. The ~~Self-scheduling~~ Self-Scheduling Outage Facility List must include:
- (a) any Scheduled Facility, Semi-Scheduled Facility, Non-Scheduled Facility, and any Energy Producing System serving an Intermittent Load and to which clause 2.30B.2(a) relates, that is not an Equipment List Facility; and
 - (b) any other equipment that AEMO determines must submit Outage Plans to AEMO to maintain Power System Security and Power System Reliability however described by AEMO, which may include secondary equipment.
- 3.18A.9. The ~~Self-scheduling~~ Self-Scheduling Outage Facility List may specify that a ~~Self-scheduling~~ Self-Scheduling Outage Facility is required to submit Outage Plans to AEMO only at certain times of the year.
- 3.18A.10. A Market Participant and a Network Operator must submit Outage Plans to AEMO for each of its ~~Self-scheduling~~ Self-Scheduling Outage Facilities in accordance with this section 3.18A and sections 3.18B to 3.21.

3.18B. Submission of Outage Plan

- 3.18B.1. An outage plan (“**Outage Plan**”) must:
- (a) relate to an Outage of the Facility;
 - (b) relate to a specific Outage Capability of the Facility;
 - (c) only be for the purposes of Outage Facility Maintenance.

Explanatory Note

Clause 3.18B.2 is amended to use standard capitalisation for “Self-Scheduling”.

- 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~~ Self-Scheduling Outage Facility.

Explanatory Note

Clause 3.18B.3 is amended to clarify that the information requirements for an Outage Plan must contain:

- information on each Facility Technology Type that is impacted by the Outage, including Remaining Available Capacity values (where relevant to the type of Facility);
- the Remaining Available Capacity of the Facility as a whole (where relevant to the type of Facility);
- both a commencement and a completion time, each specified as a Dispatch Interval. (the definition of Outage Period is also being amended to clarify that the Outage timeframe is from the start of the commencement Dispatch Interval to the end of the completion Dispatch Interval); and

- where a condition of the Outage is that equipment must be returned to service periodically through the duration of the Outage (typically in relation to Network Outages), the time periods within the Outage where the equipment will be temporarily returned to service.

3.18B.3. An Outage Plan must contain:

- (a) details of the Outage Plan including:
- i. ~~each Separately Certified Component~~ the Outage Facility affected by the Outage and, where relevant, each Facility Technology Type of the Facility affected by the Outage;
 - ii. ~~each Outage Capability for each Separately Certified Component~~ the Outage Capabilities affected by the Outage for the Outage Facility and for each Facility Technology Type of the Outage Facility;
 - iii. a description of the purpose of the Outage;
 - iv. ~~the Outage Period, where the Outage Commencement Interval and end of the Outage are expressed as Dispatch Interval~~ the Outage Commencement Interval and Outage Completion Interval;
 - v. an Outage Contingency Plan;
 - vi. where relevant, the Remaining Available Capacity of each Outage Capability ~~for each Separately Certified Component of the Outage Facility; and~~ the Outage Facility;
 - vii. ~~where relevant, the Remaining Available Capacity for each Facility Technology Type for the Outage Facility;~~
 - viii. ~~where relevant, the Outage Return To Service Commencement Interval and Outage Return To Service Completion Interval for each~~ Outage Return To Service Period; and
 - ~~vii-ix.~~ confirmation of any applicable Availability Declaration Exemption;
as specified in the WEM Procedure referred to in clause 3.18.4;
- ~~(b)~~ the Outage Commencement Interval;
- ~~(e)~~ (b) an Outage First Submission Date; and
- ~~(d)~~ (c) any other details specified in the WEM Procedure referred to in clause 3.18.4.

...

Explanatory Note

Clause 3.18B.8 is amended to:

- clarify (in clause 3.18B.8(d)) that “no earlier than” relates to the day on which Outage Commencement Interval falls;
- remove the unnecessary clarifications (i.e. “not Opportunistic Maintenance”, “Equipment List Facility or Self-scheduling Outage Facility”) in clause 3.18B.8(d); and
- use standard capitalisation for “Self-Scheduling”.

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~~ 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~~ 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~~ 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.~~

~~(d) no earlier than 3 years prior to the day on which the Outage Commencement Interval falls.~~

3.18C. Outage Coordination

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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.

Explanatory Note

Clause 3.18C.4 is amended to remove the reference to 'Impacted Participant, or both', because section 3.18.C is about the Outage Plan submitted by the 'Impacting Participant' only.

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.

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Explanatory Note

Clause 3.18C.11 is amended to use the new defined term "Public Information".

3.18C.11. AEMO must set the confidentiality status for all Outage coordination information as Public Information.

Explanatory Note

Clause 3.18C.12(c) is amended to use the appropriate defined term.

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~~ Planned Outages, requested Outage Plans, or Outage Plans foreshadowed in the Outage Intention Plan; and
 - ii. secondary focus must be on all other factors, such as the time of year; and
- (d) any principles AEMO must take into account when making a determination under clause 3.18C.4 in addition to the principles specified in clause 3.18C.5.

3.18D. Outage Revision

Explanatory Note

Clause 3.18D.1 is amended to:

- clarify that any Remaining Available Capacity for a Planned Outage should not be reduced further than the approved level under this clause;
- clarify that the Outage Completion Interval should not be replaced by a later Dispatch Interval under this clause; and
- use the appropriate defined term in clause 3.18D.1(d).

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~~ Completion Interval is not later than the previous Outage Completion Interval;

- (c) ~~the any~~ revised Remaining Available Capacity for the Outage Facility, as relevant, is not proposed to be further reduced from the previous submission; and
- (d) other aspects of the ~~Outage Plan~~ Planned Outage, as specified in the WEM Procedure referred to in clause 3.18.4, are unchanged.

Explanatory Note

Clause 3.18D.2 is amended to clarify that once an Outage Plan has been rejected or withdrawn it should no longer be revised.

3.18D.2. An Outage Plan that has not been rejected by AEMO or withdrawn by the Rule Participant may be revised at any time as long as the revision addresses each of the requirements specified in clause 3.18B.8.

Explanatory Note

Clause 3.18D.3 is amended to clarify that multiple Remaining Available Capacity values may be associated with an Outage and that AEMO is not required to re-evaluate and Outage Plan if the proposed change is to increase a Remaining Available Capacity.

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 any relevant~~ Remaining Available Capacity for the Outage Facility is proposed to be increased from the previous submission; or
- (c) the Outage Contingency Plan is proposed to be varied.

...

Explanatory Note

Clause 3.18D.9 is amended to clarify that multiple Remaining Available Capacity values may be associated with the Outage, and the Rule Participant is obligated to revise the Outage Plan if it is aware that any of those no longer meet the availability requirements specified in clause 3.18B.8.

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 any relevant~~ Remaining Available Capacity (or both) to meet the requirements specified in clause 3.18B.8;
- (b) if the Outage Plan is not approved, withdraw the Outage Plan; or
- (c) if the Outage Plan is approved, notify AEMO.

3.18E. Outage Evaluation

Explanatory Note

Clause 3.18E.1 is amended to clarify that AEMO must evaluate an Outage Plan as soon as practicable after it has been revised.

- 3.18E.1. For each Outage Plan that AEMO is required to undertake an Outage Evaluation, AEMO must:
- (a) where possible to do so, and subject to all required information being available, undertake the Outage Evaluation as soon as practicable after the Outage Plan has been submitted or revised;
 - (b) notify the relevant Market Participant or Network Operator as soon as practicable of the outcome of the Outage Evaluation;
 - (c) publish the status of the Outage Plan following completion of the Outage Evaluation, including an assessment of whether a Planned Outage is at risk of rejection; and
 - (d) keep a record of the Outage Evaluation, together with the reasons for each Outage Evaluation and assessment.

...

Explanatory Note

Clauses 3.18E.3 and 3.18E.4 are amended to use standard capitalisation for “Self-Scheduling”.

- 3.18E.3. AEMO must reject an Outage Plan for an Equipment List Facility or ~~Self-scheduling~~ 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~~ 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.

...

Explanatory Note

Clause 3.18E.10 is amended to:

- remove clause 3.18E.10(d), because it is covered by clause 3.18E.10(e) (now renumbered to clause 3.18E.10(d));
- clarify that where a Rule Participant has revised an Outage Plan prior to it being approved, while AEMO will generally give priority based on its first submission date, AEMO must also consider the impact of the change on other Outage Plans that have since been submitted (based on public information) - for example, if the revision is significant and is made very

close to the commencement time, this may impact another Rule Participant's Outage submission that has been made in good faith; and

- clarify that there may be multiple Remaining Available Capacity quantities associated with an Outage Plan.

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)~~(d) give priority to Outage Plans in the order of the Outage First Submission Date, subject to reviewing the impact of a changed Outage Period on other Outage Plans that have been submitted; and
- ~~(f)~~(e) consider:
 - i. the technical reasons for the Outage Facility Maintenance;
 - ii. the technical implications for the relevant equipment if the Outage Facility Maintenance is not carried out; and
 - iii. the ability to reschedule Outage Plans including considering the Remaining Available Capacity, as relevant, for the relevant Outage Capability ~~and over~~ the Outage Period.

Explanatory Note

Clause 3.18E.11 is amended to use standard capitalisation for "Self-Scheduling".

3.18E.11. AEMO may reject a Planned Outage for an Equipment List Facility or a ~~Self-scheduling~~ 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~~ 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.

Explanatory Note

Clause 3.18E.13 is amended to clarify that if AEMO rejects an Outage Plan there is no need for a Market Participant or Network Operator to subsequently revise or withdraw it. A rejected Outage Plan is no longer able to be revised as per the amendment to clause 3.18D.2.

3.18E.13. Where AEMO rejects an Outage Plan in accordance with this section 3.18E.13, AEMO must provide reasons to the Rule Participant that submitted the Outage Plan.

~~(a) AEMO must provide reasons to the Rule Participants; and~~

~~(b) the Market Participant or Network Operator must revise or withdraw the Outage Plan.~~

...

3.19. 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.

Explanatory Note

Clauses 3.19.3 and 3.19.4 are amended to use standard capitalisation for "Self-Scheduling".

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~~ Self-Scheduling Outage Facility unless directed by AEMO in accordance with clause 3.19.4.

3.19.4. AEMO may direct a ~~Self-scheduling~~ Self-Scheduling Outage Facility that is required to comply with this section 3.19.

...

Explanatory Note

Clause 3.19.8 is amended to correct a clause reference error.

3.19.8. In the event that Outage Intention Plans validly submitted by Market Participants or Network Operators under clauses 3.19.1, 3.19.2 or ~~clause 3.19.8~~ 3.19.9 conflict, AEMO must notify the affected Market Participants or Network Operators.

...

3.20. Outage Recall

Explanatory Note

Clause 3.20.1 is amended to clarify that AEMO cannot “reject” a Planned Outage once it has commenced but can issue an Outage Recall Direction to return the Outage Facility to service early.

3.20.1 In order to maintain Power System Security or Power System Reliability, AEMO may ~~reject a Planned Outage that has commenced, and, during the Outage Period for a Planned Outage,~~ direct a Market Participant or Network Operator to return an Outage Facility to service in accordance with the relevant Outage Contingency Plan, or take other measures contained in the relevant Outage Contingency Plan ("**Outage Recall Direction**").

Explanatory Note

Clause 3.20.2 is amended to clarify that Rule Participants are required to revise their Outage Plans following an Outage Recall Direction to reflect the correct completion time, but are not required to withdraw the Outage Plan.

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.

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Explanatory Note

The heading of section 3.21 is amended to reflect that the section covers both Forced Outages generally, and the definition of Outage quantity calculations (e.g. CAPO and CAFO).

3.21. Forced Outages and Outage Quantity Calculations

Explanatory Note

Clause 3.21.1 is amended to correct a clause reference error in clause 3.21.1(a) and use the correct defined term in clause 3.21.1(b).

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~~ 2.28.3B; 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 Completion Interval; and
- (c) where the Market Participant or Network Operator does not follow an Outage Recall Direction from AEMO to return the equipment to service within the time specified in the Outage Contingency Plan,

but does not include Outages of a Facility that occur within a period in which the Facility is subject to an approved Commissioning Test Plan and are caused by a failure of the Facility's equipment during that Commissioning Test Period.

Explanatory Note

Clause 3.21.2(a) is amended to align generally with the quantities and structure of data provided for an Outage Plan under clause 3.18B.3, accounting for necessary differences with Forced Outages such as including the cause of the outage.

Clause 3.21.2(b) is amended to clarify that the Rule Participant's obligation is provide the information specified in clause 3.21.2(a) as well as the time that this information was first notified to AEMO, to support transparency and compliance monitoring. The clause has also been restructured for ease of reading.

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 in accordance with the WEM Procedure referred to in clause 3.21.10 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.~~
 - i. the Outage Facility affected by the Outage and, where relevant, each Facility Technology Type of the Outage Facility affected by the Outage;

- ii. the Outage Capabilities affected by the Outage for the Outage Facility and for each Facility Technology Type of the Outage Facility;
- iii. the cause of the Outage;
- iv. the date and time the Outage commenced or is expected to commence;
- v. the date and time the Outage ended or is expected to end;
- vi. where relevant, an estimate of the Remaining Available Capacity of each Outage Capability for the Outage Facility;
- vii. where relevant, an estimate of the Remaining Available Capacity for each Facility Technology Type of the Outage Facility; and
- viii. any other details specified in the WEM Procedure referred to in clause 3.21.10,

as specified in the WEM Procedure referred to in clause 3.21.10;

- (b) provide AEMO with full available details of the Forced Outage as prescribed in referred to in clause 3.21.2(a), as well as the time that the information required in clause 3.21.2(a) was first notified to AEMO, in accordance with the WEM Procedure referred to in clause 3.21.10; 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;
 - i. as soon as practicable;
 - ii. using best endeavours to provide AEMO with the full available details within 24 hours of the Forced Outage occurring; and
 - iii. 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.

Explanatory Note

Clause 3.21.6 is amended to clarify that:

- the calculations (which are used as input to CAPO/CAFO calculations) are only required for Separately Certified Components that are Non-Intermittent Generating Systems or Electric Storage Resources;
- the maximum capacity figures for each Separately Certified Component are as per the relevant Standing Data quantities, which are based on sent-out quantities and, for an Electric Storage Resource, relate to the maximum quantity that can be delivered continuously for the full Electric Storage Resource Obligation Duration; and
- the Remaining Available Capacity figures for each Separately Certified Component relate to sent-out figures that are net of other loads behind the connection point and, for an Electric Storage Resource, relate to the maximum quantity that can be delivered continuously for the full Electric Storage Resource Obligation Duration.

- 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 that is a Non-Intermittent Generating System or Electric Storage Resource:

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

Wherewhere:

~~*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~~

~~(a) RAC(c,DI,0) is equal to MaxCap(c,DI);~~

~~(b) 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;~~

~~(c) MaxCap(c,DI) is:~~

~~i. if Separately Certified Component c is a Non-Intermittent Generating System, the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from the Non-Intermittent Generating System under optimal conditions, as specified under Appendix 1(b)(x) or Appendix 1(c)(x) as applicable; or~~

~~ii. if Separately Certified Component c is an Electric Storage Resource, the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply across the Electric Storage Resource Obligation Duration to the relevant Network from the Electric Storage Resource under optimal conditions, as specified under Appendix 1(b)(xii) or Appendix 1(c)(xii) as applicable; and~~

~~(d) RAC(c,DI,o) is the Remaining Available Capacity for Separately Certified Component c in Dispatch Interval DI under Outage o for the applicable energy Outage Capability, which is:~~

~~i. if Separately Certified Component c is a Non-Intermittent Generating System, sent out capacity, net of embedded and Parasitic Loads, available for supply to the relevant Network from the Non-Intermittent Generating System; or~~

~~ii. if Separately Certified Component c is an Electric Storage Resource, sent out capacity, net of embedded and Parasitic Loads, available for supply across the Electric Storage Resource Obligation Duration to the relevant Network from the Electric Storage Resource.~~

Explanatory Note

Clauses 3.21.7 – 3.21.8B were amended and new clause 3.21.8C added in Exposure Draft 1 to improve clarity, apply standard formatting and ensure that all the required capacity adjusted outage quantities are defined.

Clause 3.21.7 as presented in Exposure Draft 1 is further amended to:

- explicitly set CAFO(c,DI) to zero for Intermittent Generating Systems; and
- clarify the source of the maximum capacity values used in the calculations for Non-Intermittent Generating Systems and Electric Storage Resources.

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

(a) where Separately Certified Component c is an Intermittent Generating System:

$$CAFO(c, DI) = 0$$

(b) otherwise:

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

~~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~~

where:

i. $o \in FO$ denotes all Forced Outages o for Separately Certified Component c that include Dispatch Interval DI ;

ii. $Q(c,DI,o)$ is the outage quantity for Outage o of Separately Certified Component c in Dispatch Interval DI as calculated in clause 3.21.6;

iii. MaxCap(c,DI) is:

1. if Separately Certified Component c is a Non-Intermittent Generating System, the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from the Non-Intermittent Generating System under optimal conditions, as specified under Appendix 1(b)(x) or Appendix 1(c)(x) as applicable; or
2. if Separately Certified Component c is an Electric Storage Resource, the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply across the Electric Storage Resource Obligation Duration to the relevant Network from the Electric Storage Resource under optimal conditions, as specified under Appendix 1(b)(xii) or Appendix 1(c)(xii) as applicable; and
- iv. DefRCOQ(c,DI) is the Reserve Capacity Obligation Quantity that would apply to Separately Certified Component c in Dispatch Interval DI if the Separately Certified Component was not subject to an Outage or an approved Commissioning Test Plan.

3.21.7A. ~~AEMO must determine the~~ The Capacity Adjusted Forced Outage Quantity for energy for each Trading Interval t for each Separately Certified Component c of a Registered Facility is:

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

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~~

(a) $DI \in t$ denotes all Dispatch Intervals DI in Trading Interval t; and

(b) $CAFO(c,DI)$ is the Capacity Adjusted Forced Outage Quantity for Separately Certified Component c in Dispatch Interval DI as calculated in clause 3.21.7.

3.21.7B. ~~AEMO must determine the~~ The Capacity Adjusted Forced Outage Quantity for each Trading Interval t for each Registered Facility with a Reserve Capacity Obligation Quantity greater than zero f is:

(a) where no Capacity Credits are assigned to Registered Facility f in Trading Interval t or Registered Facility f is a Non-Scheduled Facility:

$$CAFO(f, t) = 0$$

(b) otherwise:

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

Where:

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

~~i. $c \in f$ denotes all Separately Certified Components c of Facility f; and~~

~~ii. CAFO(c,t) is the Capacity Adjusted Forced Outage Quantity for Separately Certified Component c in Trading Interval t as calculated in clause 3.21.7A.~~

~~3.21.7C. AEMO must determine the Capacity Adjusted Forced Outage Quantity for each Dispatch Interval for each Registered Facility with a Reserve Capacity Obligation Quantity greater than zero:~~

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

~~where:~~

~~(a) CAFO(f,DI) is the Capacity Adjusted Forced Outage Quantity for Facility f in Dispatch Interval DI;~~

~~(b) $c \in f$ denotes all Separately Certified Components of Facility f; and~~

~~(c) 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.~~

~~3.21.7C. The Capacity Adjusted Forced Outage Quantity for Dispatch Interval DI for Registered Facility f is:~~

~~(a) where no Capacity Credits are assigned to Registered Facility f in Dispatch Interval DI or Registered Facility f is a Non-Scheduled Facility:~~

$$CAFO(f, DI) = 0$$

~~(b) otherwise:~~

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

~~where:~~

~~i. $c \in f$ denotes all Separately Certified Components c of Facility f; and~~

~~ii. CAFO(c,DI) is the Capacity Adjusted Forced Outage Quantity for Separately Certified Component c in Dispatch Interval DI as calculated in clause 3.21.7.~~

Explanatory Note

Clause 3.21.8 as presented in Exposure Draft 1 is further amended to:

- explicitly set CAPO(c,DI) to zero for Intermittent Generating Systems; and
- clarify the source of the maximum capacity values used in the calculations for Non-Intermittent Generating Systems and Electric Storage Resources.

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

(a) where Separately Certified Component c is an Intermittent Generating System:

$$\text{CAPO}(c, DI) = 0$$

(b) otherwise:

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

~~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~~

where:

i. $o \in PO$ denotes all Planned Outages o for Separately Certified Component c that include Dispatch Interval DI ;

ii. $o \in FO$ denotes all Forced Outages o for Separately Certified Component c that include Dispatch Interval DI ;

- iii. Q(c,DI,o) is the outage quantity for Outage o of Separately Certified Component c in Dispatch Interval DI as calculated in clause 3.21.6;
- iv. MaxCap(c,DI) is:
 - 1. if Separately Certified Component c is a Non-Intermittent Generating System, the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from the Non-Intermittent Generating System under optimal conditions, as specified under Appendix 1(b)(x) or Appendix 1(c)(x) as applicable; or
 - 2. if Separately Certified Component c is an Electric Storage Resource, the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply across the Electric Storage Resource Obligation Duration to the relevant Network from the Electric Storage Resource under optimal conditions, as specified under Appendix 1(b)(xii) or Appendix 1(c)(xii) as applicable; and
- v. DefRCOQ(c,DI) is the Reserve Capacity Obligation Quantity that would apply to Separately Certified Component c in Dispatch Interval DI if the Separately Certified Component was not subject to an Outage or an approved Commissioning Test Plan.

3.21.8A. ~~AEMO must determine the~~ The Capacity Adjusted Planned Outage Quantity for energy for each Trading Interval t for each Separately Certified Component c of a Registered Facility is:

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

~~Where~~ where:

~~CAPO(c,t) is the Capacity Adjusted 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~~

(a) DI ∈ t denotes all Dispatch Intervals DI in Trading Interval t; and

(b) CAPO(c,DI) is the Capacity Adjusted Planned Outage Quantity for Separately Certified Component c in Dispatch Interval DI as calculated in clause 3.21.8.

Explanatory Note

Clause 3.21.8B as presented in Exposure Draft 1 is further amended to use the correct variable name (CAPO(f,t), not CAFO(f,t) in clause 3.21.8B(a).

~~3.21.8B. AEMO must determine the~~ The Capacity Adjusted Planned Outage Quantity for each Trading Interval t for each Registered Facility with a Reserve Capacity Obligation Quantity greater than zero f is:

(a) where no Capacity Credits are assigned to Registered Facility f in Trading Interval t or Registered Facility f is a Non-Scheduled Facility:

$$\text{CAPO}(f, t) = 0$$

(b) otherwise:

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

Where ~~where~~:

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

i. $c \in f$ denotes all Separately Certified Components c of Facility f ; and

ii. CAPO(c, t) is the Capacity Adjusted Planned Outage Quantity for Separately Certified Component c in Trading Interval t as calculated in clause 3.21.8A.

3.21.8C. The Capacity Adjusted Planned Outage Quantity for Dispatch Interval DI for Registered Facility f is:

(a) where no Capacity Credits are assigned to Registered Facility f in Dispatch Interval DI or Registered Facility f is a Non-Scheduled Facility:

$$\text{CAPO}(f, DI) = 0$$

(b) otherwise:

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

where:

i. $c \in f$ denotes all Separately Certified Components c of Facility f ; and

ii. CAPO(c, DI) is the Capacity Adjusted Planned Outage Quantity for Separately Certified Component c in Dispatch Interval DI as calculated in clause 3.21.8.

Explanatory Note

Clause 3.21.9 is no longer required because the definition of DefRCOQ in the capacity adjusted outage quantity calculations incorporates the required temperature-related adjustment.

~~3.21.9. [Blank]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 processes to be followed in reporting Forced Outages, including the determination of Forced Outage quantities pursuant to clause 4.26.1J, in a WEM Procedure.

...

Explanatory Note

The heading above section 3.22 is amended to make it relevant to the section.

Settlement Data Outage Data Publication

3.22. Outage Data Publication

Explanatory Note

Clause 3.22.1 is amended to clarify that AEMO must publish Outage Plan information to the WEM Website following both submissions and revisions in its Outage computer system, and to specify the mandatory information that AEMO must publish.

- 3.22.1. AEMO must as soon as practicable after AEMO receives ~~a request for a Planned Outage~~ an Outage Plan submission, or a revision, change is made to a Planned Outage an existing Outage Plan for an Equipment List Facility in its Outage computer system, publish the following details on the WEM Website:
- (a) whether the 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.~~
 - ~~(b) the status of the Outage;~~
 - ~~(c) the description of the Outage;~~
 - ~~(d) the Outage First Submission Date, Outage Commencement Interval and Outage Completion Interval;~~
 - ~~(e) the equipment impacted by the Outage, including, where relevant, the Facility name and Facility Technology Types for that Facility impacted by the Outage;~~
 - ~~(f) summary details of the Contingency Plan;~~
 - ~~(g) the Outage Return To Service Commencement Interval and Outage Return To Service Completion Interval for each Outage Return To Service Period listed in the Outage Plan;~~

- (h) whether the Outage has been subject to an Outage Recall Direction;
- (i) whether the Outage has been identified as at risk of rejection by AEMO;
- (j) the date and time when:
 - i. the Outage Plan was received by AEMO or was subsequently revised by the Rule Participant responsible for the Outage Plan; or
 - ii. any amendment to the Outage status occurred;
- (k) each Outage Capability impacted by the Outage and any associated Remaining Available Capacity quantities for the Outage Facility or the Facility Technology Types of the Outage Facility; and
- (l) any other information specified in the WEM Procedure referred to in clause 3.18.4.

Explanatory Note

Clause 3.22.1A has been added to cater for when AEMO rejects or recalls an Outage in operational timeframes. In these circumstances, updates will typically occur in the Outage computer system some time after the fact, and so this obligation requires AEMO to publish, to the best of its ability, the actual time at which the direction to reject or recall the Outage was given.

- 3.22.1A. Where AEMO rejects an Outage Plan or issues an Outage Recall Direction outside of its Outage computer system, AEMO must record its best estimate of when that decision was made and publish the estimated date and time of the decision as soon as practicable on the WEM Website.

Explanatory Note

Clause 3.22.2 is amended to clarify that AEMO must publish Forced Outage information to the WEM Website following both submissions and revisions in its Outage computer system, and to specify the mandatory information that AEMO must publish.

- 3.22.2. AEMO must, as soon as practicable after AEMO receives a notification of a Forced Outage for an Equipment List Facility or a revision is made to an existing Forced Outage for an Equipment List Facility in its Outage computer system, publish on the WEM Website:
- ~~(a) the 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.~~
 - (a) the Outage Facility affected by the Outage and, where relevant, each Facility Technology Type of the Outage Facility affected by the Outage;
 - (b) the cause of the Outage;
 - (c) the date and time the Outage commenced or is expected to commence;

- (d) the date and time the Outage ended or is expected to end;
- (e) the date and time when
 - i. AEMO was first notified of the Outage under clause 3.21.2(a);
 - ii. the Outage was first reported in AEMO's Outage computer system;
 - iii. any amendments to the Outage information were received by AEMO;
- (f) each Outage Capability impacted by the Outage and any associated Remaining Available Capacity quantities for the Outage Facility or the Facility Technology Types of the Outage Facility; and
- (g) any other information specified in the WEM Procedure referred to in clause 3.18.4.

Explanatory Note

Section 3.23 is deleted by the Tranche 2 & Tranche 3 Amendments (Schedule C). However, the section needs to be reinserted (set to '[Blank]') after its deletion to avoid a gap in the section number sequence.

3.23. [Blank]

Distributed Energy Resources Register

3.24. Distributed Energy Resources Register

...

3A.6. Generator Monitoring Plans

...

Explanatory Note

Clause 3A.6.3 is updated to reflect the revised Market Information Framework. Rule Participant Network Restricted means information is available to a relevant Network Operator, a Delegate, AEMO, the Coordinator, the Electricity Review Board, the ERA, other regulators and the specific Rule Participant. Under the Confidential Information classification these parties will still be able to access this information as necessary.

- 3A.6.3. ~~AEMO must classify~~ Generator Monitoring Plans and information relating to Generator Monitoring Plans including outcomes, reporting data and supporting evidence relating to a Generator Monitoring Plan ~~as Rule Participant Network Restricted information~~ are all Confidential Information.

...

3A.7. Generator Register

...

Explanatory Note

Clause 3A.7.6 is updated to reflect the revised Market Information Framework. Rule Participant Network Restricted means information is available to a relevant Network Operator, a Delegate, AEMO, the Coordinator, the Electricity Review Board, the ERA, other regulators and the specific Rule Participant. Under the Confidential Information classification these parties will still be able to access this information as necessary.

3A.7.6. ~~AEMO must classify a A Generator Register as Rule Participant Network Restricted information is Confidential Information.~~

...

3A.12. Effect of a Rectification Plan

...

Explanatory Note

Clause 3A.12.3 is amended to correct a clause reference error.

3A.12.3. The immunity in clause 3A.12.1 will not apply and the Economic Regulation Authority must investigate an alleged non-compliance or suspected non-compliance of the Registered Generation Performance Standards or the Generator Monitoring Plan approved by AEMO for the Transmission Connected Generating System as a breach of clause 3A.1.1 or clause 3A.6.1 in accordance with clause ~~2.13.10~~ 2.13.27 where:

- (a) the Economic Regulation Authority has been notified by AEMO in accordance with clause 3A.12.2;
- (b) the Market Participant has repeatedly failed to comply with the same Registered Generator Performance Standard or another applicable Registered Generator Performance Standard; or
- (c) the Market Participant has repeatedly failed to comply with the Generator Monitoring Plan approved by AEMO for the Transmission Connected Generating System.

...

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

...

Explanatory Note

The requirement for AEMO to publish the CC Uplift Quantity applicable to a Facility is moved from clause 10.5.1(f)(xiv) to new clause 4.1A.8 as below.

4.1A.8. AEMO must publish the CC Uplift Quantity for each applicable Facility.

...

4.10A. Network Augmentation Funding Facility

...

Explanatory Note

The requirement from clause 10.5.1(f)(xv) for AEMO to publish the information provided to it regarding a Facility's status as a Network Augmentation Funding Facility has been moved to new clause 4.10A.12 as below.

4.10A.12. AEMO must publish the information provided to it under clause 4.10A.6 with respect to a Market Participant nominating that a Facility be classified as a Network Augmentation Funding Facility, excluding any Confidential Information.

...

4.11. Setting Certified Reserve Capacity

...

Explanatory Note

New clause 4.11.3BA, which will be inserted in the WEM Rules by the *Wholesale Electricity Market Amendment (Tranche 5 Amendments) Rules 2021* (Schedule I, paragraph 26.4), is further amended to reflect the proposed aggregation of clauses 4.10.1(fA), 4.10.1(fB) and 4.10.1(fC) into a single clause 4.10.1(fA).

This change is expected to commence immediately after the insertion of clause 4.11.3BA.

4.11.3BA. The Required Level for a Separately Certified Component of a Scheduled Facility or Semi-Scheduled Facility is:

...

- (c) for an Electric Storage Resource assigned Certified Reserve Capacity under clause 4.11.3 calculated by AEMO using the Capacity Credits associated with the Electric Storage Resource and temperature dependence information submitted to AEMO under clauses ~~4.10.1(fA), 4.10.1(fB) or 4.10.1(fC)~~ or provided in Standing Data (where available) and converted to a sent out basis to 41 degrees Celsius.

...

4.12. Setting Reserve Capacity Obligations

...

Explanatory Note

Clause 4.12.1 as set out in the Tranche 5 Amendments (Schedule I, paragraph 27.1) supersedes the amendments to clauses 4.12.1(a)-(c) as set out in the Tranches 2 and 3 Amendments (Schedule C, paragraph 87.1). However, the Tranche 5 Amendments contains an error in that the instruction deletes clause 4.12.1 but only replaces it with subclauses (a) and (b) and not also with the opening paragraph.

To achieve the intended outcome, the Tranches 2 and 3 Amendments and Tranche 5 Amendments changes to clause 4.12.1 will not commence. Instead the Tranche 6 Amendments will include an instruction to replace the existing clause 4.12.1 as shown below.

~~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 Interruptible Loads and 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 be a sent out quantity; 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 be a sent out quantity; plus~~
- ~~iv. capacity expected to experience a Forced Outage at the time that STEM submissions were due which becomes available in real time;~~

~~is not less than the total Reserve Capacity Obligation Quantity for that Trading Interval for all Facilities registered to that Market Participant, less double the total MWh quantity to be provided as Ancillary Services as specified by AEMO for that Market Participant in accordance with clause 6.3A.2(e)(i).~~

~~(b) [Blank]~~

- ~~(c) the Market Participant must make the capacity associated with the Capacity Credits provided by a Facility applicable to a Trading Interval, up to the Reserve Capacity Obligation Quantity for the Facility for that Trading Interval, available for dispatch by AEMO in accordance with Chapter 7.~~

4.12.1. The Reserve Capacity Obligations for each Market Participant holding Capacity Credits are as follows:

- (a) a Market Participant must ensure that for each Trading Interval, the MW quantity of capacity provided through the Bilateral Submission and STEM

Submission processes, as determined for the Market Participant under clause 4.26.2AE, is greater than or equal to the MW quantity determined for the Market Participant under clause 4.26.2AB; and

(b) a Market Participant must make the capacity associated with the Capacity Credits which are assigned to its Registered Facility for each Dispatch Interval available for dispatch by AEMO in accordance with Chapter 7, up to the Reserve Capacity Obligation Quantity for the Registered Facility for the relevant Dispatch Interval.

...

Explanatory Note

Clause 4.12.4 is amended to update the cross-references in clause 4.12.4(c).

- 4.12.4. AEMO must determine the Reserve Capacity Obligation Quantity for each Registered Facility which is a Scheduled Facility, Semi-Scheduled Facility, Non-Scheduled Facility or Demand Side Programme for each Dispatch Interval as follows:
- (a) the Reserve Capacity Obligation Quantity for a Registered Facility is equal to zero for each Dispatch Interval in which no Capacity Credits are assigned to the Registered Facility;
 - (b) the Reserve Capacity Obligation Quantity for a Non-Scheduled Facility is equal to zero for each Dispatch Interval;
 - (c) the Reserve Capacity Obligation Quantity for a Demand Side Programme:
 - i. for a Dispatch Interval that falls within a period specified for the Demand Side Programme under clause 4.10.1(f)(vi), is equal to the number of Capacity Credits assigned to the Demand Side Programme for the Dispatch Interval, except where clauses 4.12.4(c)(iii) or 4.12.4(c)(iv) apply;
 - ii. for a Dispatch Interval that falls outside the periods specified for the Demand Side Programme under clause 4.10.1(f)(vi), is equal to zero;
 - iii. will equal zero for the remainder of a Capacity Year once the capacity of the Demand Side Programme has been dispatched under clause ~~7.6.16~~ 7.6.5A for the number of hours per Capacity Year that is specified for the Demand Side Programme under clause 4.10.1(f)(ii); and
 - iv. will equal zero for the remainder of a Trading Day once the capacity of the Demand Side Programme has been dispatched under clause ~~7.6.16~~ 7.6.5A for the number of hours per Trading Day that is specified for the Demand Side Programme under clause 4.10.1(f)(iii); and

- (d) the Reserve Capacity Obligation Quantity for a Scheduled Facility or Semi-Scheduled Facility which is assigned Capacity Credits for a Dispatch Interval is equal to the sum of the Reserve Capacity Obligation Quantities determined under clause 4.12.5 for each Separately Certified Component of the Registered Facility for the relevant Dispatch Interval.

...

4.15. Network Access Quantity

...

Explanatory Note

The requirement from clause 10.5.1(f)(xiii) to publish the Highest Network Access Quantity for each Facility has been relocated to clause 4.15.16.

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 ~~and;-~~
- (c) the Highest Network Access Quantity for each Facility.

...

4.16. The Benchmark Reserve Capacity Price

...

Explanatory Note

The requirement for AEMO to publish the BRCP is relocated from clause 10.5.1(e)(i) to new clause 4.16.8A as below.

4.16.8. A proposed revised value for the Benchmark Reserve Capacity Price becomes the Benchmark Reserve Capacity Price after the Economic Regulation Authority has posted a notice on its website of the new value of the Benchmark Reserve Capacity Price with effect from the date and time specified in the Economic Regulation Authority's notice.

4.16.8A. Within five days of publication of the Benchmark Reserve Capacity Price by the Economic Regulation Authority under clause 4.16.8, AEMO must publish the Benchmark Reserve Capacity Price on the WEM Website.

...

4.20 Capacity Credits

...

- 4.20.17. Where AEMO has assigned Capacity Credits to a Facility for a Capacity Year, AEMO must set the number of Capacity Credits to be associated with each component of the Facility for the Capacity Year as:
- (a) the number of Capacity Credits the Market Participant nominated to trade bilaterally under clause 4.14.1; or
 - (b) where clause 4.20.16 applies, the number of Capacity Credits notified to AEMO under that clause to be associated with each component of the Facility.

Explanatory Note

The requirement for AEMO to publish Capacity Credits by Facility has been relocated from clause 10.5.1(f)(iv) to new clause 4.20.18 as below.

4.20.18. AEMO must publish on the WEM Website, for each Market Participant holding Capacity Credits, the Capacity Credits provided by each Facility for each Reserve Capacity Cycle.

...

4.25. Reserve Capacity Testing

...

Explanatory Note

Clause 4.25.3A is amended to use the correct defined term, covering both approved Opportunistic and non-Opportunistic Outages.

- 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 subject to a Planned Outage,~~ or
 - (b) the relevant Market Participant has advised AEMO of a Forced Outage for that Facility in accordance with clause 3.21.2; or
 - (c) that Facility is undergoing a Commissioning Test approved in accordance with section 3.21A.

...

Explanatory Note

Clause 4.25.9 is amended as a result of Consequential Outages no longer being applicable. The wording has been revised to be relevant to a Network limitation, which may require AEMO to

confirm details after the fact with a Network Operator if it does not have visibility of the Network limitation.

4.25.9. In conducting a Reserve Capacity Test, AEMO must:

- (a) subject to clauses 4.25.9(b), 4.25.9(c) and 4.25.9(dA), endeavour to conduct the Reserve Capacity Test without warning;
- (b) allow sufficient time for the Market Participant to schedule fuel that it is not required under these WEM Rules to be stored on-site;
- (c) allow sufficient time for switching a Facility from one fuel to an alternative fuel if operation using the alternative fuel is being tested;
- (d) [Blank]
- (dA) in the case of a Demand Side Programme, give at least two hours' and no more than three hours' notice to allow for arrangements to be made for the Facility to be triggered;
- (e) deem the Reserve Capacity Test to be cancelled and discard the results if the Facility ~~suffers a Consequential Outage~~ is constrained by a Network limitation during the test period;
- (f) maintain adequate records of the Reserve Capacity Test to allow independent verification of the test results including the level of Injection or Withdrawal required during the Reserve Capacity Test; and
- (g) [Blank]
- (h) notify the Market Participant of the time that the Reserve Capacity Test must be performed, and the level of output required by the Separately Certified Component or level of Injection or Withdrawal required by the Facility for the Reserve Capacity Test, as applicable.

...

Explanatory Note

Several changes are proposed to the capacity refund calculations in section 4.26 to:

- ensure that Non-Scheduled Facilities incur Facility Reserve Capacity Deficit Refunds if they are in Commercial Operation but have not yet demonstrated they can meet their Required Level;
- refine the calculations and terminology relating to Refund Payable Planned Outage Quantities;
- clarify the types of Facilities or Separately Certified Components to which various calculations apply;
- account for proposed changes to the dispatch arrangements for Demand Side Programmes; and
- refine the calculation of Facility Capacity Rebates under clause 4.26.6.

4.26. Financial Implications of Failure to Satisfy Reserve Capacity Obligations

...

Explanatory Note

Clause 4.26.1A is amended to ensure that Non-Scheduled Facilities (which do not have Separately Certified Components) incur Facility Reserve Capacity Deficit Refunds if they are in Commercial Operation but have not yet demonstrated they can meet their Required Level.

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, ~~or~~ a Semi-Scheduled Facility ~~or a Non-Scheduled Facility~~:

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

where:

- i. $\text{CCIG}(f,t)$ 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. $\text{RL}(f,t)$ 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; and
- v. RTMRCD(f,t) is the Real-Time Market Reserve Capacity Deficit determined for Facility f in Trading Interval t under clause 4.26.1B; ~~and~~

4. if Facility f is considered by AEMO to have been in Commercial Operation in Trading Interval t and is a Non-Scheduled Facility:

$$\frac{\min(\text{CC}(f,t), \max(0, \min(\text{RL}(f,t) - 2 \times \text{MAX2}(f,t), \text{RL}(f,t) - A(f,t))))}{\text{where:}}$$

- where:
- i. CC(f,t) is the number of Capacity Credits held for Facility f in Trading Interval t;
 - ii. RL(f,t) is the Required Level for Facility f, adjusted to 100 percent of the level of Capacity Credits held for Facility f in Trading Interval t;
 - iii. MAX2(f,t) is the second highest value of the output for Facility f (in MWh) achieved for a Trading Interval during the Trading Day in which Trading Interval t falls, as measured in Meter Data Submissions received by AEMO in accordance with section 8.4, that has been achieved since the date AEMO determined the Facility to be in Commercial Operation up to the relevant Trading Day, where this value must be set equal to or greater than the Max2 applied by AEMO for the previous Trading Day; and
 - iv. A(f,t) is the level of output (in MW) detailed in the most recent report provided prior to Trading Interval t by the Market Participant for Facility f under clause 4.13.10C; and

4.5. 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.

Explanatory Note

Clause 4.26.1B is amended to remove references to Non-Scheduled Facilities because the proposed changes to clause 4.26.1A remove the need to calculate a Real-Time Market Reserve Capacity Deficit value for a Non-Scheduled Facility.

Clauses 4.26.1B, 4.26.1C and 4.26.1CA are amended to:

- replace the terms 'Refund Exempt Planned Outage' and 'Refund Payable Planned Outage' with 'Refund Exempt Planned Outage Quantity' and 'Refund Payable Planned Outage Quantity', to clarify that AEMO's determinations apply to Capacity Adjusted Planned Outage Quantities rather than Planned Outages;
- clarify that clause 4.26.1C applies to Separately Certified Components that are Non-Intermittent Generating Systems, while clause 4.26.1CA applies to Separately Certified Components that are Electric Storage Resources; and
- clarify that a Refund Exempt Planned Outage Count is calculated for a Separately Certified Component and a period of time.

4.26.1B. AEMO must calculate the Real-Time Market Reserve Capacity Deficit for each Scheduled Facility, ~~or Semi-Scheduled Facility or Non-Scheduled Facility~~ f for each Trading Interval t in which AEMO considers the Facility to have been in Commercial Operation as ~~either~~:

~~(a) where Facility f is a Non-Scheduled Facility:~~

~~$$\text{RTMRCD}(f,t) = 0$$~~

~~(b) otherwise:~~

$$\text{RTMRCD}(f,t) = \min(\text{RCOQ}(f,t), \text{CAFO}(f,t) + \text{NISCRQ}(f,t) + \text{ESRCSF}(f,t) + \text{RTMOSF}(f,t)) + \text{NIMGRPPO}(f,t) + \text{ESRRPPO}(f,t)$$

where:

- i-(a) RCOQ(f,t) is the Reserve Capacity Obligation Quantity determined for Facility f in Trading Interval t;
- ii-(b) CAFO(f,t) is the Capacity Adjusted Forced Outage Quantity determined for Facility f in Trading Interval t under clause 3.21.7B;
- iii-(c) NISCRQ(f,t) is the Not In-Service Capacity Refund Quantity determined for Facility f in Trading Interval t under clause 4.26.1D;
- iv-(d) ESRCFS(f,t) is the ESR Charge Shortfall determined for Facility f in Trading Interval t under clause 4.26.1E;
- v-(e) RTMOSF(f,t) is the Real-Time Market Offer Shortfall determined for Facility f in Trading Interval t under clause 4.26.1G;
- vi-(f) NIMGRPPO(f,t) is the ~~quantity of Refund Payable Planned Outage total Refund Payable Planned Outage Quantity~~ determined for Separately Certified Components of Facility f which are Non-Intermittent Generating Systems in Trading Interval t under clause 4.26.1C; and
- vii-(g) ESRRPPO(f,t) is the ~~quantity of Refund Payable Planned Outage total Refund Payable Planned Outage Quantity~~ determined for Separately Certified Components of Facility f which are Electric Storage Resources in Trading Interval t under clause 4.26.1CA.

~~4.26.1C. 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.~~

4.26.1C. If the Capacity Adjusted Planned Outage Quantity in a Trading Interval for a Separately Certified Component of a Scheduled Facility or Semi-Scheduled Facility which is a Non-Intermittent Generating System is greater than zero, then AEMO must determine that Capacity Adjusted Planned Outage Quantity to be:

- (a) if the Refund Exempt Planned Outage Count for the Separately Certified Component, calculated over the 1000 Trading Days preceding the Trading Day in which the Trading Interval falls, is less than 8400, a Refund Exempt Planned Outage Quantity; or
- (b) otherwise, a Refund Payable Planned Outage Quantity.

~~4.26.1CA. 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.~~

4.26.1CA. If the Capacity Adjusted Planned Outage Quantity in a Trading Interval for a Separately Certified Component of a Scheduled Facility or Semi-Scheduled Facility which is an Electric Storage Resource is greater than zero, then AEMO must determine that Capacity Adjusted Planned Outage Quantity to be:

- (a) if the Refund Exempt Planned Outage Count for the Separately Certified Component, calculated over the 1000 Trading Days preceding the Trading Day in which the Trading Interval falls, is less than 1400, a Refund Exempt Planned Outage Quantity; or
- (b) otherwise, a Refund Payable Planned Outage Quantity.

...

Explanatory Note

Clause 4.26.1I is amended to clarify that the Generation Reserve Capacity Deficit Refund calculation for a Market Participant includes any Facility Reserve Capacity Deficit Refunds for unregistered Facilities with an indicative Facility Class of Scheduled Facility, Semi-Scheduled Facility or Non-Scheduled Facility.

4.26.1I. AEMO must calculate the Generation Reserve Capacity Deficit Refund for each Market Participant for each Trading Interval as the sum of the Facility Reserve Capacity Deficit Refunds for the Trading Interval for each ~~Scheduled Facility, Semi-Scheduled Facility and Non-Scheduled Facility registered to the relevant Market Participant~~ Facility with a Facility Class (or, for an unregistered Facility, an indicative Facility Class) of Scheduled Facility, Semi-Scheduled Facility or Non-Scheduled Facility, for which the Market Participant holds Capacity Credits in the Trading Interval.

...

Explanatory Note

Clause 4.26.2AD is amended to include a specific clause reference for the calculation of STEMCAFO(f,DI) values.

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

$$\text{STEMFREQ}(f, DI) = \text{STEMRCOQ}(f, DI) - \text{Max}(0, \text{STEMCAFO}(f, DI) - \text{CAFO}(f, DI))$$

where:

- (a) STEMRCOQ(f,DI) is the STEM Reserve Capacity Obligation Quantity determined for Facility f in Dispatch Interval DI;
- (b) STEMCAFO(f,DI) is the estimate of the Capacity Adjusted Forced Outage Quantity for Facility f in Dispatch Interval DI determined on the Scheduling Day for the relevant Trading Day ~~in accordance with Chapter 6 under clause 6.3A.3(g)~~; and
- (c) CAFO(f,DI) is the Capacity Adjusted Forced Outage Quantity determined for Facility f in Dispatch Interval DI under clause 3.21.7C.

...

Explanatory Note

Clause 4.26.2AH is amended to:

- include a specific clause reference for the calculation of STEMCAPO(f,t) values (as presented in Exposure Draft 1);
- replace the term 'Refund Payable Planned Outage' with 'Refund Payable Planned Outage Quantity', to clarify that AEMO's determinations apply to Capacity Adjusted Planned Outage Quantities rather than Planned Outages; and
- clarify that clause 4.26.1C applies to Separately Certified Components that are Non-Intermittent Generating Systems, while clause 4.26.1CA applies to Separately Certified Components that are Electric Storage Resources.

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

$$\begin{aligned}
 RTCR(p, t) = & \sum_{f \in SFFacilities(p,t)} (CAFO(f, t) + NISCRQ(f, t) + ESRCFS(f, t) \\
 & + RTMOSF(f, t) \\
 & + \max(0, NIMGRPPO(f, t) + ESRRPPO(f, t) - STEMCAPO(f, t)))
 \end{aligned}$$

where:

- (a) CAFO(f,t) is the Capacity Adjusted Forced Outage Quantity determined for Facility f in Trading Interval t under clause 3.21.7B;
- (b) NISCRQ(f,t) is the Not In-Service Capacity Refund Quantity determined for Facility f in Trading Interval t under clause 4.26.1D;
- (c) ESRCFS(f,t) is the ESR Charge Shortfall determined for Facility f in Trading Interval t under clause 4.26.1E;
- (d) RTMOSF(f,t) is the Real-Time Market Offer Shortfall determined for Facility f in Trading Interval t under clause 4.26.1G;
- (e) NIMGRPPO(f,t) is the ~~quantity of Refund Payable Planned Outage total Refund Payable Planned Outage Quantity~~ determined for Separately Certified Components of Facility f which are Non-Intermittent Generating Systems in Trading Interval t under clause 4.26.1C;
- (f) ESRRPPO(f,t) is the ~~quantity of Refund Payable Planned Outage total Refund Payable Planned Outage Quantity~~ determined for Separately

Certified Components of Facility f which are Electric Storage Resources in Trading Interval t under clause 4.26.1CA;

- (g) STEMCAPO(f,t) is the estimate of the Capacity Adjusted Planned Outage Quantity for Facility f in Trading Interval t determined on the Scheduling Day for the relevant Trading Day ~~in accordance with Chapter 6 under clause 6.3A.3(g)~~; and
- (h) f∈SFFacilities(p,t) denotes all Scheduled Facilities and Semi-Scheduled Facilities for which Market Participant p holds Capacity Credits in Trading Interval t and which AEMO considers to be in Commercial Operation in Trading Interval t.

...

Explanatory Note

Clause 4.26.2CH is amended to replace “Load” with “Non-Dispatchable Load”, because Associated Loads are Non-Dispatchable Loads, not Loads, under the new registration taxonomy.

4.26.2CH. A Consumption Deviation Application for a ~~Load~~ Non-Dispatchable Load that was first associated with a Demand Side Programme under clause 2.29.5G, for the Market Participant submitting the Consumption Deviation Application, after the date referred to in clause 4.26.2CD, must be submitted on or before the date which is 30 days from commencement of the Association Period for that Associated Load.

Explanatory Note

Clause 4.26.2D is amended to reflect that:

- Demand Side Programmes have an “effective” Dispatch Instruction for every Trading Interval, albeit that the effective Dispatch Instruction usually contains a zero MW quantity; and
- DIMW(f,t) values will be provided under clause 7.13.5 and will be MW rather MWh values.

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 with a non-zero MW quantity 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~~ curtail the absolute value of its Withdrawal 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~~ 7.13.5;

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 with a zero MW quantity under section 7.6 to the Demand Side Programme f for Trading Interval t.

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.

Explanatory Note

Clause 4.26.2F is amended to:

- remove the reference to Electric Storage Resources in clause 4.26.2F(a)(i), which is redundant because an Energy Producing System is defined as “one or more electricity producing units, such as generation systems or Electric Storage Resources, located behind a single network connection point or electrically connected behind two or more shared network connection points”; and
- improve the clarity of clause 4.26.2F(b), and in particular to clarify that the calculation includes Demand Side Programme Capacity Cost Refunds for unregistered Facilities with an indicative Facility Class of Demand Side Programme.

4.26.2F. The Trading Interval Capacity Cost Refund for Market Participant p and Trading Interval t is the sum of:

- (a) either:
- i. where Market Participant p holds Capacity Credits associated with an Energy Producing System ~~or an Electric Storage Resource~~, the Generation Capacity Cost Refund for Market Participant p for Trading Interval t, determined in accordance with clause 4.26.3; or
 - ii. zero, otherwise; and
- (b) the sum of ~~all the~~ Demand Side Programmes Capacity Cost Refunds for Demand Side Programmes Trading Interval t for each Facility with a Facility Class (or, for an unregistered Facility, an indicative Facility Class) of Demand Side Programme for which Market Participant p holds Capacity Credits in Trading Interval t.

Explanatory Note

Clause 4.26.3 is amended to remove a redundant reference to Electric Storage Resources.

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 STEM Refund in Trading Interval t for Market Participant p , where the Net STEM Refund is calculated as follows:

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

where:

- i. $N \text{ STEM Refund}(p, t)$ is the Net STEM Refund for Market Participant p in Trading Interval t ;
- ii. $\text{TIRR weighted}(p, t)$ 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. $\text{TIRR}(f, t)$ is the Trading Interval Refund Rate for Facility f in Trading Interval t ; and
- 3. $\text{CC}(f, t)$ is the number of Capacity Credits associated with Facility f in Trading Interval t ; and
- iii. $N \text{ STEM Short}(p, t)$ is the Net STEM Shortfall for Market Participant p in Trading Interval t .

Explanatory Note

Clause 4.26.3A is amended to clarify the treatment of unregistered Facilities with an indicative Facility Class of Demand Side Programme.

4.26.3A. The Demand Side Programme Capacity Cost Refund for Trading Interval t for a Facility f with a Facility Class (or, for an unregistered Facility, an indicative Facility Class) of Demand Side Programme is equal to the lesser ~~of~~ of:

- (a) the Maximum Facility Refund for ~~the Demand Side Programme Facility~~ Facility f in the Capacity Year the Trading Interval t falls in, less all Demand Side Programme Capacity Cost Refunds applicable to the Facility in previous Trading Intervals falling in the same Capacity Year; and
- (b) the sum ~~of~~ of:

i. either:

1. if Facility f is a Registered Facility:

$$\text{TIRR}(f, t) \times S$$

~~where~~ where:

S is the Capacity Shortfall in MW determined in accordance with clause 4.26.2D in Trading Interval t , and

$\text{TIRR}(f, t)$ is the Trading Interval Refund Rate for Facility f in Trading Interval t ; ~~and~~ or

2. otherwise, zero; and

- ii. the Facility Reserve Capacity Deficit Refund for Trading Interval t for ~~the~~ Facility f , determined in accordance with clause 4.26.1A.

4.26.4. For each Market Participant holding Capacity Credits associated with a Scheduled Facility, Semi Scheduled Facility or a Demand Side Programme, AEMO must determine the amount of the rebate (“**Participant Capacity Rebate**”) to be applied for Trading Interval t as the sum of all Facility Capacity Rebates determined in accordance with clause 4.26.6.

4.26.5. [Blank]

Explanatory Note

Clause 4.26.6(e)(i)(3) is amended to simplify the test in that clause by limiting it to Generation Capacity Cost Refunds and the Maximum Participant Generation Refund (which are already defined and calculated). It is not necessary to include Demand Side Programme Facilities in the test because the refunds for each such Facility are capped on a Facility basis.

Clause 4.26.6(e)(ii)(4) is removed because the test in that clause is unnecessary - if the Facility passes the test in clause 4.26.6(e)(i)(3), then the Market Participant would never fail the test in clause 4.26.6(e)(ii)(4), because of the way that caps are applied to the refunds of the Market Participant's other Facilities.

- 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 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 ~~all Trading Interval Capacity Cost Refunds~~ the Generation Capacity Cost Refunds in Capacity Year y that the Trading Interval t falls in, for Trading Intervals prior to and including Trading Interval t, for the Market Participant p to which the Facility is registered, is less than the Maximum Participant Generation Refund ~~for the Market Participant p which the Facility is registered to, in for~~ 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 in Trading Interval t; 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
 - ~~4. the sum of all Trading Interval Capacity Cost Refunds 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 Refund for the Market Participant p which the Facility is registered to, in Capacity Year y; and~~
- iii. zero otherwise.

...

4.28 Funding Reserve Capacity Purchased by AEMO

...

Explanatory Note

Clause 4.28.2(b) is amended to replace “Market Customer’s” with “Market Participant’s”.

4.28.2. For the purposes of clause 4.28.1:

- (a) AEMO is taken to have acquired a Capacity Credit held by a Market Participant in respect of a Facility for a Trading Day if that Capacity Credit has not been allocated by that Market Participant to another Market Participant for settlement purposes under sections 4.30 and 4.31;
- (b) any Capacity Credits that have been allocated to a Market Participant in excess of that ~~Market Customer’s~~ Market Participant’s Individual Reserve Capacity Requirement must be:
 - i. deemed to be Capacity Credits acquired by AEMO from the Market Participant; and
 - ii. not counted as Capacity Credits traded bilaterally;
- (c) [Blank]

...

Explanatory Note

Clause 4.28.9 is amended to correct a clause reference error.

4.28.9. AEMO must only accept the load measured by an interval meter nominated in accordance with clauses 4.28.8(a) or 4.28.8C~~(a)~~ as a Non-Temperature Dependent Load if that load satisfies the requirements of Appendix 5A.

Explanatory Note

Clause 4.28.9A is amended to correct a clause reference error.

4.28.9A. A Market Participant may submit a Consumption Deviation Application to AEMO in accordance with the WEM Procedure referred to in clause 4.28.9E, in respect of a Load that it has nominated as a Non-Temperature Dependent Load under clause 4.28.8(a) or clause 4.28.8C~~(a)~~ and a Trading Interval, if:

- (a) the level of consumption of the Load was affected in the Trading Interval; and
- (b) the Market Participant considers that the deviation in the level of consumption was due to:
 - i. the Trading Interval falling on a Trading Day that is not a Business Day; or
 - ii. a maintenance event.

...

Explanatory Note

The requirement for AEMO to publish the NTDL Ratios, TDL Ratios and Total Ratios determined by the IRCR process are relocated from clause 10.5.1(f)(ix) to new clause 4.28.13 as below.

4.28.13. AEMO must publish the following ratios calculated by it when it determines the Indicative Individual Reserve Capacity Requirements or the Individual Reserve Capacity Requirements for a Trading Month, or recalculates the Individual Reserve Capacity Requirements for a Trading Month as required by clause 4.28.11A:

- (a) NTDL Ratio as calculated in accordance with Step 8A of Appendix 5;
- (b) TDL Ratio as calculated in accordance with Step 8C of Appendix 5; and
- (c) Total Ratio as calculated in accordance with Step 10 of Appendix 5.

...

4.28A. Intermittent Load Refunds

Explanatory Note

Clause 4.28A.1 is amended to use the correct defined term and clarify that only Outages affecting the energy production capability of the Energy Producing System are relevant to this clause.

4.28A.1. AEMO must determine for each Intermittent Load that is and continues to be deemed to be an Intermittent Load under clause 1.48.2, registered to Market Participant p the amount of the refund ("**Intermittent Load Refund**") to be applied for each Trading Day d in respect of that Intermittent Load as the sum over all Trading Intervals t of Trading Day d of the product of:

- (a) the Trading Interval Refund Rate for Trading Interval t for the Intermittent Load as determined in clause 4.28A.1A; and
- (b) [Blank]
- (c) the capacity shortfall for Trading Interval t of Trading Day d which is the greater of zero and:
 - i. double the MWh of the Intermittent Load metered during that Trading Interval, where for the purpose of this calculation the metered amount should be defined at the meter rather than being Loss Factor adjusted so as to be measured at the Reference Node, less;
 - ii. if the Energy Producing System described in clause 2.30B.2(a) ~~has submitted an Outage Plan~~ is subject to a Planned Outage in the Trading Interval that would affect the energy production capability of the Energy Producing System, the quantity nominated for that Intermittent Load by its Market Participant in accordance with clause 4.28.8(c); less

- iii. 3% of the quantity nominated for that Intermittent Load by its Market Participant in accordance with clause 4.28.8(c); less
- iv. for Trading Intervals where the temperature data described in clause 4.28A.2 shows a temperature in excess of 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~~ is not subject to a Planned Outage or Forced Outage in the Trading Interval that would affect the energy production capability of the Energy Producing System, the capacity reduction, if any, specified in accordance with clause 2.30B.3(b)(i).

...

Explanatory Note

Clause 4.28A.2 is amended to insert a colon at the end of the opening paragraph.

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]

...

4.29. Settlement Data

Explanatory Note

Clause 4.29.1(b) is amended to correct a transcription error by removing the brackets around 'surplus + BRCP Cap Factor'.

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:

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

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:

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

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

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

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:

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

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.

...

Explanatory Note

The requirement for AEMO to publish the values determined for Trans_Floor and Trans_Ceiling are relocated from clause 10.5.1(f)(ivB) to new clause 4.29.1CA as below

4.29.1B. The Facility Monthly Reserve Capacity Price for a Transitional Facility during a Transitional Reserve Capacity Cycle is the value calculated using the formula below divided by 12:

$$\text{TFMRCP} = \text{Min}(\text{max}(\text{Reserve_Capacity_Price}, \text{Trans_Floor}), \text{Trans_Ceiling})$$

where:

TFMRCP is the Facility Monthly Reserve Capacity Price for the Transitional Facility in the current Transitional Reserve Capacity Cycle for that Transitional Facility;

Reserve_Capacity_Price is the Reserve Capacity Price as determined in accordance with clause 4.29.1 for the Reserve Capacity Cycle;

Trans_Ceiling equals \$140,000 for the 2019 Reserve Capacity Cycle and for each subsequent Transitional Reserve Capacity Cycle, the value as escalated in accordance with clause 4.29.1C(a); and

Trans_Floor equals \$114,000 for the 2019 Reserve Capacity Cycle and for each subsequent Transitional Reserve Capacity Cycle, the value as escalated in accordance with clause 4.29.1C(b).

4.29.1C. The escalation factors used in clause 4.29.1B are equal to:

(a) For Trans_Ceiling:

$$\text{Trans_Ceiling} = \text{Trans_Ceiling}_{[\text{previous}]} \times \text{max}(1, (1 + \text{CPI}))$$

where:

Trans_Ceiling_[previous] is the value of Trans_Ceiling published for the previous Transitional Reserve Capacity Cycle; and

CPI is the latest published value of the Reserve Bank of Australia's Statement of Monetary Policy forecast Consumer Price Index for June of Year 3 of the relevant Transitional Reserve Capacity Cycle; or if that value is not available, the mid-point of the Reserve Bank's latest published target range of inflation, at the time AEMO undertakes the calculation in clause 4.29.2A.

(b) For Trans_Floor:

$$\text{Trans_Floor} = \text{Trans_Floor}_{[\text{previous}]} \times \text{max}(1, (1 + \text{CPI}))$$

where:

Trans_Floor_[previous] is the value of Trans_Floor published for the previous Transitional Reserve Capacity Cycle; and

CPI is the latest published value of the Reserve Bank of Australia's Statement of Monetary Policy forecast Consumer Price Index for June of Year 3 of the relevant Transitional Reserve Capacity Cycle; or if that value is not available, the mid-point of the Reserve Bank's latest published target range of inflation, at the time AEMO undertakes the calculation in clause 4.29.2A.

4.29.1CA. AEMO must publish on the WEM Website the values determined for Trans Ceiling and Trans Floor in accordance with clause 4.29.1C that are used in the formula in clause 4.29.1B.

...

Explanatory Note

Clause 4.29.3(d)(i) is amended to:

- remove the reference to Special Price Arrangements, which are no longer used in the WEM; and
- replace the full stop at the end of clause 4.29.3(d) with a semi-colon.

- 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 NCESS 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, deemed to be Intermittent Loads under clause 1.48.2, of the Intermittent Load Refund payable to AEMO by Market Participant p in respect of each of its Intermittent Loads for Trading Day d; and
- (e) for each Supplementary Capacity Contract:
 - i. the net payment to be made by AEMO under that contract for the Trading Day d; and
 - ii. to whom the payment is to be made.

...

Explanatory Note

The Tranches 2 and 3 Amendments 'replacement' of clause 4.29.5 will not commence because the clause does not exist to be replaced. The Tranche 6 Amendments will insert the clause as intended.

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.

...

Explanatory Note

The amendment to clause 5.2A.3 to shift the deadline specified in the clause to the opening of the certification application window will need to be remade following the replacement of that clause by the *Wholesale Electricity Market Amendment (Tranche 5 Amendments) Rules 2021* (Schedule I, paragraph 37.2). Refer to the explanatory note for clauses 5.2A.2 and 5.2A3 in Part 1 of this Exposure Draft for further details about the change.

5.2A.3. Clause 5.2A.2 does not require a Market Participant to apply for Certified Reserve Capacity for a Facility for a Reserve Capacity Cycle where the Market Participant has entered into an NCESS Contract in respect of the Facility after the date and time specified under clause ~~4.1.11~~ 4.1.7 for that relevant Reserve Capacity Cycle.

...

5.9. Settlement Data

...

Explanatory Note

The amendment at paragraph 41.2(a) of the Tranche 5 Amendments (Schedule I) should not commence as it will result in duplicated wording in clause 5.9.2. Instead, clause 5.9.2 is amended as shown to achieve the intended outcome.

- 5.9.2. AEMO must provide Network Operators with details of any quantities dispatched or otherwise instructed by AEMO to be provided under their [NCESS Contracts](#) in a Trading [Week](#) by 5:00 PM on the Invoicing Date for Settlement Statements for that Trading [Week](#).

...

6. The [Short Term Energy Market](#)

Energy Scheduling Timetable and Process

- 6.1. [Blank]

- 6.2. **Bilateral Submission Timetable and Process**

Explanatory Note

Clause 6.2.1 is amended to restore the current window for Bilateral Submissions for the New WEM.

- 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.~~
between:

- (a) 8:00 AM on the day seven days prior to the start of the Scheduling Day for the Trading Day; and
(b) the Bilateral Submission Cutoff for the Trading Day.

Explanatory Note

Clause 6.2.2 is amended to restore the current arrangements for the processing of Standing Bilateral Submissions for the New WEM, i.e. so that they are used to make Bilateral Submissions for a Trading Day at the time the Trading Day enters the Bilateral Submission window.

- ~~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.~~

6.2.2. Where, at the time specified in clause 6.2.1(a) for a Trading Day:

(a) AEMO holds a Standing Bilateral Submission applicable to the Trading Day for a Market Participant; and

(b) the Standing Bilateral Submission conforms to the requirements of section 6.7 at that time,

AEMO must make the Standing Bilateral Submission the Bilateral Submission for the Trading Day for the Market Participant as at the time specified in clause 6.2.1(a).

Explanatory Note

Clause 6.2.2A is amended to reflect the above restoration of the current Bilateral Submission window arrangements.

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 during the period described in clause 6.2.1, make the Bilateral Submission data the Bilateral Submission for the Trading Day; and

(b) notify the Market Participant which submitted the Bilateral Submission data under clause 6.2.1, that:

- i. the Bilateral Submission data has been made the Bilateral Submission for the Trading Day to which the Bilateral Submission data submitted under clause 6.2.1 relates; or
- ii. AEMO rejects the Bilateral Submission data as it does not comply with section 6.7, or was not received after the Bilateral Submission Cutoff during the period described in clause 6.2.1 for the Trading Day to which the Bilateral Submission data submitted under clause 6.2.1 relates.

Explanatory Note

Clause 6.2.3 is amended to:

- reflect the above restoration of the current Bilateral Submission window arrangements;
- require the Bilateral Submission quantities to be provided for each Trading Interval in the Bilateral Submission Results Window, instead of each Trading Interval in the Week-Ahead Schedule Horizon; and
- update the list of events that will trigger an update of the Bilateral Submission quantities.

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 Bilateral Submission Results Window,

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) makes a Bilateral Submission under clause 6.2.2;~~
- (b) ~~accepts Standing Bilateral Submission data under clause 6.2A.2(a); accepts Bilateral Submission data under clause 6.2.2A(a); or~~
- (c) ~~receives cancellation of Bilateral Submission data under clause 6.2.4B that has been previously accepted under clause 6.2.2A(a); or disregards cancelled Bilateral Submission data from a Bilateral Submission under clause 6.2.5(a).~~
- (d) ~~receives cancellation of Standing Bilateral Submission data under clause 6.2A.4 that has been previously accepted under clause 6.2A.2(a).~~

6.2.4. [Blank]

6.2.4A. [Blank]

Explanatory Note

Clause 6.2.4B is amended to reflect the above restoration of the current Bilateral Submission window arrangements.

6.2.4B. A Market Participant may cancel Bilateral Submission data ~~accepted by AEMO under clause 6.2.2A(a) held by AEMO~~ for any Trading Interval during the period described in clause 6.2.1 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.

6.2.6. [Blank]

6.2.7. By submitting Bilateral Submission data, a Market Participant acknowledges that it is acting with the permission of all affected Market Participants.

Explanatory Note

Clause 6.2.8 is deleted and the obligations on AEMO regarding confirmation and notification of Electric Storage Resource Obligation Intervals are covered in clauses 6.3.1 and 6.3A.2.

~~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.~~

6.2A. Standing Bilateral Submission Timetable and Process

- 6.2A.1. A Market Participant may submit Standing Bilateral Submission data to AEMO at any time.
- 6.2A.2. AEMO must, as soon as practicable after receiving Standing Bilateral Submission data under clause 6.2A.1:
- (a) accept the Standing Bilateral Submission data provided it complies with section 6.7 and revise the Standing Bilateral Submission to reflect the Standing Bilateral Submission data; and
 - (b) notify the Market Participant which submitted the Standing Bilateral data under clause 6.2A.1 that:
 - i. AEMO accepts the Standing Bilateral Submission data and has revised the Standing Bilateral Submission to reflect the Standing Bilateral Submission data; or
 - ii. AEMO rejects the Standing Bilateral Submission data as it does not comply with section 6.7.

Explanatory Note

Clause 6.2A.2A is amended to restore the current arrangements for the processing of Standing Bilateral Submissions for the New WEM.

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)~~ next time that AEMO is required to use Standing Bilateral Submissions to make Bilateral Submissions under clause 6.2.2.

- 6.2A.3. Standing Bilateral Submission data must be associated with a day of the week and when used as Bilateral Submission data will only apply to Trading Days commencing on that day of the week.

Explanatory Note

Clause 6.2A.4 is amended to clarify the level of granularity permitted for cancellations of Standing Bilateral Submission data.

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 of a day of the week 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.

6.3. [Blank]Determination of Electric Storage Resource Obligation Intervals

Explanatory Note

New clause 6.3.1 requires AEMO to finalise the Electric Storage Resource Obligation Intervals for the next Trading Day and document its expectation of the Electric Storage Resource Obligation Intervals for the subsequent seven Trading Days by 6:50 AM on each Scheduling Day. This information is then made available to all Market Participants under clause 6.3A.2 and used to determine capacity adjusted outage quantity and Reserve Capacity Obligation Quantity estimates under clause 6.3A.3.

The deadline has moved from 8:00 AM (as proposed in Exposure Draft 1) to 6:50 AM, in response to concerns raised by stakeholders during consultation that an 8:00 AM deadline would not give Market Participants enough notice of changes. The new deadline balances the need to give Market Participants adequate notice of changes and the security and reliability benefits of allowing AEMO to determine the final Electric Storage Resource Obligation Intervals for a Trading Day as late as possible.

6.3.1. AEMO must, in accordance with the WEM Procedure referred to in clause 4.11.3A, determine and record the following information by 6:50 AM on each Scheduling Day:

- (a) the Electric Storage Resource Obligation Intervals that will apply during the Trading Day for the Scheduling Day; and
- (b) the Electric Storage Resource Obligation Intervals that AEMO expects will apply during each of the seven following Trading Days.

6.3A. Information to Support the Bilateral and STEM Submission Process

Explanatory Note

Clause 6.3A.1 is amended to:

- reflect the above restoration of the current Bilateral Submission window arrangements;
- require the total energy quantity to be published for each Trading Interval in the Bilateral Submission Results Window, instead of each Trading Interval in the Week-Ahead Schedule Horizon; and
- update the list of events that will trigger an update of the total energy quantity.

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~~ Bilateral Submission Results Window. AEMO must update this information whenever AEMO:

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

Explanatory Note

Clause 6.3A.2 as proposed in Exposure Draft 1 is replaced with two clauses, due to the change in deadline for determining and providing to Market Participants the final Electric Storage Resource Obligation Intervals for a Trading Day.

Revised clause 6.3A.2 requires AEMO to provide, by 6:50 AM on each Scheduling Day, details of the Electric Storage Resource Obligation Intervals for the next eight Trading Days, as determined under clause 6.3.1. (This replaces the previous requirement from the Tranches 2 and 3 Amendments to notify Market Participants with Electric Storage Resources of changes to the Electric Storage Resource Obligation Intervals for the next Trading Day in clause 6.2.8).

New clause 6.3A.2A requires AEMO to provide, by 8:00 AM on each Scheduling Day, a demand forecast for the Trading Day for the Scheduling Day, derived from the most recently published Pre-Dispatch Schedule (which replaces the previous demand forecast requirement in clause 6.3A.3(g)).

6.3A.2. ~~[Blank]~~ AEMO must make the following information available to each Market Participant by 6:50 AM on each Scheduling Day:

- (a) the Electric Storage Resource Obligation Intervals that will apply for the Trading Day for the Scheduling Day, as determined by AEMO under clause 6.3.1(a); and

(b) the Electric Storage Resource Obligation Intervals that AEMO expects will apply for each of the seven Trading Days following the Trading Day for the Scheduling Day, as determined by AEMO under clause 6.3.1(b).

6.3A.2A. AEMO must make available to each Market Participant, by 8:00 AM on each Scheduling Day, for each Trading Interval in the Trading Day for the Scheduling Day, 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, in both MW and MWh.

Explanatory Note

The substantive content of clauses 6.3A.3 to 6.3A.5 has been moved to other clauses. Specifically:

- the provision of Reserve Capacity-related information under clauses 6.3A.3(a)-(b) is replaced by the provision of equivalent information under clauses 6.3A.5(b)-(c);
- the provision of STEM Submission feedback under clause 6.3A.3(c) is replaced by the provision of STEM Submission feedback under clause 6.3B.4;
- the provision of STEM Submission quantity limits under clauses 6.3A.3(d)-(f) is replaced by the provision of Maximum Facility Supply Capability, Maximum Supply Capability and Maximum Consumption Capability values under clause 6.3A.5(a); and
- the provision of a demand forecast under clause 6.3A.3(g) is replaced by the provision of a demand forecast for the next Trading Day under clause 6.3A.2A.

Except for STEM Submission feedback, the relevant information will be provided to Market Participants once each Scheduling Day, rather than being continuously updated.

~~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;~~

- ~~(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.~~

~~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.~~

Explanatory Note

Revised clause 6.3A.3 requires AEMO to do the following on the morning of each Scheduling Day between 8:00 AM and 8:30 AM:

- record a snapshot of the approved Commissioning Test Plans, Planned Outages and Forced Outages that are expected to occur during the STEM Submission Information Window (the eight Trading Days starting with the Trading Day for the Scheduling Day);
- use this snapshot information to determine the required STEM Submission quantity limits, capacity adjusted outage quantity estimates and Reserve Capacity Obligation Quantity estimates for each Trading Interval and/or Dispatch Interval (as appropriate) in the STEM Submission Information Window.

The Maximum Supply Capability and Maximum Consumption Capability limits are each set to a minimum of 0.001 MWh, to ensure that a Market Participant is always able to submit a Portfolio Supply Curve/Portfolio Demand Curve with at least one Price-Quantity Pair. This removes the need to include distinct Participant Interval Minimum STEM Price and Participant Interval Maximum STEM Price parameters in STEM Submissions, because a Market Participant will be able to effectively specify these values through the minimum and maximum prices in their Price-Quantity Pairs.

6.3A.3. Between 8:00 AM and 8:30 AM each Scheduling Day, AEMO must:

- (a) identify and record the details of each approved Commissioning Test Plan that includes one or more Dispatch Intervals in the STEM Submission Information Window;
- (b) identify and record the details of each Planned Outage or Forced Outage for energy recorded by AEMO for a Scheduled Facility, Semi-Scheduled

Facility or Non-Scheduled Facility with a duration that includes one or more Dispatch Intervals in the STEM Submission Information Window;

- (c) determine the Maximum Facility Supply Capability for each Scheduled Facility, Semi-Scheduled Facility and Non-Scheduled Facility f for each Dispatch Interval DI in the STEM Submission Information Window as:

$$\text{MFSC}(f,DI)=\text{MinAvail}(f,DI)\times\text{LF}(f,DI)/12$$

where:

i. MinAvail(f,DI) is:

1. where no Planned Outages or Forced Outages for Facility f with a duration that includes Dispatch Interval DI were identified under clause 6.3A.3(b), the maximum sent out capacity of Facility f as recorded in Standing Data for Dispatch Interval DI; and
2. otherwise, the minimum Remaining Available Capacity for energy recorded for Facility f in Dispatch Interval DI for the Planned Outages and Forced Outages identified under clause 6.3A.3(b); and

ii. LF(f,DI) is the Loss Factor for Facility f in Dispatch Interval DI;

- (d) determine the Maximum Facility Supply Capability for each Scheduled Facility, Semi-Scheduled Facility and Non-Scheduled Facility f for each Trading Interval t in the STEM Submission Information Window as:

$$\text{MFSC}(f,t)=\sum_{DI\in t}\text{MFSC}(f,DI)$$

where:

- i. MFSC(f,DI) is the Maximum Facility Supply Capability determined by AEMO for Facility f for Dispatch Interval DI under clause 6.3A.3(c); and
- ii. DI \in t denotes all Dispatch Intervals DI in Trading Interval t.

- (e) determine the Maximum Supply Capability for each Market Participant p for each Trading Interval t in the STEM Submission Information Window as:

$$\text{MSC}(p,t)=\max\left(0.001,\sum_{f\in\text{Facilities}(p,t)}\text{MFSC}(f,t)\right)$$

where:

- i. MFSC(f,t) is the Maximum Facility Supply Capability determined by AEMO for Facility f for Trading Interval t under clause 6.3A.3(d); and
- ii. f \in Facilities(p,t) denotes all Scheduled Facilities, Semi-Scheduled Facilities and Non-Scheduled Facilities f registered to Market Participant p in Trading Interval t;

(f) determine the Maximum Consumption Capability for each Market Participant p for each Trading Interval t in the STEM Submission Information Window as:

$$\text{MCC}(p,t)=\max(0.001, \text{StandingMCC}(p,t))$$

where:

i. StandingMCC(p,t) is the maximum Loss Factor adjusted quantity of energy, in units of MWh, that could be consumed during Trading Interval t by Market Participant p's Registered Facilities and Non-Dispatchable Loads, as specified in Standing Data;

(g) using the assumptions specified in clause 6.3A.4, determine and record an estimate of the Capacity Adjusted Forced Outage Quantity and Capacity Adjusted Planned Outage Quantity for each Separately Certified Component of a Scheduled Facility or Semi-Scheduled Facility for each Dispatch Interval and each Trading Interval in the STEM Submission Information Window in which AEMO considers the relevant Facility will be in Commercial Operation; and

(h) using the assumptions specified in clause 6.3A.4, determine and record an estimate of the Reserve Capacity Obligation Quantity for each Separately Certified Component of a Scheduled Facility or Semi-Scheduled Facility for each Dispatch Interval in the STEM Submission Information Window in which AEMO considers the relevant Facility will be in Commercial Operation.

Explanatory Note

Revised clause 6.3A.4 sets out the assumptions that AEMO must use when determining capacity adjusted outage quantity and Reserve Capacity Obligation Quantity estimates under clause 6.3A.3.

6.3A.4. When determining Capacity Adjusted Planned Outage Quantity, Capacity Adjusted Forced Outage Quantity and Reserve Capacity Obligation Quantity estimates on a Scheduling Day under clauses 6.3A.3(g) and 6.3A.3(h), AEMO must assume that:

(a) the Electric Storage Resource Obligation Intervals for the Trading Days in the STEM Submission Information Window are the same as those determined by AEMO on the Scheduling Day under clause 6.3.1;

(b) the Commissioning Test Plan details for each Facility for each Dispatch Interval in the STEM Submission Information Window are the same as those identified by AEMO on the Scheduling Day under clause 6.3A.3(a);

(c) the Planned Outage and Forced Outage details for each Separately Certified Component for each Dispatch Interval in the STEM Submission Information Window are the same as those identified by AEMO on the Scheduling Day under clause 6.3A.3(b);

- (d) the maximum daily temperature at the site of each relevant Facility does not exceed 41 degrees Celsius on any Trading Day in the STEM Submission Information Window; and
- (e) the Reserve Capacity Obligation Quantity of an Electric Storage Resource is not reduced under clause 4.12.5(g) for any Dispatch Interval in the STEM Submission Information Window.

Explanatory Note

Revised clause 6.3A.5 requires AEMO to make available to Market Participants by 8:30 AM on the Scheduling Day the STEM Submission quantity limits, capacity adjusted outage quantity estimates and Reserve Capacity Obligation Quantity estimates that it has determined under clause 6.3A.3.

The clause as presented in Exposure Draft 1 is further amended to correct the cross-references in clauses 6.3A.5(b) and 6.3A.5(c).

6.3A.5. By 8:30 AM on each Scheduling Day, AEMO must make available to each Market Participant the following parameters for information in forming its STEM Submissions:

- (a) for each Trading Interval in the STEM Submission Information Window:
 - i. the Maximum Facility Supply Capability determined on the Scheduling Day under clause 6.3A.3(d) for each Scheduled Facility, Semi-Scheduled Facility and Non-Scheduled Facility registered to the Market Participant in the Trading Interval;
 - ii. the Maximum Supply Capability determined on the Scheduling Day under clause 6.3A.3(e) for the Market Participant; and
 - iii. the Maximum Consumption Capability determined on the Scheduling Day under clause 6.3A.3(f) for the Market Participant;
- (b) for each Trading Interval in the STEM Submission Information Window, for each Separately Certified Component of a Scheduled Facility or Semi-Scheduled Facility for which the Market Participant holds Capacity Credits in the Trading Interval and which AEMO considers to be in Commercial Operation in the Trading Interval:
 - i. the Capacity Adjusted Forced Outage Quantity estimate determined on the Scheduling Day under clause 6.3A.3(g); and
 - ii. the Capacity Adjusted Planned Outage Quantity estimate determined on the Scheduling Day under clause 6.3A.3(g); and
- (c) for each Dispatch Interval in the STEM Submission Information Window, for each Separately Certified Component of a Scheduled Facility or Semi-Scheduled Facility for which the Market Participant holds Capacity Credits in the Dispatch Interval and which AEMO considers to be in Commercial Operation in the Dispatch Interval:
 - i. the Capacity Adjusted Forced Outage Quantity estimate determined on the Scheduling Day under clause 6.3A.3(g);

- ii. the Capacity Adjusted Planned Outage Quantity estimate determined on the Scheduling Day under clause 6.3A.3(g); and
- iii. the Reserve Capacity Obligation Quantity estimate determined on the Scheduling Day under clause 6.3A.3(h).

Explanatory Note

Clause 6.3B.1 is amended to make the window for STEM Submissions similar to that used for Bilateral Submissions.

6.3B. STEM Submissions Timetable and Process

~~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 for a Trading Day to AEMO between:~~

- ~~(a) 8:30 AM on the day seven days prior to the start of the Scheduling Day for the Trading Day; and~~
- ~~(b) the STEM Submission Cutoff for the Trading Day.~~

Explanatory Note

Clause 6.3B.1A is amended to restore the current arrangements for the processing of Standing STEM Submissions for the new WEM, except that the processing will occur at 8:30 AM on the Scheduling Day instead of 9:00 AM.

The processing time has been moved from the time proposed in Exposure Draft 1 (i.e. when the Trading Day first enters the STEM Submission window), in response to a concern raised by Synergy that if

- a STEM Submission is ‘trimmed’ to reflect a Planned Outage that is subject to a late cancellation; and
- the Market Participant has system issues that prevent it from updating its STEM Submission on the Scheduling Day,

then the Market Participant could incur a Net STEM Shortfall and be exposed to Reserve Capacity refunds.

The new processing time falls after the final lock in of outages for a Trading Day on the Scheduling Day, which removes any risk that a Standing STEM Submission will be trimmed based on outage data that subsequently changes.

~~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.1A. Where, at 8:30 AM on the Scheduling Day for a Trading Day:

- (a) AEMO does not hold a STEM Submission applicable to the Trading Day for the Market Participant;
- (b) AEMO holds a Standing STEM Submission applicable to the Trading Day for a Market Participant; and
- (c) the Standing STEM Submission conforms to the requirements of section 6.6 at that time.

AEMO must, subject to clause 6.3B.1B, make the Standing STEM Submission the STEM Submission for the Trading Day for the Market Participant as at 8:30 AM on the Scheduling Day for the Trading Day.

Explanatory Note

Clause 6.3B.1B is amended to move the details of the STEM Submission adjustment process to clause 6.3B.2. This process will also be used by AEMO for the daily adjustments to STEM Submissions required under the new clause 6.3B.1C.

~~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;.~~

6.3B.1B. If AEMO is required to use a Standing STEM Submission to make a STEM Submission for a Trading Day under clause 6.3B.1A, but the Standing STEM Submission does not comply with section 6.6, then AEMO must, using the process specified in clause 6.3B.2, adjust the Standing STEM Submission to make it a valid STEM Submission with respect to each Trading Interval in the Trading Day.

Explanatory Note

New clause 6.3B.1C requires AEMO to review and adjust any previously accepted STEM Submissions that have become invalid following changes to relevant factors such as Outages, Commissioning Tests or Energy Price Limits.

6.3B.1C. Between 8:30 AM and 9:00 AM each Scheduling Day, AEMO must use the process specified in clause 6.3B.2 to review and where necessary adjust each

STEM Submission it holds for a Trading Interval in the STEM Submission Information Window.

Explanatory Note

New clause 6.3B.2 specifies the STEM Submission adjustment process used to ensure that the Price-Quantity Pairs in Portfolio Supply Curves and Portfolio Demand Curves comply with the requirements of section 6.6.

6.3B.2. [Blank]AEMO must use the following process to adjust a Standing STEM Submission to make a valid STEM Submission for a Trading Interval under clause 6.3B.1B and to review and adjust a STEM Submission for a Trading Interval under clause 6.3B.1C:

- (a) If the cumulative MWh quantity over all Price-Quantity Pairs in the Portfolio Supply Curve is greater than the Maximum Supply Capability for the Market Participant for the Trading Interval which was determined on the current Scheduling Day under clause 6.3A.3(e), the Price-Quantity Pairs must be adjusted downward so that the cumulative MWh quantity over all the Price-Quantity Pairs equals the Maximum Supply Capability. This must be achieved by deleting successively or reducing the highest price Price-Quantity Pairs until the cumulative MWh quantity over all remaining Price-Quantity Pairs equals the Maximum Supply Capability.
- (b) If the cumulative MWh quantity over all Price-Quantity Pairs in the Portfolio Demand Curve is greater than the Maximum Consumption Capability for the Market Participant for the Trading Interval which was determined on the current Scheduling Day under clause 6.3A.3(f), the Price-Quantity Pairs must be adjusted downward so that the cumulative MWh quantity over all the Price-Quantity Pairs equals the Maximum Consumption Capability. This must be achieved by deleting successively or reducing the highest price Price-Quantity Pairs until the cumulative MWh quantity over all remaining Price-Quantity Pairs equals the Maximum Consumption Capability.
- (c) If the price in any Price-Quantity Pair in the Portfolio Supply Curve or Portfolio Demand Curve is greater than the Alternative Maximum STEM Price which will apply (or which AEMO expects will apply) in the Trading Interval, the price in the Price-Quantity Pair must be replaced by the Alternative Maximum STEM Price which will apply (or which AEMO expects will apply) in the Trading Interval.
- (d) If the price in any Price-Quantity Pair in the Portfolio Supply Curve or Portfolio Demand Curve is less than the Minimum STEM Price which will apply (or which AEMO expects will apply) in the Trading Interval, the price in the Price-Quantity Pair must be replaced by the Minimum STEM Price which will apply (or which AEMO expects will apply) in the Trading Interval.
- (e) If the cumulative MWh quantity over all Price-Quantity Pairs in the Portfolio Supply Curve with prices which exceed the Maximum STEM Price which

will apply (or which AEMO expects will apply) in the Trading Interval (“liquid priced quantity”) is greater than the sum over all Registered Facilities declared in the Fuel Declaration to be operating on Liquid Fuel of the Maximum Facility Supply Capability determined for the Facility for the Trading Interval on the current Scheduling Day under clause 6.3A.3(d) (“allowed quantity”), the Price-Quantity Pairs must be adjusted so that the liquid priced quantity is less than or equal to the allowed quantity. This must be achieved by successively replacing the price of the Price-Quantity Pair with the lowest price which exceeds the Maximum STEM Price with the Maximum STEM Price, until the liquid priced quantity is less than or equal to the allowed quantity.

(f) If multiple Price-Quantity Pairs in the Portfolio Supply Curve share the same price, they must be replaced with a single Price-Quantity Pair for that price with a MWh quantity equal to the sum of the MWh quantities in the Price-Quantity Pairs which are being replaced.

(g) If multiple Price-Quantity Pairs in the Portfolio Demand Curve share the same price, they must be replaced with a single Price-Quantity Pair for that price with a MWh quantity equal to the sum of the MWh quantities in the Price-Quantity Pairs which are being replaced.

To avoid doubt, the process steps specified in this clause 6.3B.2 must be performed in the order listed, and a reference to a Portfolio Supply Curve or Portfolio Demand Curve in those clauses is a reference to the Portfolio Supply Curve or Portfolio Demand Curve as adjusted by any earlier steps in the process.

6.3B.3. Where AEMO receives STEM Submission data from a Market Participant under clause 6.3B.1, AEMO must, as soon as practicable after receiving the STEM submission data:

- (a) if the STEM Submission data complies with section 6.6, make the STEM Submission data the STEM Submission for that Trading Day; and
- (b) notify the Market Participant which submitted the STEM Submission data under clause 6.3B.1, that:
 - i. the STEM Submission data has been made the STEM Submission for that Trading Day; or
 - ii. AEMO has rejected the STEM Submission data as it did not comply with section 6.6.

Explanatory Note

Clause 6.3B.4 is amended to:

- reflect the above restoration of the current Standing STEM Submission arrangements;
- clarify that the STEM Submission details provided by AEMO will incorporate any adjustments it has made under clauses 6.3B.1B or 6.3B.1C;

- require the details to be provided for each Trading Interval in the STEM Submission Results Window, instead of each Trading Interval in the Week-Ahead Schedule Horizon; and
- update the list of events that will trigger an update of the STEM Submission details.

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~~ full details of the Market Participant's STEM Submissions, as adjusted under clauses 6.3B.1B and 6.3B.1C, for each Trading Interval in the STEM Submission Results Window. AEMO must update this information whenever AEMO:

- (a) ~~AEMO accepts STEM Submission data under clause 6.3B.3(a); makes a STEM Submission from a Standing STEM Submission under clause 6.3B.1A;~~
- (b) ~~AEMO accepts Standing STEM Submission data under clause 6.3C.3(a); accepts STEM Submission data under clause 6.3B.3(a);~~
- (c) ~~AEMO removes cancelled STEM Submission data under clause 6.3B.7B(a); or adjusts STEM Submission data under clause 6.3B.1C; or~~
- (d) ~~AEMO removes cancelled Standing STEM Submission data under clause 6.3C.6C(a); disregards cancelled STEM Submission data under clause 6.3B.6(a).~~

Explanatory Note

Clause 6.3B.5 is amended to reflect the changes to the window for STEM Submissions.

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~~ held by AEMO for a Trading Interval in a Trading Day during the time interval specified for the Trading Day in clause 6.3B.1.

Explanatory Note

Clause 6.3B.6 is amended to correct a clause reference.

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~~ 6.3B.5, that the cancelled STEM Submission data has been disregarded from the STEM Submission,

for the Trading Interval of the Trading Day to which the cancelled Standing STEM Submission data relates.

6.3C. Standing STEM Submission Timetable and Process

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

6.3C.2. [Blank]

6.3C.3. AEMO must, as soon as practicable after receiving Standing STEM Submission data under clause 6.3C.1:

- (a) accept the Standing STEM Submission data provided it complies with section 6.6 and revise the Standing STEM Submission to reflect the Standing STEM Submission data; and
- (b) notify the Market Participant which submitted the Standing STEM Submission data under clause 6.3C.1 that:
 - i. AEMO accepts the Standing STEM Submission data and has revised the Standing STEM Submission to reflect the Standing STEM Submission data; or
 - ii. AEMO rejects the Standing STEM Submission data as it does not comply with section 6.6.

Explanatory Note

Clause 6.3C.4 is amended to reflect the above restoration of the current arrangements for the use of Standing STEM Submissions to make STEM Submissions.

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(e)~~ next time that AEMO is required to use Standing STEM Submissions to make STEM Submissions under clause 6.3B.1A.

6.3C.5. [Blank]

6.3C.6. [Blank]

6.3C.6A. Standing STEM Submission data must be associated with a day of the week and when used as STEM Submission data will only apply to Trading Days commencing on that day of the week.

6.3C.6B. A Market Participant may cancel Standing STEM Submission data accepted by AEMO under clause 6.3C.3(a) for any Trading Interval of a day of the week at any time.

6.3C.6C. Where any Standing STEM Submission data is cancelled under clause 6.3C.6B, AEMO must, as soon as practicable:

- (a) remove the cancelled Standing STEM Submission data from the Standing STEM Submission; and
- (b) notify the Market Participant which cancelled the Standing STEM Submission data under clause 6.3C.6B, that the cancelled Standing STEM Submission data has been removed from the Standing STEM Submission, for the Trading Interval of the day of the week to which the cancelled Standing STEM Submission data relates.

6.3C.7. [Blank]

6.3C.8. [Blank]

6.3C.9. If a Market Participant's ability to consume or supply energy in any Trading Interval of a Trading Day is less than the maximum level of its STEM supply or consumption as indicated by its current Standing STEM Submission then that Market Participant must either:

- (a) submit to AEMO Standing STEM Submission data so as to revise its Standing STEM Submission to comply with this clause 6.3C.9; or
- (b) for each Trading Interval for which the current Standing STEM Submission over-states the Market Participant's supply or consumption capabilities, submit STEM Submission data that complies with section 6.6 to AEMO.

6.4. The STEM Auction Timetable and Process

6.4.1. AEMO must undertake the process described in section 6.9 and determine the STEM Auction results for a Trading Day after the STEM Submission Cutoff, and before the STEM Results Deadline.

6.4.2. AEMO must determine the total quantity of energy scheduled to be supplied under Bilateral Contracts and in the STEM Auction, by each Market Participant, for each Trading Interval of a Trading Day by the STEM Results Deadline.

6.4.3. AEMO must make available to each Market Participant the following information in relation to a Trading Day by the STEM Results Deadline:

- (a) the Trading Intervals, if any, in which the STEM Auction was suspended;
- (b) the STEM Clearing Price in all Trading Intervals for which the STEM Auction was not suspended;
- (c) the quantities scheduled in respect of that Market Participant in the STEM Auction for each Trading Interval; and
- (d) the Net Contract Position of the Market Participant in each Trading Interval, as determined in accordance with clause 6.9.13.

6.4.4. [Blank]

6.4.5. [Blank]

Explanatory Note

Clause 6.4.6 is amended to:

- update the list of information preparation clauses;
- reflect that timelines other than the Bilateral Submission Cutoff, STEM Submission Cutoff and STEM Results deadline may need to be extended; and
- refine the list of requirements that an extension must meet.

The clause has been updated from the version published in Exposure Draft 1 to account for the change to the deadline for provision of final Electric Storage Resource Obligation Intervals for a Trading Day.

- 6.4.6. In the event of a failure of AEMO's software systems or supporting infrastructure, or any delay in AEMO publishing a Pre-Dispatch Schedule which includes all Trading Intervals in the relevant Trading Day, or AEMO preparing information under clauses 6.2.3, 6.3.1, 6.3A.1, 6.3A.2, 6.3A.2A, 6.3A.3, 6.3A.5 or clause 6.3A.3 6.3B.4, 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~~ timelines prescribed in sections 6.2, 6.3, 6.3A, 6.3B and this section 6.4, subject to any such extension:
- (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~~ the timelines prescribed in sections 6.2, 6.3, 6.3A, 6.3B and this section 6.4; and
 - (b) ~~maintaining a window of at least 120 minutes between AEMO making available the data referred to in clause 6.3A.2 and the Bilateral Submission Cutoff;~~
 - (c) ~~maintaining a window of at least 50 minutes between AEMO making available the data referred to in clause 6.3A.2A and the Bilateral Submission Cutoff;~~
 - (d) ~~maintaining a window of at least 20 minutes between AEMO making available the data referred to in clause 6.3A.5 and the Bilateral Submission Cutoff; and~~
 - (~~be~~) ~~any such extension maintaining a window of at least 110 minutes between each of the following events and the STEM Submission Cutoff:~~
 - 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 6.2.3 as at the Bilateral Submission Cutoff and the STEM Submission Cutoff; and~~

- iii. AEMO making available the data referred to in clauses 6.3A.2A and 6.3A.5.

Explanatory Note

Clause 6.4.6A is amended to:

- update the list of clauses under which information is made available;
- reflect that timelines other than the Bilateral Submission Cutoff, STEM Submission Cutoff and STEM Results deadline may need to be extended; and
- refine the list of requirements that an extension must meet.

The clause has been updated from the version published in Exposure Draft 1 to account for the change to the deadline for provision of final Electric Storage Resource Obligation Intervals for a Trading Day.

- 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 clauses 6.2.3, 6.3A.1, 6.3A.2, 6.3A.2A, 6.3A.5 or clause 6.3A.3 6.3B.4 at any time before the publication of the relevant STEM Auction results under clause 6.4.3 or a suspension of the STEM under clause 6.10.1, AEMO may:
- (a) publish or release (as applicable) corrected or updated versions of the information it has published or released under clauses 6.2.3, 6.3A.1, 6.3A.3, 6.3A.4 or 6.3A.5 6.3A.2, 6.3A.2A, 6.3A.5 or 6.3B.4; and
 - (b) extend any of the ~~Bilateral Submission Cutoff, the STEM Submission Cutoff or the STEM Results Deadline~~ relevant timelines prescribed in sections 6.2, 6.3, 6.3A, 6.3B and this section 6.4 to address the error, subject to any such extension:
 - i. ~~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~~ timelines prescribed in sections 6.2, 6.3, 6.3A, 6.3B and this section 6.4; and
 - ii. ~~maintaining a window of at least 120 minutes between AEMO making available the data referred to in clause 6.3A.2 and the Bilateral Submission Cutoff;~~
 - iii. ~~maintaining a window of at least 50 minutes between AEMO making available the data referred to in clause 6.3A.2A and the Bilateral Submission Cutoff;~~
 - iv. ~~maintaining a window of at least 20 minutes between AEMO making available the data referred to in clause 6.3A.5 and the Bilateral Submission Cutoff; and~~
 - iiy. ~~any such extension maintaining at least a 110 minute window a~~ window of at least 110 minutes between each of the following events and the STEM Submission Cutoff:

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~~ 6.2.3 as at the Bilateral Submission Cutoff ~~and the STEM Submission Cutoff;~~ and~~
3. AEMO making available the data referred to in clauses 6.3A.2A and 6.3A.5.

Explanatory Note

Clauses 6.4.6B and 6.4.6C are amended to reflect that timelines other than the Bilateral Submission Cutoff, STEM Submission Cutoff and STEM Results Deadline may need to be extended.

- 6.4.6B. If AEMO extends one or more of the ~~Bilateral Submission Cutoff, the STEM Submission Cutoff or the STEM Results Deadline~~ timelines in sections 6.2, 6.3, 6.3A, 6.3B and this section 6.4 under clauses 6.4.6 or 6.4.6A or publishes or releases corrected information under clause 6.4.6A(a), AEMO must notify Rule Participants of any extension and any amended timelines and any corrected information as soon as possible.
- 6.4.6C. If AEMO considers that extending one or more of the ~~Bilateral Submission Cutoff, the STEM Submission Cutoff or the STEM Results Deadline~~ timelines in sections 6.2, 6.3, 6.3A, 6.3B and this section 6.4 under clauses 6.4.6 or 6.4.6A would not provide enough time to allow AEMO to undertake the process described in section 6.9 and publish a valid STEM auction result under clauses 6.4.3(b), 6.4.3(c) and 6.4.3(d) by ~~1.30pm~~ 1.30 PM on the relevant Scheduling Day, AEMO must suspend the STEM auction under clause 6.10.1.
- 6.4.7. Once published under clause 6.4.3, STEM Clearing Prices cannot be altered, either through disagreement under clause 9.20.6, or through dispute under clause 9.21.

6.5. [Blank]

STEM Submission and Bilateral Submission Formats

6.6. Format of STEM Submission and Standing STEM Submission Data

Explanatory Note

Clause 6.6.1 is amended to:

- remove the concept of Participant Interval Minimum STEM Prices and Participant Interval Maximum STEM Prices; and
- remove the requirement to specify an effective date for Standing STEM Submissions.

6.6.1. A Market Participant submitting STEM Submission data or a Standing STEM Submission data must include the following information in the applicable submission:

- (a) the identity of the Market Participant making the submission;
- (b) for STEM Submission data, for each Trading Interval included in the submission:
 - i. a Fuel Declaration;
 - ii. a Portfolio Supply Curve; and
 - iii. a Portfolio Demand Curve; ~~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; and
 - 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.~~

Explanatory Note

Clause 6.6.1A is deleted to reflect the removal of Participant Interval Minimum STEM Prices and Participant Interval Maximum STEM Prices.

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.~~

6.6.2. [Blank]

Explanatory Note

Clause 6.6.2A(a) is amended to address a manifest error in the current WEM Rules regarding the treatment of Registered Facilities that can only operate on liquid fuel. Currently clause 6.6.2A(d)(iii)(1) effectively excludes liquid-only Facilities from the calculation of the maximum quantity that can be included in a Portfolio Supply Curve at prices above the Maximum STEM Price, because it only considers Facilities listed in the Fuel Declaration and the Fuel Declaration is restricted to dual-fuel Facilities.

To address this error, clause 6.6.2A(a) is amended to require the Market Participant to include all of its Facilities that are assumed to be operating on liquid fuel in its Fuel Declaration, including those that can only run on liquid fuel.

Clauses 6.6.2A(d) and 6.6.2A(e) are also amended, to use the defined terms Maximum Supply Capability, Maximum Facility Supply Capability and Maximum Consumption Capability.

6.6.2A For:

- (a) a Fuel Declaration the Market Participant must declare ~~for each of its dual fuel Facilities whether or not that Facility is~~ which of its Liquid Fuel capable Registered Facilities are assumed to be operating on Liquid Fuel ~~or Non-Liquid Fuel~~ in forming the Portfolio Supply Curve;
- (b) [Blank]
- (c) [Blank]
- (d) a Portfolio Supply Curve:
 - i. one or more Price-Quantity Pairs may be specified;
 - ii. the cumulative MWh quantity over all Price-Quantity Pairs must not exceed ~~the quantity calculated under clause 6.3A.3(e); the~~ Maximum Supply Capability determined 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~~

Maximum Facility Supply Capability determined under clause 6.3A.3(f) 6.3A.3(d);

(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)~~ Maximum Consumption Capability determined under clause 6.3A.3(f).

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.

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

Explanatory Note

Clause 6.6.5 is amended to:

- require prices in Portfolio Supply Curve Price-Quantity Pairs to be less than or equal to the Alternative Maximum STEM Price; and
- delete clause 6.6.5(b)(iiA), which is unnecessary given the requirements specified in clauses 6.6.2A(d)(iii) and 6.6.5(b)(iv).

6.6.5. For Price-Quantity Pairs in Portfolio Supply Curves:

(a) each Price-Quantity Pair must comprise one price and one quantity;

(b) each Price-Quantity Pair price must be:

i. in units of \$/MWh expressed to a precision of \$0.01/MWh;

ii. [Blank]

~~iiA. set such that:~~

~~1. the sum of the Price-Quantity Pair quantities from Price-Quantity Pairs in the Portfolio Supply Curve with prices exceeding the Maximum STEM Price must not exceed the cumulative MWh quantity that the Market Participant can offer at the Alternative Maximum STEM Price, as defined in clause 6.6.2A(d)(iii);~~

~~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;~~

iii. greater than or equal to the Minimum STEM Price;

iv. ~~[Blank]~~ less than or equal to the Alternative Maximum STEM Price; and

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

(c) each Price-Quantity Pair quantity must be

i. in units of MWh expressed to a precision of 0.001 MWh;

ii. Loss Factor adjusted; and

(d) a Price-Quantity Pair means that the Market Participant is prepared to sell a quantity of energy into the STEM for that Price-Quantity Pair equal to:

i. 0 MWh if the STEM Clearing Price is less than the Price-Quantity Pair price;

ii. the Price-Quantity Pair quantity if the STEM Clearing Price is greater than the Price-Quantity Pair price; and

iii. an amount between 0 MWh and the Price-Quantity Pair quantity if the STEM Clearing Price equals the Price-Quantity Pair price.

6.6.6. [Blank]

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

Explanatory Note

Clause 6.6.8 is amended to remove the concept of Participant Interval Minimum STEM Prices and Participant Interval Maximum STEM Prices.

6.6.8. For Price-Quantity Pairs in Portfolio Demand Curves:

(a) each Price-Quantity Pair price must be:

i. in units of \$/MWh expressed to a precision of \$0.01/MWh;

ii. less than or equal to the ~~Participant Interval~~ Alternative 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;

(b) each Price-Quantity Pair quantity must be

i. in units of MWh expressed to a precision of 0.001 MWh;

ii. Loss Factor adjusted; and

(c) a Price-Quantity Pair means that the Market Participant is prepared to buy a quantity of energy from the STEM for that Price-Quantity Pair equal to:

i. 0 MWh if the STEM Clearing Price is greater than the Price-Quantity Pair price;

- ii. the Price-Quantity Pair quantity if the STEM Clearing Price is less than the Price-Quantity Pair price; and
- iii. an amount between 0 MWh and the Price-Quantity Pair quantity if the STEM Clearing Price equals the Price-Quantity Pair price.

6.6.9. A Market Participant may apply to AEMO for all or part of the capacity of one of its Scheduled Facilities 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.

6.6.10. AEMO must assess an application made under clause 6.6.9 and inform the Market Participant whether or not the application is approved. AEMO must approve the application only where the Market Participant provides evidence satisfactory to AEMO that:

- (a) the Market Participant has an arrangement with a user of fuel (“**Fuel User**”) to release a quantity of fuel for use in a Scheduled Facility which is not Liquid Fuel capable and is registered by the Market Participant;
- (b) the use of fuel released under the arrangement would result in the Fuel User using Liquid Fuel in a Facility or other equipment; and
- (c) as a consequence of clause 6.6.10(a) and (b), the short run marginal cost of generating electricity using the Scheduled Facility using fuel released under the arrangement would be above the Maximum STEM Price.

6.6.11. Where AEMO approves an application under clause 6.6.9, AEMO must:

- (a) notify the Market Participant that the application has been approved as soon as practicable; and
- (b) update the relevant Standing Data in accordance with clause 2.34.

6.6.12. When AEMO does not approve an application under clause 6.6.9, AEMO must notify the Market Participant as soon as practicable.

6.7. Format of Bilateral Submission Data

Explanatory Note

Clause 6.7.1 is amended to remove the requirement to specify an effective date in a Standing Bilateral Submission.

6.7.1. A Market Participant submitting Bilateral Submission data or Standing Bilateral Submission data must include in the submission:

- (a) the identity of the Market Participant making the submission;
- (b) in the case of:

- i. Bilateral Submission data, the Trading Day to which the submission relates; and
- ii. Standing Bilateral Submission data; the day of the week to which the submission relates, where data provided for a day of the week relates to the Trading Day commencing on that day; and

~~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 s 6.7.1(c)(i) and ~~clause 6.7.1(c)(iii)~~ must be zero.

6.7.2. All quantities specified in a Bilateral Submission or a Standing Bilateral Submission:

- (a) must be in units of MWh;
- (b) must equal or exceed 0 MWh for net supply (that is, sold) by the relevant Market Participant;
- (c) must be less than 0 MWh for net consumption (that is, purchased) from the relevant Market Participant;
- (d) must be expressed to a precision of 0.001 MWh; and
- (e) must be Loss Factor adjusted.

6.7.3. A Market Participant must not specify quantities in a Bilateral Submission or a Standing Bilateral Submission which exceed the quantity of energy that the Market Participant is contracted to supply to the relevant Market Participant.

6.7.4. A Market Participant must not significantly over-state its consumption as indicated by its Net Contract Position with a regularity that cannot be explained by a reasonable allowance for forecast uncertainty or the impact of Loss Factors.

6.8. [Blank]

The STEM Auction Process

6.9. The STEM Auction

6.9.1. AEMO must undertake the process described in this clause 6.9 for each Trading Interval in a Trading Day.

...

6.10. Suspension of the STEM

Explanatory Note

Clause 6.10.1 is amended to use standard section and clause reference terminology.

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

6.10.2. In the event that the STEM auction for a Trading Interval is suspended under clause 6.10.1, no Market Participant can purchase energy from or sell energy to AEMO through the STEM for that Trading Interval and no STEM Clearing Price is to be declared for that Trading Interval.

6.10.3. No compensation is due or payable to any Market Participant in the event that the STEM auction for a Trading Interval is suspended under clause 6.10.1.

Explanatory Note

Section 6.12 (The Non-Balancing Dispatch Merit Order) has been deleted by the Tranches 2 and 3 Amendments (Schedule C). Consequently:

- the heading that was above section 6.12 is deleted; and
- section 6.12 is reinserted as “[Blank]” to maintain the section number sequence.

6.11. [Blank]

~~The Non-Balancing Dispatch Merit Order~~

~~6.12. [Blank]~~

6.13. [Blank]

...

6.20. Energy Price Limits

...

Explanatory Note

The requirement for AEMO to publish the Maximum STEM Price and Alternative Maximum STEM Price is relocated from clause 10.5.1(e) to new clause 6.20.10A as below.

6.20.10. The Economic Regulation Authority must consider in-time submissions on the draft report described in clause 6.20.9, and any in-time submissions received under clause 6.20.9A, and may consider any late submissions, and after considering the submissions must propose a final revised value for one or both of the Maximum STEM Price and Alternative Maximum STEM Price.

6.20.10A. Within five days of the ERA proposing a final revised value for one or both of the Maximum STEM Price and Alternative Maximum STEM Price in accordance with 6.20.10, AEMO must publish on the WEM Website the:

(a) proposed revised value for one or both of the Maximum STEM Price and Alternative Maximum STEM Price; and

(b) any rules that could cause different values to apply at different times.

...

Explanatory Note

Clauses 6.20.14, 6.20.16, 6.20.17, 6.20.18, 6.20.19 and 6.20.25 are amended to reflect the implementation of the Real-Time Market and the new registration and Essential System Services terminology.

6.20.14. In determining whether the Minimum STEM Price is appropriate under clause 6.20.13(a), subject to clause 1.35.2, the Economic Regulation Authority must consider without limitation, if since the last annual review of the Minimum STEM Price under clause 6.20.13:

- (a) the ~~Balancing Market~~ Real-Time Market for energy has settled at the Minimum STEM Price in one or more Trading Intervals because, in the Economic Regulation Authority's reasonable opinion, the Minimum STEM Price was too high;
- (b) AEMO dispatched a Facility below the sum of all quantities priced at the Minimum STEM Price in the ~~relevant Forecast Balancing Merit Order, for reasons other than Downwards Out of Merit dispatch and dispatch of LFAS or other Ancillary Services or Dispatch Support Services,~~ Facility's Real-Time Market Offer for energy in the Dispatch Interval, for reasons other than Outages, binding Network Constraints and the dispatch of Essential System Services, because, in the Economic Regulation Authority's reasonable opinion, the Minimum STEM Price was too high;
- (c) there has been a change in the generation fleet in the SWIS that, in the Economic Regulation Authority's reasonable opinion, is likely to result in:

...

- 6.20.16. The Minimum STEM Price must:
- (a) allow clearance of the ~~Balancing Market Real-Time Market for energy~~ without the ~~Balancing Price Reference Trading Price~~ being equal to the Minimum STEM Price in most circumstances; and
 - (b) subject to clause 6.20.16(a), limit Market Participants' exposure to ~~Balancing Prices Reference Trading Prices~~ that would threaten the financial viability of a prudent Market Participant.
- 6.20.17. When revising the value of the Minimum STEM Price in accordance with clause 6.20.13(b), the Economic Regulation Authority must:
- (a) determine for credible scenarios of low demand, the price at which the operator of the Facility with the highest cycling costs per MW in the scenario would, acting reasonably, decommit the Facility should the ~~Balancing Price Reference Trading Price~~ equal or fall below that price for a single Trading Interval; and
 - (b) revise the Minimum STEM Price to be the highest price determined under those scenarios that is lower than 95 percent of all of the prices determined under clause 6.20.17(a).
- 6.20.18. When determining the credible scenarios of low demand for the purpose of clause 6.20.17(a), the Economic Regulation Authority may use historic scenarios but must also account for any changes expected to the SWIS that would come into effect prior to the time that the Minimum STEM Price would apply and that are likely to have an effect on the ~~Balancing Price Reference Trading Price~~. The changes include, but are not limited to:
- (a) expected changes in system demand;
 - (b) any expected entrance of a new Facility that will participate in the ~~Balancing Market Real-Time Market~~;
 - (c) expected changes to an existing Facility; and
 - (d) any expected permanent exit of a Facility from the ~~Balancing Market Real-Time Market~~.
- 6.20.19. When determining the cycling costs of a Facility under clause 6.20.17(a), the Economic Regulation Authority must consider:
- (a) the factors that a ~~Market Generator~~ Market Participant acting reasonably would consider in making a decommitment decision for the Facility with the highest cycling cost in the SWIS, assuming that all energy sent out by the Facility is settled at the ~~Balancing Price Reference Trading Price~~:
 - i. the cost to decommit and recommit within the timeframe specified under clause 6.20.19(a)(iii), including start-related fuel and variable operating and maintenance costs of the Facility;
 - ii. the minimum stable level of operation of the Facility;

- iii. the minimum time the Facility must remain out of service once decommitted before recommitment is possible;
 - iv. any expected losses or gains, opportunity costs and cost savings that the ~~Market Generator~~ Market Participant would incur as a result of decommitment for the duration of the minimum time the Facility must remain out of service; and
- (b) any other matters that the Economic Regulation Authority deems relevant.

...

6.20.25. Where a Market Participant provides the Economic Regulation Authority with satisfactory evidence under clause 6.20.24, the Economic Regulation Authority must consider the information when determining the revised Minimum STEM Price as far as the information affects the Economic Regulation Authority's reasonable estimate of any costs that a prudent ~~Market Generator~~ Market Participant would incur when decommitting its Facility in the scenarios under clause 6.20.17(a).

...

Explanatory Note

The requirement for AEMO to publish the Minimum STEM Price is relocated from clause 10.5.1(e)(iv) to new clause 6.20.31 as below.

6.20.30. A revised value for the Minimum STEM Price replaces the previous value after the Economic Regulation Authority has published its final report in accordance with clause 6.20.29, with effect from the time specified in final report.

6.20.31. Within five Business Days of the Economic Regulation Authority publishing a report with the revised value for the Minimum STEM Price on its website, AEMO must publish on the WEM Website:

- (a) the Minimum STEM Price; and
- (b) any rules that could cause a different value to apply at different times.

...

Explanatory Note

The requirement for AEMO to publish STEM related data has been relocated from clauses 10.5.1(i) and 10.5.1(w) to new clause 6.22.1 in new section 6.22.

6.22. STEM Data

6.22.1. AEMO must publish the following STEM summary information:

- (a) for each Trading Interval in each completed Trading Day in the previous 12 calendar months:
 - i. the total STEM Offer quantity;

- ii. the total STEM Bid quantity;
- iii. whether the STEM was suspended in relation to the relevant Trading Interval;
- iv. where the STEM was not suspended, the STEM quantity purchased by AEMO; and
- v. where the STEM was not suspended, the STEM Clearing Price;
- (b) for each Trading Interval in each Trading Day during the 12 calendar months, before the end of the seventh day from the start of the Trading Day:
 - i. the STEM Offers by Market Participant;
 - ii. the STEM Bids by Market Participant;
 - iii. the quantity bought or sold in the STEM by Market Participant; and
 - iv. the Fuel Declaration made by Market Participant; and
- (c) the STEM Price for each Trading Interval of the current Trading Month for which STEM auction results have been released to Market Participants.

Explanatory Note

The key changes proposed to the Real-Time Market arrangements in Chapter 7 include:

- changes to the rules around the provision and use of Injection and Withdrawal forecasts for Semi-Scheduled Facilities and Non-Scheduled Facilities;
- changes to the obligations to provide Real-Time Market Submissions for Non-Scheduled Facilities;
- clarification of how AEMO uses Real-Time Market Submissions for Non-Scheduled Facilities in the Central Dispatch Process;
- changes to the submission and dispatch arrangements for Demand Side Programmes;
- clarification of the terminology, content requirements and processing rules for Real-Time Market Submissions; and
- changes to the publication requirements for dispatch-related information.

The changes are described in more detail in the relevant sections of Chapter 7.

7 Real-Time Market Operation and Dispatch

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.

Explanatory Note

Clause 7.1.3 is amended to extend the scope of the Real-Time Market Timetable to cover timelines for:

- DSP Withdrawal Profile Submissions; and
- the new DSP Week-Ahead Schedules and DSP Pre-Dispatch Schedules.

The timelines for the DSP Schedules are specified separately from the corresponding Market Schedules because they may not necessarily be generated at the same time.

7.1.3. The Real-Time Market Timetable must include:

- (a) timelines for:
- i. the submission of Real-Time Market Submissions and DSP Withdrawal Profile 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~~
ivA. the calculation and publication on the WEM Website of a DSP Pre-Dispatch Schedule at least once each Pre-Dispatch Interval;
 - v. the calculation and publication on the WEM Website of a Week-Ahead Schedule at least once each Trading Day; and
vA. the calculation and publication on the WEM Website of a DSP 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.

Explanatory Note

Clause 7.2.4(l) is amended to restore the term “Facility Performance Factors”, which was inadvertently changed to “Facility Performance Offsets” by the Tranche 5 Amendments (Schedule I, paragraph 44.2).

Clause 7.2.4(cA) and clause 7.2.4A have been included to ensure that the Unconstrained Injection Forecasts and Unconstrained Withdrawal Forecasts provided in Real-Time Market Submissions under section 7.4 are included in the Dispatch Algorithm, and to allow for alternative forecast quantities to be used where deemed necessary by AEMO.

- 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;
 - (cA) the Unconstrained Injection Forecasts and Unconstrained Withdrawal Forecasts specified in Real-Time Market Submissions, or any alternative forecast quantities determined by AEMO under clause 7.2.4A;
 - (d) dispatching sufficient energy to meet the Forecast 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;
- (iA) implementing the terms of NCESS Contracts as reflected in Constraint Equations formulated by AEMO under clause 5.7.3;
- (j) energy Injection and Withdrawal capabilities as they vary by Charge Level;
- (k) respecting Oscillation Control ~~Constraints~~ Constraint Equations;
- (l) accounting for all relevant Contingency Lower Offsets, Contingency Raise Offsets and Facility Performance ~~Offsets~~ 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.

7.2.4A. AEMO may determine and use as input to the Dispatch Algorithm alternative forecast quantities to the Unconstrained Injection Forecast and Unconstrained Withdrawal Forecast provided in a Real-Time Market Submission if AEMO reasonably considers that the alternative forecast quantities are likely to be more accurate.

Explanatory Note

Clause 7.2.5 is amended to correct clause numbering errors.

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-v.~~ sets out the form, scope and construction of each type of Constraint Equation;
- ~~v-vi.~~ describes and quantifies the mechanism by which different Constraints are taken into account and prioritised, including in accordance with clauses 3.12.2 and 7.6.25; and
- ~~vi-vii.~~ AEMO reasonably considers will enable a third party, such as the Market Auditor or the Economic Regulation Authority, to replicate the results of the Dispatch Algorithm by using the same inputs;

(b) the methodology it uses to determine:

- i. Contingency Raise Offsets;
- ii. Contingency Lower Offsets;
- iii. Facility Performance Factors;
- iv. the Minimum RoCoF Control Requirement;
- v. the Additional RoCoF Control Requirement;
- vi. the RoCoF Control Requirement; and
- vii. the RoCoF Upper Limit;

(c) the processes to be followed by AEMO and Market Participants in accounting for Inflexible Facilities; and

(d) any methodology for replacement of erroneous input data or substitution for missing input data.

7.2.6. AEMO may relax the Constraints referred to in clause 7.2.4 in order to resolve infeasible dispatch solutions provided that any relaxation of a Constraint:

- (a) achieves a feasible dispatch outcome;
- (b) meets AEMO's obligations to maintain Power System Security and Power System Reliability in accordance with the 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.

Explanatory Note

Clause 7.3.3 is deleted because the obligations for publishing Forecast Operational Demand and other dispatch quantities are covered under section 7.13.

- 7.3.3. ~~AEMO must publish a Forecast Operational Demand at the times specified in section 7.13.~~[Blank]
- 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.

Explanatory Note

An overview of the main changes affecting section 7.4 is provided below.

Changes to Real-Time Market Submission terminology and processing rules

Section 7.4 has been amended to clarify the definitions of "Real-Time Market Submission" and "Standing Real-Time Market Submission" and the general processing rules for these submissions. Under the proposed changes:

- A Real-Time Market Submission relates to a Registered Facility, Market Service and Dispatch Interval.
- A Market Participant may include multiple Real-Time Market Submissions in a single electronic submission. AEMO will either accept the electronic submission (and all the Real-

Time Market Submissions within it) or reject the electronic submission (and all the Real-Time Market Submissions within it).

- A Standing Real-Time Market Submission is a default Real-Time Market Submission for a Registered Facility and Market Service for Dispatch Intervals starting at specified times on Trading Days of a specified type.
- A Market Participant may include multiple Standing Real-Time Market Submissions in a single electronic submission, but must ensure that the Standing Real-Time Market Submissions in an electronic submission for a Registered Facility and Market Service, in combination, uniquely specify the default Real-Time Market Submission to apply for each Dispatch Interval in a generic Trading Week.
- At any point in time, the Real-Time Market Submission for a Registered Facility, Market Service and Dispatch Interval is the (variation) Real-Time Market Submission most recently accepted by AEMO under clause 7.4.49(a)(i), or, if no such submission exists, the most recently accepted applicable Standing Real-Time Market Submission.

Changes to the provision and use of Injection and Withdrawal forecasts for Semi-Scheduled Facilities and Non-Scheduled Facilities

Previously, a Market Participant was required to ensure that the sum of the quantities in the Price-Quantity Pairs for Injection in its Semi-Scheduled Facility Real-Time Market Submission was equal to the Market Participant's unconstrained Injection forecast for the Facility. While this arrangement provided an Injection forecast to AEMO, it could also restrict the level to which the Facility could be dispatched, because of the absence of Price-Quantity Pairs covering Injection levels above the Market Participant's forecast. Additionally, the arrangement did not support the provision of Withdrawal forecasts.

Under the proposed new arrangements, the quantities in the Price-Quantity Pairs for energy for a Semi-Scheduled Facility or Non-Scheduled Facility should sum to the maximum quantity that the Market Participant considers the Facility could Inject/Withdraw assuming it was not constrained by AEMO (including on price), i.e. assuming no shortage of any intermittent fuel such as wind. The Market Participant will also include an Unconstrained Injection Forecast and Unconstrained Withdrawal Forecast, defined as follows, in each Real-Time Market Submission:

- **Unconstrained Injection Forecast:** The expected MW level of Injection at the end of a Dispatch Interval for a Semi-Scheduled Facility or Non-Scheduled Facility, assuming that the Facility will not be subject to a Dispatch Instruction or direction from AEMO that limits its Injection, and allowing for expected conditions, commitment and control intentions and the effect of any Outages that have not been rejected for the Facility.
- **Unconstrained Withdrawal Forecast:** The expected MW level of Withdrawal at the end of a Dispatch Interval for a Semi-Scheduled Facility or Non-Scheduled Facility, assuming that the Facility will not be subject to a Dispatch Instruction or direction from AEMO that limits its Withdrawal, and allowing for expected conditions, commitment and control intentions and the effect of any Outages that have not been rejected for the Facility.

AEMO may use the Unconstrained Injection Forecasts and Unconstrained Withdrawal Forecasts provided in Real-Time Market Submissions as inputs to the Dispatch Algorithm, but may also use alternative forecasts if it reasonably considers they are likely to be more accurate.

Price-Quantity Pairs will continue to be used within the Dispatch Algorithm to determine Dispatch Caps for Semi-Scheduled Facilities. However, Semi-Scheduled Facilities will not be constrained where their Unconstrained Injection Forecasts or Unconstrained Withdrawal Forecasts are lower than the cleared Price-Quantity Pairs.

Changes to Real-Time Market Submission obligations for Non-Scheduled Facilities:

It is important for AEMO to have visibility of a Non-Scheduled Facility's intentions to support the production of forward-looking Market Schedules and provide overall transparency to the market. For this reason, Market Participants will be required to submit Real-Time Market Submissions for their Non-Scheduled Facilities.

The submission requirements for Non-Scheduled Facilities have been separated from the requirements for the Registered Facilities being actively dispatched by AEMO through the Dispatch

Algorithm (Scheduled Facilities, Semi-Scheduled Facilities and Interruptible Loads). The Market Participant must declare its intentions (either Injection or Withdrawal) by including a single Price-Quantity Pair at the price cap/floor. The Market Participant will also provide an Unconstrained Injection Forecast and Unconstrained Withdrawal Forecast for each Dispatch Interval.

These inputs will be used in the Dispatch Algorithm to account for the expected impact of Non-Scheduled Facilities, and will be included in the publication requirements to support transparency.

While Market Participants will be required to make Real-Time Market Submissions for Non-Scheduled Facilities, they will have a lower threshold for updating their submissions to reflect that they are not actively dispatched. The obligation to maintain accurate forecast quantities for a Non-Scheduled Facility will not attract civil penalties, and the requirement to update forecast quantities is reduced to when information supporting underlying expectations has significantly changed or the Market Participant is knowingly intervening in the operation of the Facility (e.g. has specific knowledge about Outages, commitment or control intentions of behind-the-meter components), as provided for under new clause 7.4.37A.

Relocation of provisions relating to Demand Side Programme submissions:

The provisions relating to DSP Withdrawal Profile Submissions and Standing DSP Withdrawal Profile Submissions have been moved from section 7.4 to a new section 7.4A.

7.4. Real-Time Market Submissions

Real-Time Market Submissions: ~~–~~ – Obligations and meaning

Explanatory Note

Clause 7.4.1 is amended to specify the Registered Facilities/Market Services for which Real-Time Market Submissions are required.

- 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;~~
- (a) ~~for energy, for each of its Scheduled Facilities, Semi-Scheduled Facilities and Non-Scheduled Facilities; and~~
 - (b) ~~for each Frequency Co-optimised Essential System Service, for each of its Registered Facilities that is accredited to provide that Frequency Co-optimised Essential System Service.~~

Explanatory Note

Clauses 7.4.1A, 7.4.1B and 7.4.1C describe how the Real-Time Market Submission for a Registered Facility, Market Service and Dispatch Interval is determined from any relevant submissions accepted by AEMO over time.

- 7.4.1A. If AEMO has not accepted a Real-Time Market Submission for a Registered Facility, Market Service and Dispatch Interval under clause 7.4.49(a)(i), but has accepted an applicable Standing Real-Time Market Submission, then the Standing Real-Time Market Submission is deemed to be the Real-Time Market Submission for the Registered Facility, Market Service and Dispatch Interval.

7.4.1B. A Real-Time Market Submission for a Registered Facility, Market Service and Dispatch Interval that AEMO accepts under clause 7.4.49(a)(i) replaces any previously accepted Real-Time Market Submission for, and has effect in relation to, the Registered Facility, Market Service and Dispatch Interval.

7.4.1C. If:

(a) AEMO has not yet accepted a Real-Time Market Submission for a Registered Facility, Market Service and Dispatch Interval under clause 7.4.49(a)(i); and

(b) AEMO accepts a Standing Real-Time Market Submission for the Registered Facility and Market Service that is applicable to the Dispatch Interval,

then the Standing Real-Time Market Submission replaces any previously accepted Standing Real-Time Market Submission as the deemed Real-Time Market Submission for the Registered Facility, Market Service and Dispatch Interval.

Explanatory Note

Clause 7.4.2 is amended to:

- correct a clause reference error;
- restrict the requirements to Scheduled Facilities, Semi-Scheduled Facilities and Interruptible Loads (Non-Scheduled Facilities are covered in clause 7.4.2B and Demand Side Programmes are covered in section 7.4A); and
- ensure that the requirements only apply to Dispatch Intervals within the Week-Ahead Schedule Horizon;
- clarify the requirements relating to Outages;
- include “control” in clause 7.4.2(b)(i) to cover the Market Participant’s intentions about how it will operate the components of its Registered Facility;
- account for the replacement of Unadjusted Semi-Scheduled Injection Forecasts with Unconstrained Injection Forecasts and Unconstrained Withdrawal Forecasts; and
- correct minor typographical errors.

7.4.2. Subject to clause ~~7.4.30~~ 7.4.37, 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 of its Scheduled Facilities, Semi-Scheduled Facilities and Interruptible Loads~~ 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)~~ (a) for Dispatch Intervals in the Week-Ahead Schedule Horizon:

i. the Market Participant’s reasonable expectation of the capability of its Registered Facility to be dispatched in the Real-Time Market;

- ~~ii.~~ any applicable tests required under these WEM Rules, including tests for Reserve Capacity under section 4.25;
 - ~~iii.~~ any ~~applicable~~ Outage Plans applicable to the Dispatch Interval that have not been rejected, withdrawn or subjected to an Outage Recall Direction that affects the Dispatch Interval; and
 - ~~iii.iv.~~ any applicable ~~active or pending~~ Forced Outages applying to the Dispatch Interval;
- ~~(e)(b)~~ for Dispatch Intervals in the Pre-Dispatch Schedule Horizon, all information reasonably available to the Market Participant, including:
- i. the Market Participant's intentions for commitment, control and decommitment;
 - ii. the Market Participant's intentions for providing Frequency ~~Co-Optimised~~ Co-optimised Essential System Services; and
 - iii. in the case of a Semi-Scheduled Facility, ~~if the Unadjusted Semi-Scheduled Injection Forecast has changed by more than~~ any changes to the Market Participant's Unconstrained Injection Forecast or Unconstrained Withdrawal Forecast that exceed the Tolerance Range or Facility Tolerance Range applicable to the Registered Semi-Scheduled 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)(c)~~ the prices at which the Market Participant intends the Registered Facility will participate in the Real-Time Market for:
- i. Injections;
 - ii. Withdrawals; and
 - iii. providing a Frequency Co-optimised Essential System Service for which the Registered Facility is accredited;
- as applicable.

Explanatory Note

Clause 7.4.2A is amended to correct a typographical error.

7.4.2A. In meeting the requirements of clause 7.4.2, a Market Participant must make reasonable endeavours to take into account information available in Market Schedules published by AEMO, including estimates of cleared energy and Essential System Service Enablement Quantities.

Explanatory Note

New clause 7.4.2B sets out the corresponding requirements for Non-Scheduled Facilities to the requirements specified for Scheduled Facilities, Semi-Scheduled Facilities and Interruptible Loads in clause 7.4.2. Unlike clause 7.4.2, clause 7.4.2B is not intended to be a civil penalty provision.

7.4.2B. Subject to clause 7.4.37A, a Market Participant must make Real-Time Market Submissions for each of its Non-Scheduled Facilities that reflect, for each Dispatch Interval in the Week-Ahead Schedule Horizon:

- (a) the Market Participant's reasonable expectation of the Injection and Withdrawal capability of the Non-Scheduled Facility, allowing for any known tests or Outages of the Non-Scheduled Facility;
- (b) the Market Participant's Unconstrained Injection Forecast for the Non-Scheduled Facility; and
- (c) the Market Participant's Unconstrained Withdrawal Forecast for the Non-Scheduled Facility.

7.4.3. 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.

Explanatory Note

Exposure Draft 1 proposed to amend clause 7.4.5 to address the following issues:

- When the Pre-Dispatch Schedule projects a shortfall in a Frequency Control Essential System Service (FCESS), clause 7.4.5(b) requires SESSM Award holders to update their Real-Time Market Submissions to offer all the available accredited capacity of their awarded Facilities as In-Service Capacity. This could result in more capacity being offered as In-Service Capacity than is necessary or desirable.
- The clause does not correctly account for a Facility that is not subject to any Outage in a Dispatch Interval, e.g. clause 7.4.5(a) would require the Market Participant to offer the maximum accredited quantity of the relevant FCESS instead of the contracted quantity in this situation.

Under the proposed amendments, a Market Participant holding a SESSM Award must:

- under normal conditions, offer (at least) the lower of their contracted quantity and available accredited capacity in the relevant FCESS, as either Available or In-Service Capacity (clause 7.4.5(a));
- if the Reference Scenario for a Pre-Dispatch Interval projects a shortfall in the FCESS, ensure that they are offering all their available accredited capacity in the FCESS, as either Available or In-Service Capacity (clause 7.4.5(b)); and
- if the Reference Scenario for a Pre-Dispatch Interval or Dispatch Interval projects that the relevant Facility will be enabled to provide the FCESS, ensure that they are offering the relevant Essential System Service Enablement Quantity as In-Service Capacity, as well as sufficient In-Service energy capacity to facilitate the FCESS enablement (clause 7.4.5(c)).

The available accredited capacity of the Facility in the relevant FCESS is determined as:

- the lowest Remaining Available Capacity for the FCESS under any applicable Outage for the Facility; or
- if there are no applicable Outages, the maximum accredited quantity of the Facility for the FCESS.

Further amendments to clause 7.4.5 are proposed to:

- use the correct defined term (SESSM Availability Quantity); and

- | |
|---|
| <ul style="list-style-type: none"> clarify which Real-Time Market Submissions are relevant in clause 7.4.5(b). |
|---|

7.4.5. For the purpose of a Real-Time Market Submission under clause 7.4.4, a Market Participant must:

- (a) for all Dispatch Intervals within the SESSM Service Timing and the Week-Ahead Schedule Horizon:
- i. offer a quantity of the relevant Frequency Co-optimised Essential System Service greater than or equal to the lower of:
 1. the sum of the relevant Base ESS Quantity and SESSM Availability Quantity; and
 2. the lowest Remaining Available Capacity for that Frequency Co-optimised Essential System Service under any Outage applying to the Registered Facility in the Dispatch Interval, or, if there are no applicable Outages, the relevant maximum accredited quantity of that Frequency Co-optimised Essential System Service for the Registered Facility,
~~in Price-Quantity Pairs 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 SESSM 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 ensure that the Real-Time Market Submissions for the Registered Facility and Frequency Co-optimised Essential System Service for that Pre-Dispatch Interval so that the Registered Facility is: are offering a quantity of the relevant Frequency Co-optimised Essential System Service greater than or equal to the lowest Remaining Available Capacity for that Frequency Co-optimised Essential System Service under any Outage applying to the Registered Facility in the Pre-Dispatch Interval, or, if there are no applicable Outages, the relevant maximum accredited quantity of the Frequency Co-optimised Essential System Service for the Registered Facility; and
- 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.~~

~~(c) where the Reference Scenario for a Pre-Dispatch Interval or Dispatch Interval projects that the Registered Facility will be enabled to provide an awarded Frequency Co-optimised Essential System Service, ensure that the Real-Time Market Submissions for the Registered Facility for that Pre-Dispatch Interval or Dispatch Interval:~~

~~i. present the relevant Essential System Service Enablement Quantity as In-Service Capacity; and~~

~~ii. offer sufficient capacity as In-Service Capacity for energy to allow the Registered Facility to be dispatched for energy between any relevant Enablement Limits.~~

Explanatory Note

Clause 7.4.6 is amended to correct minor typographical errors.

- 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~~ practicable 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.

Explanatory Note

The proposed changes to the provision of Injection and Withdrawal forecasts for Semi-Scheduled Facilities eliminates the need for clause 7.4.7.

- 7.4.7. ~~[Blank] 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.~~

Explanatory Note

Under the proposed changes, Real-Time Market Submissions for Non-Scheduled Facilities will contain a single Price-Quantity Pair that reflects the Market Participant's intentions for the Dispatch Interval. Clause 7.4.8 is replaced and clause 7.4.9 is removed accordingly.

~~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.~~

7.4.8. A Market Participant must ensure that each Real-Time Market Submission for energy for its Non-Scheduled Facility includes:

- (a) if the Market Participant intends the Non-Scheduled Facility to be Injecting at the end of the Dispatch Interval, a single Price-Quantity Pair with:
- i. a quantity equal to the intended maximum Injection MW level for the Dispatch Interval; and
- ii. a price equal to the Energy Offer Price Floor when converted into a Loss Factor Adjusted Price; and
- (b) otherwise, a single Price-Quantity Pair with:
- i. a quantity equal to the intended maximum Withdrawal MW level for the Dispatch Interval; and
- ii. a price equal to the Energy Offer Price Ceiling when converted into a Loss Factor Adjusted Price.

7.4.9. [Blank]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.~~

Explanatory Note

Clauses 7.4.10 and 7.4.11 are amended to use language that is more consistent with the language used in other related clauses.

- 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 with a non-zero MW quantity for the same Dispatch Interval.
- 7.4.11. Where a Registered Facility has been accredited in accordance with section 2.34A to provide Contingency Reserve Raise subject to a Maximum Contingency Reserve Block Size, the quantities in each Price-Quantity Pair in the Real-Time Market ~~Offers Submissions~~ for Contingency Reserve Raise ~~in a Real-Time Market Submission~~ for the Registered Facility must not exceed the applicable Maximum Contingency Reserve Block Size.

Explanatory Note

The submission requirements for Demand Side Programmes have been moved to new section 7.4A.

Real-Time Market Submissions for Demand Side Programmes

- 7.4.12. ~~[Blank] A Market Participant must submit a Standing Withdrawal Profile for each of its Demand Side Programmes.~~
- 7.4.13. ~~[Blank] 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. ~~[Blank] 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. ~~[Blank] 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. ~~[Blank] 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. ~~[Blank]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. ~~[Blank]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. ~~[Blank]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. ~~[Blank]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

Explanatory Note

Clauses 7.4.21 to 7.4.24 are amended to:

- simplify the drafting by making the specification of a Real-Time Market Acceptance Horizon mandatory; and
- clarify the submission timing limits in clause 7.4.21 (now moved to clause 7.4.23).

~~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.~~

7.4.21. AEMO must specify a Real-Time Market Acceptance Horizon in a WEM Procedure.

7.4.22. The Real-Time Market Acceptance Horizon must not be less than four weeks before the relevant Dispatch Interval.

7.4.23. Subject to clause 7.4.35, a Market Participant may submit a Real-Time Market Submission for a Dispatch Interval at any time:

(a) on or after the Real-Time Market Acceptance Horizon for the Dispatch Interval; and

(b) before the start of the Dispatch Interval.

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

Explanatory Note

The substantive content of clause 7.4.25 has been moved to clause 7.4.1B.

~~7.4.25. [Blank]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.~~

Explanatory Note

Clauses 7.4.26 to 7.4.28 are amended to clarify the requirements to provide reasons for late submissions and submissions containing deviations from Standing Data parameters. A Market Participant will be required to provide a reason with any Real-Time Market Submission that:

- is submitted for a Dispatch Interval in the Pre-Dispatch Schedule Horizon; or
- contains parameter values that deviate from the corresponding Standing Data values.

The ERA may request further information from the Market Participant about any of the reasons included in a Real-Time Market Submission under clauses 7.4.26 or 7.4.27.

- 7.4.26. ~~Where a subsequent Real-Time Market Submission is made under this section 7.4, a~~ Where a Market Participant makes a Real-Time Market Submission for a Registered Facility and Market Service for a Dispatch Interval in the Pre-Dispatch Schedule Horizon (including by submitting a new Standing Real-Time Market Submission for the Registered Facility and Market Service), the Market Participant must:
- (a) specify the reason for the revision in the subsequent Real-Time Market Submission, and
 - (b) ~~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: Real-Time Market Submission that meets the conditions specified in clauses 7.4.26 or 7.4.27, the Economic Regulation Authority may request the Market Participant to provide further information about the reasons provided under clauses 7.4.26(a) or 7.4.27(a) (as applicable), including any records created under clauses 7.4.26(b) or 7.4.27(b) (as applicable).~~
- (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.

Explanatory Note

Clause 7.4.35 is amended to:

- correct the reference to Gate Closure (which is a point in time relative to a Dispatch Interval);
- include the need to comply with clause 7.6.31(a) for an Inflexible Facility in the list of valid reasons for a submission after Gate Closure; and
- clarify which adjustments are applicable in each of the circumstances listed.

- 7.4.35. A Market Participant must not make a Real-Time Market Submission for a Dispatch Interval ~~within the~~ after Gate Closure for the Dispatch Interval, 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.~~
- (a) adjusting the Unconstrained Injection Forecast or Unconstrained Withdrawal Forecast for a Semi-Scheduled Facility or Non-Scheduled Facility;
 - (b) adjusting Available Capacity, In-Service Capacity and quantities in Price-Quantity Pairs for a Registered Facility that has suffered a Forced Outage, to reflect the Registered Facility's Remaining Available Capacity under that Forced Outage;
 - (c) adjusting the Dispatch Inflexibility Profile of a Scheduled Facility or Semi-Scheduled Facility to reflect a delay in starting the Facility; or
 - (d) complying with clause 7.6.31(a) in respect of a Registered Facility that has become Inflexible.

Explanatory Note

Clause 7.4.36, which specifies the Real-Time Market Submissions that AEMO should use for scheduling and dispatch, is amended to refer to the new clauses that explain how the "current" Real-Time Market Submission for a Registered Facility, Market Service and Dispatch Interval is determined.

- 7.4.36. AEMO must use the most recently ~~submitted~~ Real-Time Market Submissions (as determined in accordance with clauses 7.4.1A, 7.4.1B and 7.4.1C) in the scheduling and dispatch of Registered Facilities in accordance with this Chapter 7.

Explanatory Note

Clause 7.4.37 is amended to:

- restrict the application of the clause to Scheduled Facilities, Semi-Scheduled Facilities and Interruptible Loads;
- reflect that Real-Time Market Submissions may not need to be updated when reviewed;
- remove clause 7.4.37(b) because its intent is achieved by clause 7.4.37(a); and
- extend the list of exceptions in clause 7.4.37(c) (renumbered to clause 7.4.37(b)) to include compliance with clause 7.6.31(a) for a Facility that has become Inflexible.

7.4.37. A Market Participant, for a Scheduled Facility, Semi-Scheduled Facility or Interruptible Load:

- (a) is not only required to review, and if necessary update, Real-Time Market Submissions for Dispatch Intervals outside the Pre-Dispatch Schedule Horizon more frequently than once daily; once per day; and
- ~~(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~~
- ~~(e)~~(b) is not required to review and update Real-Time Market Submissions for Dispatch Intervals for which Gate Closure has passed, except for events referred to in clauses 7.4.35(b), 7.4.35(c) or 7.4.35(d).

Explanatory Note

Clause 7.4.37A sets out the less onerous obligations for Market Participants in relation to Non-Scheduled Facilities.

7.4.37A. A Market Participant is not required to review or revise a Real-Time Market Submission for a Non-Scheduled Facility except where the Market Participant:

- (a) is intending to take controlled action to vary the Injection or Withdrawal of the Non-Scheduled Facility; or
- (b) has revised the information used to develop the Real-Time Market Submission for the Non-Scheduled Facility,
- for a Dispatch Interval in the Pre-Dispatch Schedule Horizon, in which case the Market Participant must make reasonable endeavours to update the Real-Time Market Submission to reflect the revised information.

Real-Time Market Submissions – Format

Explanatory Note

Clause 7.4.38 is amended to clarify that the permitted combinations of Real-Time Market Submissions within an electronic submission are prescribed in the WEM Procedure.

- 7.4.38. AEMO must document in a WEM Procedure the format and methodology to be followed by Market Participants for making Real-Time Market Submissions, including the options to submit multiple Real-Time Market Submissions to AEMO in a single electronic submission, any relevant minimum tranche size for offers, the maximum allowable number of Price-Quantity Pairs for a Dispatch Interval and any specific requirements for Registered Facilities that offer Essential System Services and not energy.

Explanatory Note

Clause 7.4.39 is amended to:

- reflect that a Real-Time Market Submission is for a Registered Facility, Market Service and Dispatch Interval; and
- clarify the requirements relating to the provision of reasons.

- 7.4.39. A Real-Time Market Submission ~~for a Registered Facility~~ must specify:
- (a) the Registered Facility;
 - (b) ~~each the~~ Market Service;
 - (c) ~~each the~~ Dispatch Interval ~~covered by the Real-Time Market Submission~~;
 - (d) ~~if the Real-Time Market Submission is replacing an earlier Real-Time Market Submission: the reason for revision of the Real-Time Market Submission, if required under clause 7.4.26(a);~~
 - ~~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 reason for any difference between the values provided in the Real-Time Market Submission and the corresponding Standing Data values, if required under clause 7.4.27(a);
 - ~~(e)~~(f) the information specified in clauses 7.4.40 to 7.4.42 as applicable; and
 - ~~(f)~~(g) any other information specified in the WEM Procedure to be documented by AEMO under clause 7.4.38.

Explanatory Note

Clause 7.4.40 is amended to:

- use consistent terminology for a Real-Time Market Submission for energy;

- restructure clause 7.4.40(g) to distinguish the items that apply to each Price-Quantity Pair individually from the items that apply to the Price-Quantity Pairs as a group; and
- remove the requirements specified in clauses 7.4.40(g)(iv) and 7.4.40(g)(v), due to the high associated IT costs; and
- include the requirement to provide an Unconstrained Injection Forecast and Unconstrained Withdrawal Forecast for a Semi-Scheduled Facility or Non-Scheduled Facility.

7.4.40. A Real-Time Market Submission for ~~Injection or Withdrawal by a Registered Facility~~ energy must, in addition to the matters listed in clause 7.4.39, specify, as applicable:

- (a) the In-Service Capacity for Injection in MW;
- (b) the Available Capacity for Injection in MW;
- (c) the In-Service Capacity for Withdrawal in MW;
- (d) the Available Capacity for Withdrawal in MW;
- (e) the Maximum Upwards Ramp Rate in MW per minute;
- (f) the Maximum Downwards Ramp Rate in MW per minute;
- (g) up to the number of Price-Quantity Pairs specified in the WEM Procedure referred to in clause 7.4.38, where, ~~for each Price-Quantity Pair:~~
 - i. ~~the prices are to be stated in dollars and whole cents per MWh; for each Price-Quantity Pair:~~
 - 1. ~~the price is to be stated in dollars and whole cents per MWh;~~
 - 2. ~~the quantity is to be identified as either Available Capacity or In-Service Capacity; and~~
 - 3. ~~if the quantity is classified as Available Capacity, the Start Decision Cutoff for the quantity is to be provided in minutes;~~
 - ii. the sum of all positive MW quantities is to equal the total of Available Capacity and In-Service Capacity for Injection; and
 - iii. the sum of all negative MW quantities is to equal the total of Available Capacity and In-Service Capacity for Withdrawal;
 - 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;~~
 - 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;~~
 - vi. ~~the minimum time to synchronise the Available Capacity for Injection is provided in minutes; and~~
 - vii. ~~the minimum time to synchronise the Available Capacity for Withdrawal is provided in minutes; and~~

- (h) if the Registered Facility is Inflexible; and
- (i) for a Semi-Scheduled Facility or Non-Scheduled Facility:
 - i. the Unconstrained Injection Forecast; and
 - ii. the Unconstrained Withdrawal Forecast.

Explanatory Note

Clauses 7.4.41 and 7.4.42 are amended to clarify that Market Participants are not required to offer all of their accredited FCESS capacity in their Real-Time Market Submissions (except where an obligation exists under other clauses or the terms of a SESSM Award).

- 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 maximum~~ accredited capacity for Regulation or Contingency Reserve for that Dispatch Interval;
 - (b) the In-Service Capacity for the relevant Frequency Co-optimised Essential System Service;
 - (c) the Available Capacity for the relevant Frequency Co-optimised Essential System Service;
 - (d) the Enablement Minimum of the relevant Frequency Co-optimised Essential System Service;
 - (e) the Low Breakpoint of the relevant Frequency Co-optimised Essential System Service;
 - (f) the High Breakpoint of the relevant Frequency Co-optimised Essential System Service;
 - (g) the Enablement Maximum of the relevant Frequency Co-optimised Essential System Service; and
 - (h) a ranking of Price-Quantity Pairs with MW quantities summing to the ~~maximum available quantity of the Regulation or Contingency Reserve~~ total of Available Capacity and In-Service Capacity for the Frequency Co-optimised Essential System Service where the prices are to be stated in dollars and whole cents per MW per hour.
- 7.4.42. A Real-Time Market Submission for a Registered Facility to supply RoCoF Control Service must, in addition to the matters listed in clause 7.4.39, specify:
- (a) the total available quantity of RoCoF Control Service where this value is less than or equal to the ~~total maximum~~ accredited capacity for RoCoF Control Service for that Dispatch Interval;
 - (b) the Enablement Minimum of the RoCoF Control Service;
 - (c) the Low Breakpoint of the RoCoF Control Service;

- (d) the High Breakpoint of the RoCoF Control Service;
- (e) the Enablement Maximum of the RoCoF Control Service; and
- (f) a ranking of Price-Quantity Pairs with MWs quantities summing to the ~~maximum available quantity of~~ total of Available Capacity and In-Service Capacity for the RoCoF Control Service where the prices are to be stated in dollars and whole cents per MWs per hour.

Explanatory Note

Clause 7.4.43 is amended to clarify that Dispatch Inflexibility Profiles are included in Real-Time Market Submissions for energy.

- 7.4.43. A Market Participant may include a Dispatch Inflexibility Profile in a Real-Time Market Submission for energy for a Fast Start Facility in accordance with clause 7.4.44.
- 7.4.44. A Dispatch Inflexibility Profile for a Fast Start Facility must contain the following parameters to indicate its MW capacity and time related Inflexibilities at the time it is included in the Real-Time Market Submission:
- (a) the time, T1, in minutes, that the Registered Facility requires following the receipt of a Dispatch Instruction for the Registered Facility to start varying its level of Injection or Withdrawal from 0 MW in accordance with the Dispatch Instruction;
 - (b) the time, T2, in minutes, that the Registered Facility requires after T1 (as specified in clause 7.4.44(a)) to reach a specified minimum level of Injection or Withdrawal;
 - (c) the time, T3, in minutes, that the Registered Facility requires to be operated at or beyond its minimum level of Injection or Withdrawal before the Registered Facility can be safely and securely returned to Injection or Withdrawal of zero;
 - (d) the time, T4, in minutes, following the receipt of a Dispatch Instruction to return its Injection or Withdrawal from the minimum level specified in clause 7.4.44(b) to zero, that the Registered Facility requires to fully comply with the Dispatch Instruction; and
 - (e) the quantity, in MW, of Injection or Withdrawal that the Registered Facility must be operated at or beyond during the period in clause 7.4.44(c).
- 7.4.45. For a Fast Start Facility:
- (a) T1, T2, T3 and T4 must all be equal to or greater than zero;
 - (b) the sum of (T1 + T2) must be less than or equal to 30 minutes; and
 - (c) the sum of (T1 + T2 + T3 + T4) must be less than 60 minutes.

Real-Time Market Submissions – Construction

Explanatory Note

Clause 7.4.46 is amended to remove the reference to “sent out quantities” because the term is not applicable to Withdrawal and the measurement location for Injection and Withdrawal is covered in the definitions of these terms.

- 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.
- 7.4.46A. A Market Participant is not required to specify Price-Quantity Pairs for Withdrawals in its Real-Time Market Submission, where the Real-Time Market Submission is made in respect of a Registered Facility containing an Intermittent Load.
- 7.4.47. The prices in Price-Quantity Pairs in a Real-Time Market Submission:
- (a) apply at the 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

Explanatory Note

Clauses 7.4.48 and 7.4.49 are amended to:

- clarify the processing rules for electronic submissions containing Real-Time Market Submissions;
- remove the reference to clause 7.4.9 (which has been deleted); and
- remove the reference to clause 7.4.35, which relates to submissions made after Gate Closure, because AEMO is unable to assess whether a submission meets the exception criteria as part of the submission validation process.

- 7.4.48. On receipt of an electronic submission containing one or more Real-Time Market Submissions in accordance with this section 7.4, AEMO must as soon as practicable:
- (a) acknowledge receipt of the ~~Real-Time Market Submission~~ electronic submission to the submitting Market Participant; and
 - (b) ~~validate the Real-Time Market Submission by verifying that it complies~~ determine whether the Real-Time Market Submissions in the electronic submission comply with the following requirements, as applicable:

- i. the content requirements in clauses 7.4.10(a), 7.4.39, 7.4.40, 7.4.41, 7.4.42, 7.4.44, 7.4.45, 7.4.47(b) and 7.4.47(c);
- ii. the pricing requirements in 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~~ an electronic submission complies with the requirements in clause 7.4.48(b), AEMO must:
 - i. accept the Real-Time Market Submissions and notify the submitting Market Participant that ~~it has~~ the Real-Time Market Submissions have been accepted, and
 - ii. make available to the Market Participant the data contained in the Real-Time Market Submissions ~~as~~ it they will be used by AEMO in the Central Dispatch Process, including Loss Factor Adjusted Prices and non-Loss Factor Adjusted Prices; or
- (b) determines that the ~~Real-Time Market Submission~~ electronic 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~~ electronic submission and notify the submitting Market Participant that it has been rejected, and
 - ii. provide details of the reasons the ~~Real-Time Market Submission~~ electronic submission was rejected.

Real-Time Market Submissions: ~~-~~ Processing

7.4.50. AEMO must convert the prices in a Real-Time Market Submission for energy into Loss Factor Adjusted Prices, and must use those Loss Factor Adjusted Prices in the Dispatch Algorithm.

Explanatory Note

Clause 7.4.51 is amended to insert a missing word.

7.4.51. Where a Loss Factor Adjusted Price determined 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.~~

Explanatory Note

Clauses 7.4.54 to 7.4.56 set out the timing limits and content requirements for electronic submissions containing Standing Real-Time Market Submissions.

7.4.54. A Market Participant may submit Standing Real-Time Market Submissions for a Registered Facility and Market Service at any time before Gate Closure for the first Dispatch Interval to which the submissions apply.

7.4.55. The Standing Real-Time Market Submissions in an electronic submission to AEMO for a Registered Facility and Market Service must, in combination, uniquely specify the default Real-Time Market Submission to apply for each Dispatch Interval in a generic Trading Week.

7.4.56. An electronic submission containing Standing Real-Time Market Submissions must specify the first Dispatch Interval to which the submissions apply.

Explanatory Note

Clause 7.4.57 lists the options for specifying the type of Trading Day to which a Standing Real-Time Market Submission applies.

7.4.57. Subject to clause 7.4.55, a Market Participant may specify the type of Trading Day to which a Standing Real-Time Market Submission applies as:

- (a) all Trading Days starting on a specific day of the week;
- (b) all Trading Days starting on a weekday;
- (c) all Trading Days starting on a weekend;
- (d) all Trading Days starting on a Business Day;
- (e) all Trading Days starting on a non-Business Day; or
- (f) all Trading Days.

Explanatory Note

Clause 7.4.57A sets out the corresponding WEM Procedure requirements for Standing Real-Time Market Submissions to those set out in clause 7.4.38 for Real-Time Market Submissions.

7.4.57A. AEMO must document in a WEM Procedure the format and methodology to be followed by Market Participants for making Standing Real-Time Market Submissions, including the options to submit Standing Real-Time Market Submissions for multiple Registered Facilities and Market Services in a single electronic submission.

Explanatory Note

Clauses 7.4.58 and 7.4.59 are amended to:

- clarify the processing rules for electronic submissions containing Standing Real-Time Market Submissions; and

- make consequential changes to the list of validation requirements in clause 7.4.58(b).

7.4.58. On receipt of ~~a Standing Real-Time Market Submission~~ an electronic submission containing one or more Standing Real-Time Market Submissions, AEMO must, as soon as practicable:

- (a) acknowledge receipt of the Standing Real-Time Market Submission electronic submission to the submitting Market Participant; and
- (b) validate the Standing Real-Time Market Submission by verifying that it complies ~~determine whether the Standing Real-Time Market Submissions in the electronic submission comply 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.~~
 - i. the content requirements in clauses 7.4.55, 7.4.56 and 7.4.57;
 - ii. the timing requirement in clause 7.4.54; and
 - iii. for each Standing Real-Time Market Submission in the electronic submission, as applicable:
 - 1. the content requirements in clauses 7.4.10(a), 7.4.39, 7.4.40, 7.4.41, 7.4.42, 7.4.44, 7.4.45, 7.4.47(b) and 7.4.47(c);
 - 2. the pricing requirements in clause 7.4.8; and
 - 3. the quantity requirements in clause 7.4.11.

7.4.59. Where AEMO:

- (a) validates the Standing Real-Time Market Submission in accordance with determines that an electronic submission complies with the requirements in clause 7.4.58(b), AEMO must:
 - i. accept the Standing Real-Time Market Submissions and notify the submitting Market Participant that it has the Standing Real-Time Market Submissions have been accepted, and
 - ii. make available to the Market Participant the data contained in the Standing Real-Time Market Submissions as it will be used by AEMO in the Central Dispatch Process; or
- (b) determines that the Standing Real-Time Market Submission electronic 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 electronic 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 electronic submission~~ was rejected.

Explanatory Note

Clause 7.4.59A is the equivalent of clause 7.4.1B for Standing Real-Time Market Submissions.

7.4.59A. A Standing Real-Time Market Submission for a Registered Facility and Market Service that AEMO accepts under clause 7.4.59(a) replaces any previously accepted Standing Real-Time Market Submission for Dispatch Intervals from the Dispatch Interval specified in clause 7.4.56.

Explanatory Note

Clause 7.4.60 is amended to reflect that a Standing Real-Time Market Submission is for a single Market Service.

7.4.60. When AEMO uses a Standing Real-Time Market Submission for energy in the Dispatch Algorithm, AEMO must first convert the prices in ~~a the~~ Standing Real-Time Market Submission ~~for energy~~ into Loss Factor Adjusted Prices, and must use those Loss Factor Adjusted Prices in the Dispatch Algorithm.

Explanatory Note

Clause 7.4.61 is amended to correct a typographical error.

7.4.61. It is the responsibility of each Market Participant to check that the data contained in its Standing Real-Time Market Submissions as it will be used by AEMO in the Central Dispatch Process is correct.

Explanatory Note

Clause 7.4.62 has been placed under a new sub-section heading because the contents of the clause relate to Real-Time Market Submissions as well as Standing Real-Time Market Submissions.

Clause 7.4.62 is also amended to remove the requirement for AEMO to document the types of day that can be nominated in a Standing Real-Time Market Submission in a WEM Procedure, because this is now specified in clause 7.4.57.

Real-Time Market Submissions and Standing Real-Time Market Submissions – Process Documentation

~~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.~~

7.4.62. AEMO must document in a WEM Procedure the processes it must follow when:

- (a) acknowledging receipt of a Real-Time Market Submission under clause 7.4.48(a) or a Standing Real-Time Market Submission under clause 7.4.58(a);
- (b) validating a Real-Time Market Submission in accordance with clause 7.4.48(b) or a Standing Real-Time Market Submission in accordance with clause 7.4.58(b); and
- (c) accepting or rejecting a Real-Time Market Submission in accordance with clause 7.4.49 or a Standing Real-Time Market Submission in accordance with clause 7.4.59.

Explanatory Note

Feedback from AEMO's implementation program identified a number of issues with the proposal to include Demand Side Programmes in the Dispatch Algorithm, including:

- the potential for inaccurate identification of potential Demand Side Programme dispatch in the forward Market Schedules;
- issues with the proposed tie-breaking approach; and
- issues relating to the need to take into account the specific restrictions associated with the dispatch of Demand Side Programmes, e.g. notice periods, hours available for dispatch, maximum hours of dispatch per year, etc).

Due to these issues, Demand Side Programmes will not be dispatched using the Dispatch Algorithm. Instead, an alternative approach has been developed for the dispatch of these Facilities.

A key component of this approach is the requirement for Market Participants to provide DSP Withdrawal Profile Submissions that specify two forecast quantities for each Dispatch Interval:

- a DSP Unconstrained Withdrawal Quantity, which is the Market Participant's estimate of the average MW consumption of its Demand Side Programme in the Dispatch Interval assuming that the Demand Side Programme is not affected by any Dispatch Instruction or Reserve Capacity Test; and
- a DSP Constrained Withdrawal Quantity, which the DSP Unconstrained Withdrawal Quantity adjusted to take into account the impact of any impending dispatch or Reserve Capacity Tests about which the Market Participant has been advised.

The two values are expected to be identical for most Dispatch Intervals.

New section 7.4A sets out the obligations with respect to DSP Withdrawal Profile Submissions. The clauses below are structured similarly to the clauses in section 7.4 (Real-Time Market Submissions), but are included in a separate section to reflect that these obligations apply only to Demand Side Programmes.

7.4A. DSP Withdrawal Profile Submissions

7.4A.1. A Market Participant must ensure that it has made a DSP Withdrawal Profile Submission or Standing DSP Withdrawal Profile Submission in accordance with this section 7.4A for each Dispatch Interval in the Week-Ahead Schedule Horizon for each of its Demand Side Programmes.

7.4A.2. If AEMO has not accepted a DSP Withdrawal Profile Submission for a Demand Side Programme and Dispatch Interval under clause 7.4A.15(a), but has accepted an applicable Standing DSP Withdrawal Profile Submission, then the Standing DSP Withdrawal Profile Submission is deemed to be the DSP Withdrawal Profile Submission for the Demand Side Programme and Dispatch Interval.

7.4A.3. A DSP Withdrawal Profile Submission for a Demand Side Programme and Dispatch Interval that AEMO accepts under clause 7.4A.15(a) replaces any previously accepted DSP Withdrawal Profile Submission for, and has effect in relation to, the Demand Side Programme and Dispatch Interval.

7.4A.4. If:

(a) AEMO has not yet accepted a DSP Withdrawal Profile Submission for a Demand Side Programme and Dispatch Interval under clause 7.4A.15(a); and

(b) AEMO accepts a Standing DSP Withdrawal Profile Submission for the Demand Side Programme that is applicable to the Dispatch Interval,

then the Standing DSP Withdrawal Profile Submission replaces any previously accepted Standing DSP Withdrawal Profile Submission as the deemed DSP Withdrawal Profile Submission for the Demand Side Programme and Dispatch Interval.

Explanatory Note

Clauses 7.4A.5 to 7.4A.8 set out the requirements for a Market Participant to review and update the DSP Withdrawal Profile Submissions for its Demand Side Programme when AEMO:

- indicates that the Demand Side Programme may be dispatched over a specific period in a Market Advisory;
- issues a Dispatch Instruction to the Demand Side Programme to curtail its consumption;
- issues a Dispatch Instruction to the Demand Side Programme to end a period of curtailment; or
- issues a notification of a Reserve Capacity Test for the Demand Side Programme.

Clause 7.4A.9 requires the Market Participant, if it has been requested to revise its DSP Withdrawal Profile Submissions for a period, to make reasonable endeavours to ensure that the

DSP Unconstrained Withdrawal Quantities and DSP Constrained Withdrawal Quantities remain as accurate as possible for that period.

7.4A.5. If AEMO identifies a Demand Side Programme in a Market Advisory under clause 7.11.6(cA)(i), then the relevant Market Participant must:

- (a) as soon as practicable review, and if necessary update, the DSP Withdrawal Profile Submissions for the Demand Side Programme for each future Dispatch Interval before the end of the Trading Day in which the period specified under clause 7.11.6(cA)(ii) falls; and
- (b) for the purposes of determining DSP Constrained Withdrawal Quantities, assume the Demand Side Programme will be subject to Dispatch Instructions that curtail the Withdrawal of the Demand Side Programme by the maximum quantity consistent with its Reserve Capacity Obligations for the period specified under clause 7.11.6(cA)(ii).

7.4A.6. If AEMO issues a Dispatch Instruction with a non-zero MW quantity to a Demand Side Programme under clause 7.6.15, then the Market Participant must:

- (a) as soon as practicable and no later than one hour before the Dispatch Interval from which the Dispatch Instruction applies, review, and if necessary update, the DSP Withdrawal Profile Submissions for the Demand Side Programme for each future Dispatch Interval before the end of the Trading Day in which the Dispatch Interval specified under clause 7.6.11A(c) falls; and
- (b) for the purposes of determining the applicable DSP Constrained Withdrawal Quantities, take into account the timeframes and quantities in the Dispatch Instructions that have been issued to the Demand Side Programme and assume that AEMO will issue a Dispatch Instruction with a zero MW quantity that will apply from the Dispatch Interval specified under clause 7.6.11A(e).

7.4A.7. If AEMO issues a Dispatch Instruction with a zero MW quantity to a Demand Side Programme under clause 7.6.15, then the Market Participant must:

- (a) as soon as practicable and no later than one hour before the Dispatch Interval from which the Dispatch Instruction applies, review, and if necessary update, the DSP Withdrawal Profile Submissions for the Demand Side Programme for each future Dispatch Interval in the Trading Day in which the Dispatch Interval specified under clause 7.6.11A(c) falls; and
- (b) for the purposes of determining the applicable DSP Constrained Withdrawal Quantities, take into account the time from which the Dispatch Instruction will apply.

7.4A.8. If a Market Participant receives a notification relating to a Reserve Capacity Test of a Demand Side Programme under clause 4.25.9(h), the Market Participant must:

- (a) as soon as practicable and no later than one hour before the Reserve Capacity Test is due to commence, review and update the DSP Withdrawal Profile Submissions for the Demand Side Programme for each future Dispatch Interval in the Trading Day in which Reserve Capacity Test will be conducted; and
- (b) take the information provided in the notification under clause 4.25.9(h) into account in determining the relevant DSP Constrained Withdrawal Quantities.

7.4A.9. A Market Participant must make reasonable endeavours to ensure that when any of the conditions specified in clauses 7.4A.5, 7.4A.6, 7.4A.7 or 7.4A.8 apply, the DSP Unconstrained Withdrawal Quantities and DSP Constrained Withdrawal Quantities in its DSP Withdrawal Profile Submissions for the Demand Side Programme accurately reflect the Market Participant's reasonable expectation of the Withdrawal of the Demand Side Programme during the applicable Dispatch Intervals under the required assumptions.

DSP Withdrawal Profile Submissions – Timing

Explanatory Note

The timing restrictions for DSP Withdrawal Profile Submissions are similar to those applied to Real-Time Market Submissions.

7.4A.10. A Market Participant may submit a DSP Withdrawal Profile Submission for a Dispatch Interval at any time:

- (a) on or after the Real-Time Market Acceptance Horizon for the Dispatch Interval; and
- (b) before the start of the Dispatch Interval.

7.4A.11. AEMO must use the most recent DSP Withdrawal Profile Submission (as determined in accordance with clauses 7.4A.2, 7.4A.3 and 7.4A.4) in the scheduling and dispatch of Demand Side Programmes in accordance with this Chapter 7.

Explanatory Note

Clauses 7.4A.12 to 7.4A.15, which set out the format and validation requirements for DSP Withdrawal Profile Submissions, are consistent with the corresponding provisions for Real-Time Market Submissions.

DSP Withdrawal Profile Submissions – Format

7.4A.12. AEMO must document in a WEM Procedure the format and methodology to be followed by Market Participants for making DSP Withdrawal Profile Submissions, including the options to submit multiple DSP Withdrawal Profile Submissions to AEMO in a single electronic submission.

7.4A.13. A DSP Withdrawal Profile must specify:

- (a) the Demand Side Programme;
- (b) the Dispatch Interval;
- (c) a DSP Unconstrained Withdrawal Quantity;
- (d) a DSP Constrained Withdrawal Quantity; and
- (e) any other information specified in the WEM Procedure to be documented by AEMO under clause 7.4A.12.

DSP Withdrawal Profile Submissions – Validation

7.4A.14. On receipt of an electronic submission containing one or more DSP Withdrawal Profile Submissions in accordance with this section 7.4A, AEMO must as soon as practicable:

- (a) acknowledge receipt of the electronic submission to the submitting Market Participant; and
- (b) determine whether the DSP Withdrawal Profile Submissions in the electronic submission comply with the following requirements, as applicable:
 - i. the content requirements in clause 7.4A.13; and
 - ii. the timing requirements in clause 7.4A.10.

7.4A.15. Where AEMO:

- (a) determines that an electronic submission complies with the requirements in clause 7.4A.14(b), AEMO must accept the DSP Withdrawal Profile Submissions and notify the submitting Market Participant that the DSP Withdrawal Profile Submissions have been accepted, or
- (b) determines that the electronic submission, or any part of it, does not comply with the requirements referred to in clause 7.4A.14(b), AEMO must:
 - i. reject the electronic submission and notify the submitting Market Participant that it has been rejected, and
 - ii. provide details of the reasons the electronic submission was rejected.

Explanatory Note

The arrangements for Standing DSP Withdrawal Profile Submissions are the same as those used for Standing Real-Time Market Submissions, except that the deadline for the submissions is two hours before the first Dispatch Interval to which the submissions apply (instead of Gate Closure).

The process documentation requirements for DSP Withdrawal Profile Submissions and Standing DSP Withdrawal Profile Submissions are also similar to the requirements for Real-Time Market Submissions and Standing Real-Time Market Submissions.

DSP Withdrawal Profile Submissions – Standing Submissions

- 7.4A.16. A Market Participant may submit Standing DSP Withdrawal Profile Submissions for a Demand Side Programme at any time up to two hours before the first Dispatch Interval to which the submissions apply.
- 7.4A.17. The Standing DSP Withdrawal Profile Submissions in an electronic submission to AEMO for a Demand Side Programme must, in combination, uniquely specify the default DSP Withdrawal Profile Submission to apply for each Dispatch Interval in a generic Trading Week.
- 7.4A.18. An electronic submission containing Standing DSP Withdrawal Profile Submissions must specify the first Dispatch Interval to which the submissions apply.
- 7.4A.19. Subject to clause 7.4A.17, a Market Participant may specify the type of Trading Day to which a Standing DSP Withdrawal Profile Submission applies as:
- (a) all Trading Days starting on a specific day of the week;
 - (b) all Trading Days starting on a weekday;
 - (c) all Trading Days starting on a weekend;
 - (d) all Trading Days starting on a Business Day;
 - (e) all Trading Days starting on a non-Business Day; or
 - (f) all Trading Days.
- 7.4A.20. AEMO must document in a WEM Procedure the format and methodology to be followed by Market Participants for making Standing DSP Withdrawal Profile Submissions, including the options to submit Standing DSP Withdrawal Profile Submissions for multiple Demand Side Programmes in a single electronic submission.
- 7.4A.21. On receipt of an electronic submission containing one or more Standing DSP Withdrawal Profile Submissions, AEMO must, as soon as practicable:
- (a) acknowledge receipt of the electronic submission to the submitting Market Participant; and
 - (b) determine whether the Standing DSP Withdrawal Profile Submissions in the electronic submission comply with the following requirements:
 - i. the content requirements in clauses 7.4A.17, 7.4A.18 and 7.4A.19;
 - ii. the timing requirement in clause 7.4A.16; and

- iii. for each Standing DSP Withdrawal Profile Submission in the electronic submission, the content requirements in clause 7.4A.13.

7.4A.22. Where AEMO:

- (a) determines that an electronic submission complies with the requirements in clause 7.4A.21(b), AEMO must accept the Standing DSP Withdrawal Profile Submissions and notify the submitting Market Participant that the Standing DSP Withdrawal Profile Submissions have been accepted; or
- (b) determines that the electronic submission, or any part of it, does not comply with the requirements referred to in clause 7.4A.21(b), AEMO must:
 - i. reject the electronic submission and notify the submitting Market Participant that it has been rejected, and
 - ii. provide details of the reasons the electronic submission was rejected.

7.4A.23. A Standing DSP Withdrawal Profile Submission for a Demand Side Programme that AEMO accepts under clause 7.4A.22(a) replaces any previously accepted Standing DSP Withdrawal Profile Submission for Dispatch Intervals from the Dispatch Interval specified in clause 7.4A.18.

DSP Withdrawal Profile Submissions and Standing DSP Withdrawal Profile Submissions – Process Documentation

7.4A.24. AEMO must document in a WEM Procedure the processes it must follow when:

- (a) acknowledging receipt of a DSP Withdrawal Profile Submission under clause 7.4A.14(a) or a Standing DSP Withdrawal Profile Submission under clause 7.4A.21(a);
- (b) validating a DSP Withdrawal Profile Submission in accordance with clause 7.4A.14(b) or a Standing DSP Withdrawal Profile Submission in accordance with clause 7.4A.21(b); and
- (c) accepting or rejecting a DSP Withdrawal Profile Submission in accordance with clause 7.4A.15 or a Standing DSP Withdrawal Profile Submission in accordance with clause 7.4A.22.

7.5. Dispatch Algorithm

Network Constraints

7.5.1. For each Dispatch Interval:

- (a) AEMO must reasonably determine, based on the latest information available to it, whether a Network Constraint has the potential to affect dispatch in the Dispatch Interval; and
- (b) for each Network Constraint identified by AEMO under clause 7.5.1(a), AEMO must select one or more Constraint Equations or Constraint Sets to

use in the Dispatch Algorithm for the Dispatch Interval to address the Network Constraints identified.

Explanatory Note

Clause 7.5.2(c) is amended to use the correct defined term.

- 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~~ Alternative Network Constraint Equation is used, AEMO will continue to meet its obligations under section 7.2,
- in which case, AEMO may use the Alternative Network Constraint Equation in the Dispatch Algorithm for the expected duration of the relevant Network Constraint.
- 7.5.3. If the Constraints Library does not contain a Constraint Equation or Constraint Set that accurately reflects the Network Constraint identified under clause 7.5.1, then without limiting AEMO's obligations to formulate Constraint Equations under section 2.27A, AEMO must formulate a new Constraint Equation or Constraint Set for use in the Dispatch Algorithm for the Network Constraint and update the Constraints Library in accordance with clause 2.27A.7.
- 7.5.4. AEMO must document in a WEM Procedure:
- (a) the process to be used by AEMO for selecting, applying, invoking and revoking Constraint Equations or Constraint Sets in response to Network Constraints for use in the Dispatch Algorithm; and
 - (b) the circumstances in which AEMO will use Fully Co-optimised Network Constraint Equations and Alternative Network Constraint Equations in the Dispatch Algorithm.

Essential System Services Constraints

- 7.5.5. AEMO must include Constraint Equations for the dispatch of Essential System Services in the Dispatch Algorithm.
- 7.5.6. Where the WEM Procedure referred to in clause 3.11.7 provides that the quantity of a Frequency Co-optimised Essential System Service is to be determined outside the 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 Offset and Contingency Lower Offset for each Dispatch Interval and Pre-Dispatch Interval of each Market Schedule and in making a determination AEMO must have regard to:

- (a) System Inertia;
- (b) Load Relief;
- (c) Droop Response expected from synchronised Registered Facilities;
- (d) the size of the Largest Credible Supply Contingency;
- (e) the size of the Largest Credible Load Contingency; and
- (f) any other relevant factors specified in the WEM Procedure referred to in clause 7.2.5.

7.5.12. AEMO must determine the Minimum RoCoF Control Requirement, the Additional RoCoF Control Requirement and the RoCoF Control Requirement for each Dispatch Interval and Pre-Dispatch Interval of each Market Schedule and in making a determination AEMO must have regard to:

- (a) Facility Performance Factors;
- (b) System Inertia from sources other than Registered Facilities;
- (c) the size of the Largest Credible Supply Contingency;
- (d) Contingency Raise Offset;
- (e) Contingency Lower Offset; and
- (f) any other relevant factors specified in the WEM Procedure referred to in clause 7.2.5.

7.5.13. AEMO must determine a Facility Performance Factor for Contingency Reserve Raise and Contingency Reserve Lower for each Registered Facility that is accredited, in accordance with section 2.34A, to provide that Essential System Service for each Dispatch Interval and Pre-Dispatch Interval of each Market Schedule and in making a determination AEMO must have regard to:

- (a) Facility Speed Factors;
- (b) System Inertia;
- (c) the size of the Largest Credible Supply Contingency;
- (d) the size of the Largest Credible Load Contingency; and
- (e) any other relevant factors specified in the WEM Procedure referred to in clause 7.2.5.

7.5.14. AEMO must determine and publish on the WEM Website the RoCoF Upper Limit at least annually.

7.6. Dispatch

Dispatch Instructions

Explanatory Note

Clauses 7.6.1 and 7.6.2 are amended to reflect that only Scheduled Facilities, Semi-Scheduled Facilities and Interruptible Loads are dispatched by WEMDE using the Dispatch Algorithm.

- 7.6.1. AEMO must centrally dispatch Scheduled Facilities, Semi-Scheduled Facilities and Interruptible Loads based on their Real-Time Market Bids and Real-Time Market Offers using the Dispatch Algorithm.
- 7.6.2. 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.

Explanatory Note

Clause 7.6.4 is amended to use standard section and clause reference terminology.

- 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~~ clause 7.11A.1(b).

Explanatory Note

The phrase “in respect of a Dispatch Interval” has been removed from this general description of a Dispatch Instruction because Dispatch Instructions are no longer proposed to be issued for each Dispatch Interval to Demand Side Programmes. The clauses detailing the contents of Dispatch Instructions contain the required granularity details, so they do not need to be included in this clause.

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.

Explanatory Note

Clause 7.6.5A allows AEMO to dispatch a Demand Side Programme to maintain Power System Security or Power System Reliability. This may be required in the event of a capacity shortfall or other low reserve condition, to conserve fuel during a major fuel shortfall or to relieve a security constraint.

Clause 7.6.5B sets out the principles AEMO must follow in determining which Demand Side Programmes should be dispatched, and for how long and what quantities the Facilities should be dispatched.

Clause 7.6.5C requires AEMO to document in a WEM Procedure the processes it will use to decide that the dispatch of Demand Side Programmes is required and to select Demand Side Programmes for dispatch.

7.6.5A. AEMO may issue Dispatch Instructions to a Demand Side Programme where AEMO reasonably considers that the dispatch of a Demand Side Programme is required to restore or maintain Power System Security or Power System Reliability.

7.6.5B. AEMO must issue Dispatch Instructions to Demand Side Programmes in accordance with the following principles:

- (a) AEMO must not issue Dispatch Instructions to a Demand Side Programme that restrict the absolute value of Withdrawal below the Facility's Relevant Level by more than the Facility's Reserve Capacity Obligation Quantity in a Dispatch Interval, except with the prior agreement of the Market Participant; and
- (b) when selecting Demand Side Programmes for dispatch to meet a potential energy shortfall, AEMO must:
 - i. take into account Market Schedules and any information provided by Market Participants in response to a Market Advisory issued under clause 7.11.5(gA) for the relevant period;
 - ii. avoid the dispatch of Demand Side Programmes beyond the extent that AEMO considers may reasonably be necessary to restore or maintain Power System Security and Power System Reliability;
 - iii. where a Demand Side Programme has an Associated Load which is also an Associated Load of an Interruptible Load, and that Interruptible Load is expected to provide an Essential System Service during the relevant period, prefer dispatch of other Demand Side Programmes; and

- iv. only discriminate between Demand Side Programmes based on response time and availability, except where required under clause 7.6.5B(b)(iii).

7.6.5C. AEMO must document in a WEM Procedure:

- (a) how AEMO will determine that the dispatch of Demand Side Programmes under clause 7.6.5A may be required; and
- (b) the process that AEMO will use to select Demand Side Programmes for dispatch, which must be consistent with the principles specified in clause 7.6.5B.

7.6.6. AEMO is not required to issue a Dispatch Instruction for Automatic Generator Control movements where:

- (a) AEMO is adjusting the provision of Regulation within the quantity of Regulation enabled;
- (b) AEMO has direct control of a Registered Facility under clause 7.6.30 and the adjustments relate to implementation of a previously recorded Dispatch Instruction; or
- (c) the Facility is providing a System Restart Service.

7.6.7. AEMO may direct a Network Operator to do, or not do, an act, matter or thing, if it reasonably determines the act, matter or thing is required to support or enable AEMO's operation of the Central Dispatch Process.

7.6.7A. A Network Operator is not required to comply with a direction referred to in clause 7.6.7 if such compliance would endanger the safety of any person, damage equipment, or breach any applicable law.

Explanatory Note

Clause 7.6.8 is amended to:

- restrict the clause to Dispatch Instructions for Scheduled Facilities, Semi-Scheduled Facilities and Interruptible Loads (Dispatch Instructions for Demand Side Programmes are covered in new clause 7.6.11A);
- clarify what is included in Dispatch Instructions for the different Facility Classes; and
- clarify that the quantities referred to in clause 7.6.8(d)(iii) are not the actual Dispatch Targets or Dispatch Caps for the Facility (which are sent out values) but their "as-generated" equivalents.

7.6.8. For each Dispatch Instruction for a Scheduled Facility, Semi-Scheduled Facility or Interruptible Load, AEMO must record:

- (a) details of the Registered Facility to which the Dispatch Instruction relates;
- (b) the time the Dispatch Instruction was issued;
- (c) the Dispatch Interval to which the Dispatch Instruction applies;

- ~~(d) 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).~~
- (d) for a Scheduled Facility or Semi-Scheduled Facility:
 - i. the Dispatch Target or Dispatch Cap for the Dispatch Interval, as applicable, under clause 7.6.10 or 7.6.11;
 - ii. where the Registered Facility is a Semi-Scheduled Facility, the Dispatch Forecast for the Dispatch Interval;
 - iii. where AEMO has agreed to process Dispatch Targets or Dispatch Caps for the Registered Facility on an as-generated basis, the equivalent as-generated values for the Dispatch Target, Dispatch Cap or Dispatch Forecast as applicable; and
 - iv. Essential System Service Enablement Quantities; and
- (e) for Interruptible Loads:
 - i. Essential System Service Enablement Quantities.

7.6.8A. AEMO may record, for a Dispatch Instruction to a Scheduled Facility or Semi-Scheduled Facility, the ramp rate to be maintained by the Registered Facility until the Dispatch Target is reached, which must not exceed the Maximum Upwards Ramp Rate or the Maximum Downwards Ramp Rate of the Registered Facility, as applicable.

Explanatory Note

Clause 7.6.9 is amended to include new clause 7.6.11A, which covers Dispatch Instructions for Demand Side Programmes.

- 7.6.9. At the same time as, or as soon as practicable after, AEMO issues a Dispatch Instruction for a Registered Facility, AEMO must make the information recorded in accordance with clauses 7.6.8 or 7.6.11A available to the Market Participant for the Registered Facility.
- 7.6.10. Each Dispatch Instruction for a Scheduled Facility must include a Dispatch Target.
- 7.6.11. Each Dispatch Instruction for a Semi-Scheduled Facility must include:
 - (a) a Dispatch Cap; or

- (b) a Dispatch Target, where the Registered Facility has a non-zero Essential System Service Enablement Quantity for Contingency Reserve or Regulation.

Explanatory Note

New clause 7.6.11A reflects the differences between Dispatch Instructions for Demand Side Programmes and the Dispatch Instructions that are issued by the Dispatch Algorithm for other Facility Classes. These include the following:

- Dispatch Instructions for Demand Side Programmes are issued in accordance with the required notice period for the Facility (usually two hours);
- a Dispatch Instruction is usually only issued to a Demand Side Programme when a change is required to its consumption, whereas Dispatch Instructions are issued to other Facilities every five minutes;
- the start time for a Demand Side Programme (i.e. the time from which the Dispatch Instruction applies) must fall on a Trading Interval boundary, to support the relevant settlement calculations;
- the meaning of a Dispatch Instruction is different for Demand Side Programmes:
 - a non-zero MW quantity means that the consumption of the Demand Side Programme must be curtailed to less than or equal to the specified level by the start time shown in the Dispatch Instruction; and
 - the Market Participant is expected to maintain at least this level of curtailment until the start time of the next Dispatch Instruction it receives for the Demand Side Programme; and
 - a zero MW quantity means that the consumption of the Demand Side Programme no longer needs to be curtailed from the start time shown in that Dispatch Instruction; and
- Dispatch Instructions with non-zero MW quantities will include an estimated end time for the dispatch – the Market Participant will use this estimate to update its DSP Constrained Withdrawal Quantities, but must not end its curtailment except in accordance with a zero MW quantity Dispatch Instruction.

7.6.11A. For each Dispatch Instruction issued for a Demand Side Programme, AEMO must record:

(a) details of the Demand Side Programme to which the Dispatch Instruction relates;

(b) the time the Dispatch Instruction was issued;

(c) the Dispatch Interval from which the Dispatch Instruction applies, where this must be the first Dispatch Interval of a Trading Interval;

(d) the MW quantity representing the required Withdrawal restriction, where:

i. a non-zero MW quantity represents a required reduction in the absolute value of Withdrawal from the Relevant Demand for the Demand Side Programme; and

ii. a zero MW quantity indicates that the Demand Side Programme is no longer required to restrict its Withdrawal; and

- (e) if a non-zero MW quantity is specified, the estimated Dispatch Interval from which the Dispatch Instruction may no longer apply, where this must be the first Dispatch Interval of a Trading Interval.

Explanatory Note

Clause 7.6.12 is amended to:

- clarify that AEMO will not issue Dispatch Instructions to Non-Scheduled Facilities (although it may still issue directions to them where necessary);
- explain how Non-Scheduled Facilities will be treated by the Dispatch Algorithm – treating the Facilities as Inflexible means that they will not set prices or be included in any tie-breaking processes; and
- describe the key Dispatch Algorithm output that AEMO must record (and later publish) for Non-Scheduled Facilities.

7.6.12. ~~AEMO is not required to~~ must not 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.

- (a) use the Real-Time Market Submissions of Non-Scheduled Facilities as input to the Dispatch Algorithm;
- (b) treat Non-Scheduled Facilities as Inflexible for the purposes of the Dispatch Algorithm; and
- (c) record the Dispatch Forecast determined by the Dispatch Algorithm for each Non-Scheduled Facility for each Dispatch Interval.

Explanatory Note

Clause 7.6.13 is amended to provide clarity on the obligation for a Demand Side Programme when actively curtailed. The Demand Side Programme consumption must be at or below the required level by the start time of the Dispatch Instruction, and must remain at or below the required level until the start time of the next Dispatch Instruction, which may either be to increase or decrease curtailment, or return to uncurtailed levels.

~~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.~~

7.6.13. Where AEMO has issued a Dispatch Instruction with a non-zero MW quantity to a Demand Side Programme, the Market Participant must maintain an absolute MW level of Withdrawal from the Demand Side Programme less than or equal to the level required in the Dispatch Instruction from the start of the Dispatch Interval specified under clause 7.6.11A(c) until the start of the Dispatch Interval specified

under clause 7.6.11A(c) for the next Dispatch Instruction issued to the Demand Side Programme.

Explanatory Note

Clause 7.6.13A is amended to provide clarity on when a Demand Side Programme may return to uncurtailed levels. A zero MW Dispatch Instruction indicates that the Demand Side Programme is no longer curtailed. However, as AEMO must issue the non-zero Dispatch Instruction ahead of time, the Demand Side Programme may not consume above the level specified in the previous non-zero MW Dispatch Instruction until the start time of the zero MW Dispatch Instruction.

~~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.~~

7.6.13A. Where AEMO has issued a Dispatch Instruction with a zero MW quantity to a Demand Side Programme, the Market Participant may, from the start of the Dispatch Interval specified under clause 7.6.11A(c) for the Dispatch Instruction, increase the absolute MW level of Withdrawal of the Demand Side Programme above the level specified in the previous Dispatch Instruction.

Explanatory Note

Clause 7.6.14 is amended to:

- include AEMO's powers of direction in an Emergency Operating State; and
- clarify that the clause applies to Dispatch Instructions issued to Scheduled Facilities and Semi-Scheduled Facilities; and
- clarify that the linear profiles are based on estimates of the Registered Facility's Injection or Withdrawal level at the start of the Dispatch Interval because the Dispatch Algorithm must determine the Dispatch Instructions ahead of the Dispatch Interval.

7.6.14. Subject to clause 7.10.14, unless the Dispatch Instruction is issued to implement a direction under clauses 3.4.4 or 3.5.5 or section 7.7, AEMO must determine the ramp rate in a Dispatch Instruction for a Scheduled Facility or Semi-Scheduled Facility using a linear profile between the Registered Facility's estimated Injection or Withdrawal at the start of the Dispatch Interval and at the end of the Dispatch Interval covered by the Dispatch Instruction.

Explanatory Note

Clause 7.6.15, which sets out the requirement for AEMO to respect Standing Data minimum notice periods for Demand Side Programmes, is amended to reflect the proposed changes to the dispatch of Demand Side Programmes and the replacement of Appendix 1.

7.6.15. AEMO must issue a Dispatch Instruction to a Demand Side Programme before the Dispatch Interval in from which the Dispatch ~~Target in the Dispatch Instruction is to be achieved~~ Instruction applies, in accordance with the ~~standing data~~ minimum response time specified for the Facility under Appendix ~~1(h)(vii)~~ 1(f)(iv).

Explanatory Note

Clause 7.6.16 is removed because the Dispatch Algorithm will not produce dispatch quantities for Demand Side Programmes.

- 7.6.16. ~~[Blank]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.~~

Explanatory Note

Clause 7.6.17 is amended to clarify that because the Dispatch Algorithm is not directly processing Demand Side Programmes, AEMO must consider the impact of the Dispatch Instructions it issues to Demand Side Programmes (using the information provided by Market Participants in their revised DSP Withdrawal Profile Submissions) and, depending on the quantity and timeframes, may update the Forecast Operational Demand to reflect the impact in the forward Market Schedules where necessary.

- 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 review and if necessary adjust the Forecast Operational Demand for the relevant period to account for any expected changes to the Withdrawal of the Demand Side Programme's Associated Loads.~~
- 7.6.18. AEMO must document in a WEM Procedure:
- (a) the processes AEMO and Market Participants must follow in issuing, recording, receiving, confirming and responding to Dispatch Instructions; and
 - (b) the methodology and data requirements for conversion of sent-out figures to as-generated figures where AEMO agrees to convert sent-out figures to as-generated figures for the purposes of implementing Dispatch Instructions for a Registered Facility.

Explanatory Note

Clause 7.6.19 is amended to clarify that Market Participants are not always required to confirm the receipt of a Dispatch Instruction, as contemplated under clauses 7.6.6 and 7.6.20 (AGC control of Facilities).

- 7.6.19. Where a Market Participant is required to confirm the receipt of a Dispatch Instruction, AEMO must ensure that the communication methods used for issuing Dispatch Instructions allow the Market Participant to confirm the receipt of the Dispatch Instruction before the start of the Dispatch Interval to which the Dispatch Instruction relates in accordance with clause 7.6.20.

- 7.6.20. A Market Participant must confirm receipt of a Dispatch Instruction that was not issued by AEMO electronically via the Automatic Generation Control System for the Registered Facility in accordance with the WEM Procedure referred to in clause 7.6.18.
- 7.6.21. AEMO must not issue a Dispatch Instruction for a Dispatch Interval that has already ended.
- 7.6.22. AEMO must maintain a record of:
- (a) each Dispatch Instruction;
 - (b) each confirmation of receipt of a Dispatch Instruction, where confirmation is required; and
 - (c) each notification from a Market Participant under clause 7.6.31, in a consolidated electronic form which enables the Market Auditor to audit the information, and is sufficient for use in settlement.

Explanatory Note

Clause 7.6.23 is amended to reflect the removal of Demand Side Programmes from the Dispatch Algorithm. Note that the requirement in clause 7.6.23(d) has been relocated to clause 7.6.5B(b)(iii).

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; and
 - ~~(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)~~(c) 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.

Explanatory Note

Clause 7.6.26 is amended to use the correct defined term.

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

Explanatory Note

The Tranche 5 Amendments 'insertion' of clause 7.6.28 will not commence because the clause will have been created by the Tranches 2 and 3 Amendments. The Tranche 6 Amendments will replace the clause as intended in the Tranche 5 Amendments.

- ~~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.~~

7.6.28. AEMO may, where required for a Registered Facility or equipment to participate in the Central Dispatch Process, or to provide an Essential System Service, or otherwise by agreement with a Market Participant, control specified operations of a Registered Facility or equipment, including:

(a) the starting, loading and stopping of one or more of the Market Participant's Scheduled Facilities; and

(b) limiting the Injection 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

Explanatory Note

Clause 7.6.31 is amended to clarify that the clause applies to Scheduled Facilities and Semi-Scheduled Facilities.

7.6.31. Where a Market Participant reasonably expects that its ~~Registered Facility~~ Scheduled Facility or Semi-Scheduled Facility will be unable to comply with a Dispatch Instruction for the Registered Facility in a future Dispatch Interval, the Market Participant must immediately:

(a) amend its Real-Time Market Submission for 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.

Explanatory Note

Clause 7.7.3 is amended to clarify the obligation on Market Participants and allow AEMO to specify an ESS quantity that is less than the relevant maximum accredited quantity.

- 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 a quantity specified by AEMO of Essential System Service to be offered to reflect up to the maximum accredited quantity, or the lowest Remaining Available Capacity under any Outage, applying to the Registered Facility for that Frequency Co-optimised Essential System Service in any of the Dispatch Intervals covered by the Low Reserve Condition Declaration.

Explanatory Note

Clause 7.7.4(b) is amended to replace 'In Service Capacity' with 'In-Service Capacity'.

- 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~~ 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.

Explanatory Note

Clause 7.7.9(b) is deleted and the clause restructured accordingly because the requirement on AEMO in the clause is already covered by clause 7.7.9(a).

- 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: consistent with the Registered Facility's data held by AEMO, including Standing Data, at the time the Dispatch Instruction is determined.

- ~~(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.

Explanatory Note

Clause 7.8.5(b)(vi) is amended to correct the use of the defined term “Planned Outage”.

- 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 where the Start Decision Cutoff for the Registered Facility has passed.
- 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 where the Start Decision Cutoff for the Registered Facility has passed.

Explanatory Note

Clause 7.8.6(b) is amended to replace ‘In Service Capacity’ with ‘In-Service Capacity’.

- 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-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.

Explanatory Note

Clause 7.8.8 is amended to extend the scope of the clause to DSP Schedules.

- 7.8.8. AEMO may determine and publish any Market Schedule or DSP Schedule more frequently than specified in clauses 7.1.3(a)(iii), ~~7.1.3(a)(iv) and 7.1.3(a)(v)~~ to 7.1.3(a)(vA).
- 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.

Explanatory Note

New section 7.8A defines the requirements for the publication of information relating to potential and expected dispatch capability of Demand Side Programmes. The structure and timing of the two proposed DSP Schedules (the DSP Pre-Dispatch Schedule and DSP Week-Ahead Schedule) mirrors the corresponding Pre-Dispatch Schedule and Week-Ahead Schedule, except that information is provided for each Dispatch Interval (not Trading Interval) in the relevant period.

The schedules include two new values determined by AEMO for each Demand Side Programme for each Dispatch Interval:

- DSP Forecast Capacity, which is the forecast total available reduction in MW of a Demand Side Programme, taking into the Facility's Relevant Demand, RCOQ and Minimum Consumption (as estimated by AEMO at the time); and
- DSP Forecast Reduction, which is the expected reduction in MW of a Demand Side Programme based on its submitted DSP Unconstrained Withdrawal Quantities and DSP Constrained Withdrawal Quantities.

7.8A. DSP Schedules

- 7.8A.1. A DSP Pre-Dispatch Schedule or DSP Week-Ahead Schedule is a schedule that includes, for each Demand Side Programme, for each Dispatch Interval in the Pre-Dispatch Schedule Horizon or Week-Ahead Schedule Horizon (as applicable):

- (a) the DSP Unconstrained Withdrawal Quantity and DSP Constrained Withdrawal Quantity provided by the Market Participant in its DSP Withdrawal Profile Submission;
- (b) AEMO's reasonable estimate based on the information available to AEMO of:
 - i. the Demand Side Programme's Relevant Demand in the applicable Trading Interval;
 - ii. the sum of the Minimum Consumption of each Associated Load of the Demand Side Programme in the applicable Trading Interval;
and
 - iii. the Reserve Capacity Obligation Quantity of the Demand Side Programme in the Dispatch Interval;
- (c) the DSP Forecast Capacity, determined by AEMO in accordance with clause 7.8A.3; and
- (d) the DSP Forecast Reduction, determined by AEMO in accordance with clause 7.8A.4.

7.8A.2. AEMO must determine and publish on the WEM Website the following DSP Schedules in accordance with the Real-Time Market Timetable:

- (a) DSP Week-Ahead Schedules; and
- (b) DSP Pre-Dispatch Schedules.

7.8A.3. The DSP Forecast Capacity for a Demand Side Programme in a Dispatch Interval is:

$$\text{DSPForecastCapacity} = \max(0, \text{DSPUWQ} - \max(\text{MinLoad}, \text{RD} - \text{RCOQ}))$$

where:

DSPUWQ is the Unconstrained Withdrawal Quantity provided by the Market Participant in its DSP Withdrawal Profile Submission for the Demand Side Programme and Dispatch Interval;

MinLoad is AEMO's reasonable estimate, based on the information available to it, of the sum of Minimum Consumption of each Associated Load of the Demand Side Programme in the applicable Trading Interval;

RD is AEMO's reasonable estimate, based on the information available to it, of the Relevant Demand of the Demand Side Programme in the applicable Trading Interval; and

RCOQ is AEMO's reasonable estimate, based on the information available to it, of the Reserve Capacity Obligation Quantity of the Demand Side Programme in the Dispatch Interval.

7.8A.4. The DSP Forecast Reduction for a Demand Side Programme in a Dispatch Interval is:

$$\text{DSPForecastReduction} = \text{DSPUWQ} - \text{DSPCWQ}$$

where:

DSPUWQ is the Unconstrained Withdrawal Quantity provided by the Market Participant in its DSP Withdrawal Profile Submission for the Demand Side Programme and Dispatch Interval; and

DSPCWQ is the Constrained Withdrawal Quantity provided by the Market Participant in its DSP Withdrawal Profile Submission for the Demand Side Programme and Dispatch Interval.

7.9. Commitment

- 7.9.1. Where a Real-Time Market Submission for a Registered Facility does not specify a Dispatch Inflexibility Profile, the Registered Facility must commence the process of starting and synchronising without instruction or direction from AEMO to be eligible for dispatch in a Dispatch Interval covered by the Real-Time Market Submission.

Explanatory Note

Clause 7.9.2 is amended to replace 'In Service Capacity' with 'In-Service Capacity'.

- 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-Service Capacity in the Real-Time Market Submission for the Registered Facility.
- 7.9.3. If a Market Participant intends to desynchronise a Registered Facility, or any part of it, for which it has not specified a Dispatch Inflexibility Profile, the Market Participant must notify AEMO of the expected time of desynchronisation by updating the Real-Time Market Submission for the Registered Facility to reflect the Registered Facility's Available Capacity and In-Service Capacity.
- 7.9.4. If a Market Participant intends to synchronise or desynchronise an unregistered Energy Producing System serving an Intermittent Load, the Market Participant to which the Intermittent Load is registered must notify AEMO of the expected time of synchronisation or desynchronisation of the unregistered Energy Producing System.
- 7.9.5. Clauses 7.9.2 and 7.9.3 do not apply where:
- 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
 - 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.

Explanatory Note

Clause 7.9.7 is amended to replace the comma at the end of the clause with a full stop.

- 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~~7.2~~.
- 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.

Explanatory Note

Clause 7.9.10 is deleted because section 3.21B has been deleted and a Market Participant will not need to seek explicit permission from AEMO to decommit its Registered Facility.

- 7.9.10. ~~[Blank]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

Explanatory Note

The dispatch compliance obligations for Demand Side Programmes have been moved to new clause 7.10.1A.

Clause 7.10.1 is also amended to remove the words “sent out” because the relevant quantities are all “sent out” quantities (e.g. the as-generated equivalent of a Dispatch Target is not the Dispatch Target).

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~~ Scheduled Facility, Semi-Scheduled Facility or Interruptible Load for the Dispatch Interval.

7.10.1A. A Market Participant must comply with the most recently issued Dispatch Instruction applicable to its Demand Side Programme in a Dispatch Interval.

Explanatory Note

Clause 7.10.2 is amended to reflect that:

- a Facility suffering a Forced Outage may have multiple Remaining Available Capacities, e.g. for different Outage Capabilities and Facility Technology Types;
- a Facility may be required to comply with a Dispatch Cap rather than a Dispatch Target.

7.10.2. A Market Participant is not required to comply with clause 7.10.1 if:

- (a) such compliance would endanger the safety of any person, damage equipment or breach any applicable law;
- (b) the actual Injection or Withdrawal of the Registered Facility does not, at any time the Dispatch Instruction applies:
 - i. vary, by more than the applicable Tolerance Range or Facility Tolerance Range, from a linear profile between the Injection or Withdrawal of the Facility at the start of the Dispatch Interval and the Dispatch Target at:
 - 1. the time at which the Dispatch Target would be reached by ramping at the ramp rate specified in the Dispatch Instruction; or

2. if no ramp rate is specified in the Dispatch Instruction, the end of the Dispatch Interval;
- ii. exceed by more than the applicable Tolerance Range or Facility Tolerance Range a linear profile between the Injection or Withdrawal of the Facility at the start of the Dispatch Interval and the Dispatch Cap at:
 1. the time at which the Dispatch Cap would be reached by ramping at the ramp rate specified in the Dispatch Instruction; or
 2. if no ramp rate is specified in the Dispatch Instruction, the end of the Dispatch Interval;
- (c) both of the following apply:
 - i. the Market Participant notifies AEMO, in accordance with clause 3.21.2(a), that its Registered Facility has been affected by or will be affected by a Forced Outage; and
 - ii. the quantity of the relevant Remaining Available Capacity for the Forced Outage notified is consistent with the extent to which the Market Participant did not comply with the most recently issued Dispatch Instruction applicable to its Registered Facility for the Dispatch Interval;
- (d) the Registered Facility has been granted permission under clause 7.10.14 to ramp at a fixed rate, complies with the Dispatch Target or Dispatch Cap, as relevant, and ramps at the ramp rate specified in the Real-Time Market Submission for the Registered Facility;
- (e) AEMO was unable to issue Dispatch Instructions to a Fast Start Facility in accordance with clause 7.6.32(b), and that Facility is responding according to its Dispatch Inflexibility Profile; or
- (f) the Market Participant was conducting a Commissioning Test on a Facility as part of an approved Commissioning Test Plan, and was unable to comply with clause 7.10.1 in a Dispatch Interval due to a failure of the Facility's equipment.

Explanatory Note

Clause 7.10.2A performs the same function in respect of clause 7.10.1A for Demand Side Programmes as clause 7.10.2 performs for in respect of clause 7.10.1.

7.10.2A. A Market Participant is not required to comply with clause 7.10.1A if such compliance would endanger the safety of any person, damage equipment or breach any applicable law.

7.10.3. Notwithstanding clause 7.10.2(b), a Market Participant must not consistently operate its Registered Facility at the extremes of the Tolerance Range or Facility Tolerance Range applicable to the Registered Facility.

- 7.10.4. 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.

Explanatory Note

Clause 7.10.5 is amended to correct a clause reference error.

- 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~~ 7.10.4.
- 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.

Explanatory Note

Clause 7.10.15 is amended to correct a clause reference error.

- 7.10.15. AEMO must notify a Market Participant and the Economic Regulation Authority, in writing, of its decision under clause ~~7.10.15~~ 7.10.14 to grant permission or not and provide written reasons for its decision.
- 7.10.16. A Market Participant that has been granted permission in accordance with clause 7.10.14 must immediately notify AEMO if any works to the Registered Facility that is the subject of the permission results in the Facility being capable of ramping with a linear profile to the end of a Dispatch Interval to meet Dispatch Instructions.
- 7.10.17. In response to a notification under clause 7.10.16, AEMO may, by notice in writing to the Market Participant and the Economic Regulation Authority, revoke permission granted by it under clause 7.10.14.
- 7.10.18. A Facility accredited to provide Contingency Reserve must be capable of responding according to its accredited capability (including Facility Speed Factor), and sustain the required response for a period of at least 15 minutes following any Contingency Event.

Explanatory Note

Clause 7.10.19 is amended to use the defined term Automatic Generation Control System and clarify that commands from AEMO's Automatic Generation Control System are not to be confused with Dispatch Instructions.

- 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 commands~~ from AEMO's ~~centralised control scheme~~ Automatic Generation Control System.
- 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.

Explanatory Note

Clause 7.10.21 is amended to capitalise the defined term Business Days.

- 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~~ Business Days from the date AEMO receives the application.

Explanatory Note

The heading above section 7.11 is amended to remove the reference to status reports, which are no longer covered in that section.

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.

Explanatory Note

Clause 7.11.5 is amended to:

- include a new Market Advisory requirement in clause 7.11.5(gA) to cover situations where AEMO identifies the potential need for the dispatch of Demand Side Programmes in accordance with the process described in section 7.6;
- correct section and clause reference errors; and
- replace the full stop after clause 7.11.5(j) with a comma.

- 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;
- (gA) AEMO reasonably considers that the dispatch of Demand Side Programmes may occur for a Trading Day as a result of a potential energy shortfall identified in accordance with the WEM Procedure referred to in clause 7.6.5C;
- (h) significant degradation or failure of AEMO market or control systems required for the normal conduct of the operation of the Real-Time Market and the Central Dispatch Process;
- (i) an AEMO Intervention Event has occurred, or is expected to occur; and
- (j) a significant Contingency Event has occurred, as detailed in the WEM Procedure referred to in clause ~~7.11.10~~ 7.11.8,

unless the situation has already been signalled through a Low Reserve Condition Declaration, Pre-Dispatch Schedule, or in the information published under section ~~3.23~~ 3.22, as applicable.

Explanatory Note

Clause 7.11.6 is amended to:

- add clause 7.11.6(cA), which specifies the information AEMO must include in a Market Advisory relating to potential Demand Side Programme dispatch; and
- correct a clause reference error and add a missing left hand bracket in clause 7.11.6(g).

7.11.6. Subject to clause 7.11.6B, a Market Advisory must contain the following information:

- (a) the date and time that the Market Advisory is released;
- (b) the time period for which the Market Advisory is expected to apply;
- (c) details of the situation that the Market Advisory relates to, including the location, extent and seriousness of the situation where AEMO is able to reasonably estimate this information at the time the Market Advisory is issued;
- (cA) where the Market Advisory relates to the circumstances described in clause 7.11.5(gA), AEMO's estimate of:
 - i. which Demand Side Programmes may be dispatched; and
 - ii. the period during which the Withdrawal of the Demand Side Programmes may potentially be curtailed;
- (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~~ 7.11.8, whether that WEM Procedure applies to the situation.
- 7.11.6A. AEMO must issue an updated Market Advisory containing the information in clause 7.11.6(c) as soon as practicable where AEMO revises an estimate of the information or after AEMO is able to reasonably determine the information.
- 7.11.6B. If any information that would otherwise be released under clauses 7.11.6(c), 7.11.6(d) or 7.11.6(e) is confidential or has a confidentiality status that would prevent the Economic Regulation Authority from releasing the information, AEMO must:
- (a) release that information to the Economic Regulation Authority but, subject to clause 7.11.6B(b), ensure that the Market Advisory contains information of only a general or aggregate nature so that the information publicly released is not confidential; and
 - (b) include in the Market Advisory the details of any circumstance that has given rise to AEMO issuing the Market Advisory, including:
 - i. the name of the Registered Facility or Network element where that Registered Facility or Network element has caused or materially contributed to the circumstances giving rise to the Market Advisory;
 - ii. the name of the Registered Facility, or Registered Facilities, that are likely to be dispatched in response to the Market Advisory; and
 - iii. unless already published, any changes to the inputs to the Dispatch Algorithm that AEMO has made or intends to make in response to the situation identified in the Market Advisory, including changes to Constraint Equations.
- 7.11.6C. Where AEMO is required to:
- (a) make changes to any inputs to the Dispatch Algorithm; or
 - (b) issue a direction to a Market Participant or a Network Operator,
- prior to issuing a Market Advisory, AEMO may make any such changes and issue any such direction as if a Market Advisory had already been issued.
- 7.11.7. Market Participants, Network Operators and the Economic Regulation Authority must inform AEMO as soon as practicable if they become aware of any circumstances that might reasonably be expected to result in AEMO issuing a Market Advisory.
- 7.11.8. AEMO may document in a WEM Procedure the processes to be followed by AEMO and Market Participants with respect to the events or situations specified in, or contemplated by, this section 7.11, including:

- (a) a description of events that AEMO would consider significant for the purposes of 7.11.5(j);
- (b) the processes to be followed by Market Participants after receiving a relevant Market Advisory; and
- (c) the processes to be followed by AEMO after it has issued a relevant Market Advisory.

Price Determination

7.11A. Price Determination Principles

7.11A.1. The principles applying to the determination of prices in the Real-Time Market are:

- (a) subject to this section 7.11A, 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.

Explanatory Note

Clause 7.11B.3 is amended to reflect that Demand Side Programmes are no longer included in the Dispatch Algorithm and there is no need to set the Market Clearing Price for energy to the Alternative Maximum STEM Price because a Demand Side Programme has been dispatched.

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.

Explanatory Note

Clause 7.11C.1A is amended to correct a clause reference error.

7.11C.1A. AEMO must use the procedures developed under clause ~~7.11C.1~~ 7.11C.1 to determine whether each Dispatch Interval is an Affected Dispatch Interval.

7.11C.2. Where AEMO determines that a Dispatch Interval is an Affected Dispatch Interval, 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.

Explanatory Note

Clause 7.11C.5 is amended to correct a minor typographical error.

7.11C.5. A report under clause 7.11C.4 must:

- (a) cover the ~~12 months'~~ 12-month period since the end of the period covered by the last report;
- (b) be published within 3 months of the end of the review period covered by the report; and
- (c) include the following:
 - i. details of all Affected Dispatch Intervals which should not have been identified as Affected Dispatch Intervals;
 - ii. the reasons why the Affected Dispatch Intervals identified under clause 7.11C.5(c)(i) were identified as Affected Dispatch Intervals; and
 - iii. details of any Dispatch Intervals that AEMO has subsequently determined should have been identified by AEMO as Affected Dispatch Intervals, but were not.

7.11C.5A. AEMO must develop and submit a Procedure Change Proposal where it considers that a change is required to the WEM Procedure developed under clause 7.11C.1 as a result of a report that it has published under clause 7.11C.4.

7.11C.6. 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.

7.12. [Blank]

Settlement and Monitoring Data

Explanatory Note

Throughout this section, changes have been included to clarify where information must be provided directly to Market Participants (e.g. via a portal or B2B mechanism) or published on the WEM Website, and the associated timeframes.

The WEM Website is a lower availability solution than a Market Participant interface, therefore while AEMO must make efforts to publish data in a timely manner to the WEM Website, there are occasions where making the data available may be delayed (e.g. WEM Website maintenance, or general data latency).

The changes in this section will require confirmation, taking into account Market Participant feedback during the consultation process to ensure the clauses are structured to provide sufficient comfort that important information has a higher general requirement to be published quickly to the WEM Website, while not placing an unreasonable burden on supporting infrastructure which may be costly for Market Participants.

Indicatively, some of the key data elements may include:

- Forecast Operational Demand;
- market prices;
- cleared quantities;
- binding constraints; and
- identification of shortfalls,

but may exclude (in terms of the timeliness requirement):

- data from alternative Market Schedule Scenarios; and
- certain Dispatch Algorithm input data.

7.13. Settlement and Monitoring Data

7.13.1. AEMO must make available to Market Participants and publish on the WEM Website:

- (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.

Explanatory Note

Clause 7.13.1A is amended to:

- clarify that the Forecast Operational Demand is associated with the Reference Scenario, and that other forecasts may be used for other Scenarios; and
- include a new defined term “Near Binding Constraint Equations” in clause 7.13.1A(i) – the definition has been proposed to resolve an issue that arises where the right hand side of a Constraint Equation is zero.

7.13.1A. AEMO must make available to Market Participants and publish on the WEM Website:

- (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 or, where applicable, the alternative forecast used for the Scenario;
- (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) ~~Near Binding 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 Offset;
- (o) the Contingency Lower Offset;
- (p) Facility Performance Factors; and
- (q) the identity of each Registered Facility that was subject to a Commissioning Test or a Reserve Capacity Test.

Explanatory Note

Clause 7.13.1B is also amended to use the new concept of Near Binding Constraint Equations in clause 7.13.1B(e).

- 7.13.1B. Within 5 minutes of each time AEMO uses the Dispatch Algorithm for the purposes of the Central Dispatch Process, and no later than the end of the relevant Dispatch Interval, AEMO must make available to Market Participants and publish on the WEM Website:
- (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) Near Binding 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 Offset;
 - (j) the Contingency Lower Offset;
 - (k) Facility Performance Factors; and
 - (l) the AEMO estimated quantity of Not In-Service Capacity for each Scheduled Facility or Semi-Scheduled Facility for which a Market Participant holds Capacity Credits, in each Dispatch Interval.

7.13.1C. Within 5 minutes of the end of a Trading Interval, AEMO must make available to Market Participants and publish on the WEM Website the Reference Trading Price for that Trading Interval.

7.13.1CA. Where a Market Clearing Price has been impacted by an Affected Dispatch Interval or AEMO Intervention Event, AEMO must:

- (a) determine revised Market Clearing Prices for each Market Service for the relevant Dispatch Interval;
- (b) determine the revised Reference Trading Price for the relevant Trading Interval; and
- (c) publish the revised prices referred to in clauses 7.13.1CA(a) and 7.13.1CA(b) as soon as practicable.

Explanatory Note

Clause 7.13.1D is amended to clarify that Estimated Enablement Losses are only provided for Scheduled Facilities and Semi-Scheduled Facilities.

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~~ Scheduled Facilities and Semi-Scheduled Facilities.

Explanatory Note

Clause 7.13.1E is amended to:

- clarify that the listed information is published on the WEM Website;
- remove the reference to Unadjusted Semi-Scheduled Injection Forecasts in clause 7.13.1E(a)(iii);
- remove redundant words from clause 7.13.1E(a)(iv);
- clarify in clause 7.13.1E(b) that maximum daily ambient temperatures are only published for Scheduled Facilities and Semi-Scheduled Facilities, and that they are determined using the method specified for the Facility in Standing Data; and
- extend the list of items to be published in clause 7.13.1E(c) to include Unconstrained Injection Forecasts, Unconstrained Withdrawal Forecasts and Inflexibility indicators;
- use standard language for the decrease of a Demand Side Programme and update the cross reference in clause 7.13.1E(d); and
- require (in new clause 7.13.1E(h)) the publication of any alternative forecast quantities determined and used by AEMO in the Central Dispatch Process under clause 7.2.4A.

7.13.1E. AEMO must prepare and publish on the WEM Website the following data for a Trading Day by noon on the first Business Day following the day on which the Trading Day ends:

- (a) the following SCADA data for each Dispatch Interval of the Trading Day:
 - i. an estimate of the MWh Injection or Withdrawal of each Registered Facility monitored by AEMO's SCADA system;
 - ii. [Blank]
 - iii. where it is available to AEMO for use in the Central Dispatch Process, data that has been used to ~~replace the Unadjusted Semi-Scheduled Injection Forecast or to~~ adjust Essential System Service submissions for each Semi Scheduled Facility;
 - iv. the Charge Level ~~at the end~~ immediately prior to the start of the Dispatch Interval of each Electric Storage Resource that is part of a Semi-Scheduled Facility or Scheduled Facility and monitored by AEMO's SCADA system;
 - v. the MWh output or consumption of each separate electricity producing unit in each Energy Producing System supplying an Intermittent Load for which, in AEMO's reasonable opinion, the information provided under clause 2.30B.3(g) does not show that if a Contingency Event or an event behind the relevant connection point affects the Energy Producing System the net Injection or Withdrawal of the Facility will change by less than 10 MW;
 - vi. the EOI Quantity of each Registered Facility; and
 - vii. any other SCADA data used as an input into the Central Dispatch Process;
- (b) the maximum daily ambient temperature at the site of each ~~Registered Facility Scheduled Facility or Semi-Scheduled Facility~~, recorded in accordance with ~~clause 4.10.1(e)(iv) the method specified in Appendix 1(b)(viii) or Appendix 1(c)(viii) as applicable~~;
- (c) details of each Real-Time Market Submission used in the Central Dispatch Process for Dispatch Intervals in that Trading Day, including, as applicable:
 - 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);

xv. if the Registered Facility is Inflexible;

xvi. Unconstrained Injection Forecast; and

xvii. Unconstrained Withdrawal Forecast;

- (d) for each Trading Interval of the Trading Day, the requested decrease in ~~consumption~~ absolute value of Withdrawal 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 Energy Uplift Price and the Uplift Payment Mispricing Trigger; ~~and~~
- (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 7.2.4 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 Dispatch Interval of the Trading Day, for each Semi-Scheduled Facility and Non-Scheduled Facility, any alternative forecast quantities to the Unconstrained Injection Forecast and Unconstrained Withdrawal Forecast provided by the Market Participant in its Real-Time Market Submission that were determined and used by AEMO in the Central Dispatch Process under clause 7.2.4A.

Explanatory Note

The Tranches 2 and 3 Amendments inadvertently replaced clause 7.13.1F with a clause “7.13.F”. The Tranche 5 Amendments also seek to replace clause 7.13.1F, but the Tranche 5 change will not commence because clause 7.13.1F will not exist after the Tranches 2 and 3 changes.

Additionally:

- the publication requirements for DSP Schedules needs to be included in this section;
- extensions for making information available to Market Participants under clause 7.13.1D are not required;
- the extension contemplated in clause 7.13.1F should also apply to clause 7.13.1G, because AEMO may reasonably encounter a delay in collecting the relevant information; and
- while the WEM Website publication timeframe requirements are still under consideration, it appears that extensions for publications under clauses 7.13.1, 7.13.1A, 7.13.1B and 7.13.1C are only required because of temporary technical issues, and not because of delays in collecting the relevant information.

To achieve the required outcomes:

- clauses 7.13.F, 7.13.1G and 7.13.1H are deleted;
- clause 7.13.1G is reinserted as clause 7.13.1F to improve the logical flow of the clauses;
- a new clause 7.13.1G specifies the publication requirements relating to DSP Pre-Dispatch Schedules and DSP Week-Ahead Schedules;
- new clause 7.13.1H requires the publication of DSP Dispatch Instructions;
- new clause 7.13.1I allows AEMO, where it is prevented by a temporary technical issue from publishing data on the WEM Website under clauses 7.13.1, 7.13.1A, 7.13.1B, 7.13.1C, 7.13.1G or 7.13.1H, to delay the publication of the data on the WEM Website by up to two Business Days;
- new clause 7.13.1J allows for a two Business Day extension for publications under clauses 7.13.1E and (as renumbered) 7.13.1F; and
- clause 7.13.1H is reinserted as clause 7.13.1K, and amended to replace the reference to clause 7.13.1G(a) to reflect the renumbering of clause 7.13.1G.

~~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.~~

7.13.1F. AEMO must prepare and publish on the WEM Website, for each Trading Interval and Dispatch Interval of a Trading Day, by noon on the first Business Day following the day on which the Trading Day ends:

- (a) an estimate of the total quantity of energy not served (in MWh) due to involuntary load shedding (manual and automatic); and
- (b) an estimate of the change in Withdrawal (in MWh) of any Interruptible Loads in the provision of Contingency Reserve Raise.

7.13.1G. AEMO must make available to Market Participants and publish on the WEM Website, for each Dispatch Interval of each DSP Pre-Dispatch Schedule or DSP Week-Ahead Schedule, within 30 minutes of determining that DSP Schedule, the following information:

- (a) for each Demand Side Programme:
 - i. DSP Unconstrained Withdrawal Quantity;
 - ii. DSP Constrained Withdrawal Quantity;
 - iii. estimated Relevant Demand;
 - iv. estimated sum of the Minimum Consumption of each Associated Load of the Demand Side Programme;
 - v. estimated Reserve Capacity Obligation Quantity;
 - vi. DSP Forecast Capacity; and
 - vii. DSP Forecast Reduction;
- (b) the sum of the DSP Forecast Capacities of each Demand Side Programme; and
- (c) the sum of the DSP Forecast Reductions of each Demand Side Programme.

7.13.1H. Within five minutes of each time AEMO issues a Dispatch Instruction to a Demand Side Programme, AEMO must make available to Market Participants and publish on the WEM Website the details of that Dispatch Instruction.

7.13.1I. If AEMO is prevented by a temporary technical issue from publishing data on the WEM Website under clauses 7.13.1, 7.13.1A, 7.13.1B, 7.13.1C, 7.13.1G or 7.13.1H, AEMO may delay the publication of the data on the WEM Website by up to two Business Days.

7.13.1J. If AEMO is prevented from completing the relevant processes that enable the recording of the data described in clauses 7.13.1E or 7.13.1F, AEMO may delay

the preparation and publication of the data on the WEM Website by up to two Business Days.

7.13.1K. AEMO may, if it reasonably considers it is required in order to estimate, or support AEMO's estimate of, the quantity referred to in clause 7.13.1F(a), request information from Rule Participants in respect to any involuntary load shedding. A Rule Participant must comply with a request under this clause 7.13.1K within the time specified in the request.

7.13.2. Where AEMO is required to develop estimates under clause 7.13.6, AEMO must publish those estimates as soon as practicable after the date specified in clause 4.1.11.

7.13.3. AEMO must document in a WEM Procedure the procedure to be followed by Rule Participants in providing settlement and monitoring data to AEMO.

7.13.4. AEMO must maintain SCADA data by Registered Facility and the Operational System Load Estimate.

Explanatory Note

Clause 7.13.5 is amended to reflect the simpler dispatch arrangements proposed for Demand Side Programmes and the removal of the need to account for ramp rates when determining the requested quantity of reduction.

Due to the increased simplicity, the quantity will be provided as a MW value and the requirement for AEMO to develop a WEM Procedure has been removed.

~~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).~~

7.13.5. AEMO must, for the purposes of clauses 7.13.1E(d) and 4.26.2D, calculate, for each Demand Side Programme for each Trading Interval, the quantity, in MW, by which the Facility was requested by the applicable Dispatch Instruction to curtail

the absolute value of its Withdrawal during that Trading Interval, where the quantity:

- (a) must be measured as a requested decrease from the Facility's Relevant Demand (and so must not include any quantity above the Relevant Demand); and
- (b) must not take account of the Facility's actual performance in response to the Dispatch Instruction.

Explanatory Note

Clause 7.13.6 is amended to account for situations where a Network limitation means that a Facility would not have been able to send out any energy regardless of what Dispatch Instruction it was issued by AEMO.

7.13.6. Where an estimate is required to support the Relevant Level Methodology for a Registered Facility that:

- (a) contains an Intermittent Generating System; or
- (b) is a Non-Scheduled Facility,

AEMO must estimate, for the Intermittent Generating System or Non-Scheduled Facility, for each Trading Interval, the maximum quantity of sent out energy in MWh which the Intermittent Generating System or Non-Scheduled Facility could have potentially generated in the Trading Interval had ~~AEMO issued a Dispatch Instruction that did not restrict~~ the output of the Registered Facility associated with the Intermittent Generating System or the Non-Scheduled Facility not been restricted by a Dispatch Instruction or Network limitation during that Trading Interval, in accordance with the WEM Procedure referred to in clause 7.13.8.

7.13.7. If AEMO reasonably believes that the estimate determined under clause 7.13.6 was incorrect, it must revise the estimate for use in the Relevant Level Methodology.

Explanatory Note

Clause 7.13.8 is amended to clarify that AEMO will actually use the methods it specifies in the WEM Procedure to determine estimates under clause 7.13.6.

Clause 7.13.8 is also amended to use standard clause reference terminology.

7.13.8. AEMO must develop a WEM Procedure specifying:

- (a) ~~one or more methods that may be used~~ the methods that AEMO will use to determine estimates under clause 7.13.6;
- (b) the process for revising an estimate under clause 7.13.7; and
- (c) the information that a Market Participant must provide to AEMO for each of the Market Participant's Registered Facilities to support the preparation of estimates under clauses 7.13.6 and ~~clause~~ 7.13.7.

Explanatory Note

The heading above Section 7.13A is amended to make it relevant to that section.

Determination and Publication of RoCoF Upper Limit Not In-Service Capacity

7.13A. Not In-Service Capacity

7.13A.1. AEMO must determine the Not In-Service Capacity for each Scheduled Facility or Semi-Scheduled Facility f for which a Market Participant holds Capacity Credits, in the Dispatch Interval DI as either:

- (a) where AEMO has directed a Registered Facility to offer its capacity as In Service:

$$\text{NISCap}(f,DI) = \text{Max}(0, \text{Min}(\text{RCOQ}(f,DI), \text{ReqDispEnergy}(f,DI)) - \text{Max}(\text{ISSDCEnergy}(f,DI), \text{ISDispEnergy}(f,DI))$$

or

- (b) otherwise:

$$\text{NISCap}(f,DI) = \text{Max}(0, \text{Min}(\text{RCOQ}(f,DI), \text{EstDispEnergy}(f,DI)) - \text{Max}(\text{ISSDCEnergy}(f,DI), \text{ISDispEnergy}(f,DI))$$

where:

- i. $\text{NISCap}(f,DI)$ is the Not In-Service Capacity quantity for the relevant Facility f in Dispatch Interval DI ;
- ii. $\text{EstDispEnergy}(f,DI)$ is the quantity of estimated energy dispatch immediately prior to the Start Decision Cutoff time for the relevant Facility f in Dispatch Interval DI , calculated in accordance with clause 7.13A.2;
- iii. $\text{ISSDCEnergy}(f,DI)$ is the quantity of In-Service Capacity offered immediately after the Start Decision Cutoff time for the relevant Facility f in Dispatch Interval DI , calculated in accordance with clause 7.13A.3;
- iv. $\text{ISDispEnergy}(f,DI)$ is the total MW quantity of In-Service Capacity for the relevant Facility f included in the Real-Time Market Offers for energy that were used to formulate Dispatch Instructions and calculate Market Clearing Prices for Dispatch Interval DI ; and
- v. $\text{ReqDispEnergy}(f,DI)$ is the quantity of In-Service Capacity for the relevant Facility f required by AEMO in Dispatch Interval DI .

Explanatory Note

Clauses 7.13A.2 and 7.13A.3 are amended to reflect the restructure of clause 7.4.40(g).

7.13A.2. $EstDispEnergy(f, DI)$ for each Scheduled Facility or Semi-Scheduled Facility f in Dispatch Interval DI is determined from the most recent Market Schedule published before the Start Decision Cutoff from the Price-Quantity Pair for Injection for the relevant Facility f with the longest minimum time to synchronise, as specified in clause ~~7.4.40(g)(vi)~~ 7.4.40(g)(i)(3), as applicable:

- (a) where at least one Dispatch Schedule has been published that contains Dispatch Interval DI within a Trading Interval, the total MW quantity of energy scheduled for dispatch in the Dispatch Interval DI for the relevant Facility f determined in the Reference Scenario of the Dispatch Schedule; or
- (b) where at least one Pre-Dispatch Schedule has been published that contains Dispatch Interval DI within a Trading Interval, then the total MW quantity of energy scheduled for dispatch in the Trading Interval for the relevant Facility f determined in the Reference Scenario of the Pre-Dispatch Schedule; or
- (c) where at least one Week-Ahead Schedule has been published that contains Dispatch Interval DI within a Trading Interval, then the total MW quantity of energy scheduled for dispatch in the Trading Interval for the relevant Facility f determined in the Reference Scenario of the Week-Ahead Schedule; or
- (d) otherwise, zero.

7.13A.3. $ISSDCEnergy(f,DI)$ for each Scheduled Facility or Semi-Scheduled Facility f in Dispatch Interval DI is determined from the most recent Market Schedule published after the Start Decision Cutoff from the Price-Quantity Pair for Injection for the relevant Facility f with the longest minimum time to synchronise, as specified in clause ~~7.4.40(g)(vi)~~ 7.4.40(g)(i)(3), as applicable:

- (a) where at least one Dispatch Schedule has been published that contains Dispatch Interval DI within a Trading Interval, the total MW quantity of In-Service Capacity included in the Real-Time Market Submission for energy from the relevant Facility f in the Dispatch Interval DI ; or
- (b) where at least one Pre-Dispatch Schedule has been published that contains Dispatch Interval DI within a Trading Interval, the total MW quantity of In-Service Capacity included in the Real-Time Market Submission for energy from the relevant Facility f in the Trading Interval; or
- (c) where at least one Week-Ahead Schedule has been published that contains Dispatch Interval DI within a Trading Interval, the total MW quantity of In-Service Capacity included in the Real-Time Market Submission for energy from the relevant Facility f in the Trading Interval; or
- (d) otherwise, zero.

Congestion Rental

7.14. Calculation of Congestion Rental

Explanatory Note

Clause 7.14.1 is amended to clarify the relevant Facility Classes and remove unnecessary cross references.

- 7.14.1. AEMO must calculate for each ~~Registered Facility~~ Scheduled Facility or Semi-Scheduled Facility and each Dispatch Interval of a Trading Day, the Congestion Rental in respect of the full set of Network Constraints. 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) ConstraintCoefficient(f,n,DI) is the coefficient of Registered Facility f in respect of the cleared energy quantity of Registered Facility f in Network Constraint n in Dispatch Interval DI;
- (b) MarginalConstraintValue(n,DI) is the marginal value of Network Constraint n in Dispatch Interval DI ~~as provided under clause 7.13.1E(e)/ section 9.4~~; and
- (c) n ∈ N denotes all Network Constraints applied in Dispatch Interval DI.

...

8.6. Format of Meter Data Submissions

...

Explanatory Note

Clause 8.6.2(b) is amended to add a full stop at the end of the clause.

- 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.

...

Explanatory Note

Clause 9.5.7 is amended to:

- specify the exclusion of Facilities with a positive Metered Schedule in the Trading Interval through the Consumption Contributing Quantity calculation instead of the definition of “f_{εp}”; and
- clarify which Facilities are included in the calculation.

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:

$$\text{ConsumptionContributingQuantity}(p,t) = \sum_{f \in p} \text{MeteredSchedule}(f,t)$$

$$\text{ConsumptionContributingQuantity}(p,t) = \sum_{f \in p} \min(0, \text{MeteredSchedule}(f,t))$$

where:

- f_{εp} denotes all facilities including Non-Dispatchable Loads Scheduled Facilities, Semi-Scheduled Facilities, Non-Scheduled Facilities and Non-Dispatchable Loads registered to or associated with Market Participant p (including Synergy’s Notional Wholesale Meter where Synergy is Market Participant p) in Trading Interval t ~~that have a negative Metered Schedule in Trading Interval t;~~
- 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.

...

9.6. Settlement Calculations - Net Settlement Amount

...

Explanatory Note

Clause 9.6.3 is amended to use the correct term “MPF_SA(p,d)” in the equation.

9.6.3. The net settlement amount for AEMO to Rule Participant p for Trading Day d is:

$$\text{Net_SA}(p,d) = \text{STEM_SA}(p,d) + \text{RC_SA}(p,d) + \text{RTE_SA}(p,d) +$$

$$\text{ESS_SA}(p,d) + \text{OC_SA}(p,d) + \text{MFP_SA}(p,d)$$

$$\text{Net_SA}(p,d) = \text{STEM_SA}(p,d) + \text{RC_SA}(p,d) + \text{RTE_SA}(p,d) +$$

$$\text{ESS_SA}(p,d) + \text{OC_SA}(p,d) + \text{MPF_SA}(p,d)$$

where:

- 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;
- 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.

...

9.8. Settlement Calculations - Reserve Capacity

...

Explanatory Note

Section 9.8.2 is amended to replace "RCSA(p,d)" with "RC_SA(p,d)" for consistency with the term used in clause 9.6.3.

9.8.2. The Reserve Capacity settlement amount for Market Participant p for Trading Day d is:

$$\del{RCSA(p,d)}$$

$$RC_SA(p,d)$$

$$= Capacity_Provider_Payment(p,d) - Capacity_Purchaser_Payment(p,d)$$

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.

...

Explanatory Note

Clause 9.10.7 is amended to clarify that the calculation only includes Registered Facilities.

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 Registered Facility f in Dispatch Interval DI calculated in accordance with clause 9.10.6; and
- (b) f∈Facilities denotes all Registered Facilities f.

...

Explanatory Note

Clause 9.10.11(b) is amended to clarify that the calculation only includes Registered Facilities.

9.10.11. The total cost of procuring Contingency Reserve Lower in Trading Interval t is:

$$CL_Payable(t) = \sum_{f \in \text{Facilities}} CL_Payable(f,t)$$

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; and
- (b) f∈Facilities denotes all Registered Facilities f.

...

Explanatory Note

Clause 9.10.15 is amended to clarify that the calculation only includes Registered Facilities.

9.10.15. The cost of procuring RoCoF Control Service in Dispatch Interval DI is:

$$RCS_Payable(DI) = \sum_{f \in \text{Facilities}} RCS_Payable(f,DI)$$

where:

- (a) RCS_Payable(f,DI) is the RoCoF Control Service amount payable for ~~facility~~ Registered Facility f in Dispatch Interval DI as calculated in accordance with clause 9.10.14; and
- (b) f∈Facilities denotes all Registered Facilities f.

...

Explanatory Note

Clause 9.10.24 is amended to clarify that the calculation only includes Registered Facilities.

9.10.24. The total cost of procuring Regulation in Trading Interval t is:

$$Regulation_Payable(t) = \sum_{f \in \text{Facilities}} Regulation_Payable(f,t)$$

where:

- (a) Regulation_Payable(f,t) is the Regulation amount payable for Registered Facility f in Trading Interval t as calculated in accordance with clause 9.10.21; and
- (b) f∈Facilities denotes all Registered Facilities f.

...

Explanatory Note

Clause 9.10.26(a) is amended to remove the payment calculation option specified in clause 9.10.26(a)(ii), which will not be used for System Restart Service Contracts.

9.10.26. The System Restart Services amount payable to Market Participant p for System Restart Services in Trading Interval t is:

$$\text{SRS_Payable}(p,t) = \sum_{c \in \text{cEP}} \text{SRS_Payable}(c,t)$$

where:

- (a) SRS_Payable(c,t) is: the applicable dollar amount payable to Market Participant p in Trading Interval t for System Restart Services under each relevant System Restart Service Contract to which Market Participant p is a counterparty; and
 - ~~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) cEP denotes all System Restart Service Contracts to which Market Participant p is a counterparty.

...

Explanatory Note

Sections 9.12 and 9.13 are amended to account for changes to the WEM governance arrangements that commenced on 1 July 2021.

Clauses 9.12.2, 9.12.3, 9.12.4, 9.12.4A, 9.13.2, 9.13.3 and 9.13.4 are also amended to apply negative signs to charges and recoverable amounts consistently with their application in other settlement clauses (i.e. at the 'highest level variable').

9.12. **Settlement Calculations - Market Participant Market Fees, Market Participant Coordinator Fees and Market Participant Regulator Fees**

9.12.1. AEMO must calculate for each Market Participant the Market Participant fee settlement amount for a Trading Day.

9.12.2. The applicable Market Participant fee settlement amount for Market Participant p for Trading Day d is:

$$\text{MPF_SA}(p,d) = \text{MPMF_SA}(p,d) + \text{MPRF_SA}(p,d)$$

$$\text{MPF_SA}(p,d) = - \text{MPMF_SA}(p,d) - \text{MPRF_SA}(p,d) - \text{MPCF_SA}(p,d)$$

where:

(a) MPMF_SA(p,d) is the Market Participant Market Fees settlement amount for Market Participant p for Trading Day d calculated in accordance with clause 9.12.3; ~~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; and

(c) MPCF_SA(p,d) is the Market Participant Coordinator Fees settlement amount for Market Participant p for Trading Day d calculated in accordance with clause 9.12.4A.

9.12.3. The Market Participant Market Fees settlement amount for Market Participant p for Trading Day d is:

$$\text{MPMF_SA}(p,d) = - \text{MarketFeeRate}(d) \times \text{ParticipantContribution}(p,d)$$

$$\text{MPMF_SA}(p,d) = \text{MarketFeeRate}(d) \times \text{ParticipantContribution}(p,d)$$

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:

$$\text{MPRF_SA}(p,d) = - \text{RegulatorFeeRate}(d) \times \text{ParticipantContribution}(p,d)$$

$$\text{MPRF_SA}(p,d) = \text{RegulatorFeeRate}(d) \times \text{ParticipantContribution}(p,d)$$

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.

9.12.4A. The Market Participant Coordinator Fees settlement amount for Market Participant p for Trading Day d is:

~~$$\text{MPCF_SA}(p,d) = \text{CoordinatorFeeRate}(d) \times \text{ParticipantContribution}(p,d)$$~~

$$\text{MPCF_SA}(p,d) = \text{CoordinatorFeeRate}(d) \times \text{ParticipantContribution}(p,d)$$

where:

- (a) CoordinatorFeeRate(d) is the charge per MWh for funding the Coordinator's activities with respect to the Wholesale Electricity Market and other functions under these WEM Rules and the Regulations determined as the Market Participant Coordinator Fee rate in accordance with clause 2.24.2 for the year in which Trading Day d falls; and
- (b) ParticipantContribution(p,d) is calculated in accordance with clause 9.12.5.

9.12.5. The Participant Contribution for Market Participant p in Trading Day d is:

$$\text{ParticipantContribution}(p,d) = \sum_{t \in d} \sum_{f \in p} |\text{MeteredSchedule}(f,t)|$$

where:

- (a) MeteredSchedule(f,t) is the Metered Schedule for facility f in Trading Interval t;
- (b) $t \in d$ denotes all Trading Intervals t in Trading Day d; and
- (c) $f \in p$ denotes all Registered Facilities f registered to Market Participant p and all Non-Dispatchable Loads associated with Market Participant p (including Synergy's Notional Wholesale Meter where Synergy is Market Participant p calculated in accordance with clause 9.5.3).

9.13. Settlement Calculations - Service Fees

9.13.1. AEMO must determine a Service Fee Settlement Amount for a Trading Day payable to AEMO to the Coordinator and to the Economic Regulation Authority.

9.13.2. The Service Fee Settlement Amount payable to AEMO for Trading Day d is:

~~$$\text{SFMF_SA}(d) = \sum_{p \in P} \text{MPMF_SA}(p,d)$$~~

$$\text{SFMF_SA}(d) = \sum_{p \in P} \text{MPMF_SA}(p,d)$$

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:

~~$$SFRF_SA(d) = \sum_{p \in P} MPRF_SA(p,d)$$~~

~~$$SFRF_SA(d) = \sum_{p \in P} MPRF_SA(p,d)$$~~

where:

- (a) MPRF_SA(p,d) is the Market Participant Regulator Fees settlement amount for Market Participant p for Trading Day d as calculated in clause 9.12.4; and
- (b) p ∈ P denotes all Market Participants.

9.13.4 The Service Fee Settlement Amount payable to the Coordinator for Trading Day d is:

~~$$SFCF_SA(d) = \sum_{p \in P} MPCF_SA(p,d)$$~~

~~$$SFCF_SA(d) = \sum_{p \in P} MPCF_SA(p,d)$$~~

where:

- (a) MPCF_SA(p,d) is the Market Participant Coordinator Fees settlement amount for Market Participant p for Trading Day d as calculated in clause 9.12.4A; and
- (b) p ∈ P denotes all Market Participants.

...

9.15. Adjustment Process

...

Explanatory Note

New clauses 9.15.8 and 9.15.9 give effect to the proposed process, outlined in the explanatory note for sections 2.24 and 2.25, for paying back Market Participant Regulator Fees and Market Participant Coordinator Fees as a result of a settlement Adjustment Process.

...

9.15.8. Where, for an Adjustment Process, the Service Fee Settlement Amount payable to the Economic Regulation Authority under clause 9.13.3 based on the adjusted Market Participant Regulator Fees settlement amounts is less than the Service Fee Settlement Amount payable to the Economic Regulation Authority under clause 9.13.3 for the last Settlement Statement for that period, AEMO must pay the difference from the fund established under clause 9.18.9 and recover the payment from the Economic Regulation Authority in accordance with clause 2.25.3(b).

9.15.9. Where, for an Adjustment Process, the Service Fee Settlement Amount payable to the Coordinator under clause 9.13.4 based on the adjusted Market Participant Coordinator Fees settlement amounts is less than the Service Fee Settlement Amount payable to the Coordinator under clause 9.13.4 for the last Settlement Statement for that period, AEMO must pay the difference from the fund established under clause 9.18.9 and recover the payment from the Coordinator in accordance with clause 2.25.3(c).

...

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.

Explanatory Note

Clause 9.20.2(b) is amended and new clauses 9.20.2A to 9.20.2C are introduced to enable AEMO to disgorge, repay or pay a Repaid Amount and recover the payment from Market Participants through a levy similar in design to the current Default Levy.

The defined term Repaid Amount Levy is introduced in the Glossary.

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.~~ raise a Repaid Amount Levy from all Market Participants (other than from Market Participants with unrecovered Payment Defaults) to recover the remainder of the Repaid Amount. AEMO will determine the amount to be paid by each Market Participant, having regard to the absolute value of the MWh of generation or consumption,

determined in accordance with the Metered Schedules, for each Market Participant for Trading Intervals during the most recent Trading Week for which Settlement Statements have been issued, as a proportion of the total of those values for all Market Participants (other than Market Participants with unrecovered Payment Defaults).

9.20.2A. AEMO must notify each relevant Market Participant of the amount it must pay in respect of the Repaid Amount Levy as determined in accordance with clause 9.20.2(b) within six Business Days of AEMO being notified of its requirement to provide the Repaid Amount under clause 9.20.2.

9.20.2B. A Market Participant must pay the full amount notified by AEMO under clause 9.20.2A to AEMO (in cleared funds) by 10:00 AM on the second Business Day after being notified by AEMO under clause 9.20.2A, whether or not it disputes the amount notified.

9.20.2C. By the end of the second month following the end of a Financial Year, AEMO must re-allocate any Repaid Amount Levies raised during that Financial Year as follows:

- (a) AEMO will determine the sum of the Repaid Amount Levies raised by AEMO during the Financial Year;
- (b) AEMO will determine the aggregate Repaid Amount Levy amount which should have been paid by each Market Participant, having regard to the absolute value of the MWh of generation or consumption, as determined in accordance with the Metered Schedules for each Market Participant excluding Market Participants with unrecovered Payment Defaults) for Trading Intervals during the Financial Year as a proportion of the total of those values for all these Market Participants;
- (c) AEMO must compare the amount determined for the Market Participant under clause 9.20.2C(b) with the total of the amounts which the Market Participant actually paid under clause 9.20.2B;
- (d) AEMO must determine an appropriate adjustment to put each Market Participant in the position it would have been in had it paid the amount determined under clause 9.20.2C(b) instead of the amounts actually paid under clause 9.20.2B; and
- (e) AEMO must include that adjustment in the Settlement Statement for the most recently completed Trading Week.

Explanatory Note

Clause 9.20.3 is amended to give effect to the proposed process, outlined in the explanatory note for sections 2.24 and 2.25, for paying back Market Participant Regulator Fees and Market Participant Coordinator Fees as a result of a settlement Adjustment Process.

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, including any

payments from AEMO on behalf of the Economic Regulation Authority under clause 9.15.8 and the Coordinator under clauses 9.15.9 (“**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.

Explanatory Note

9.20.4(a)(iii) is deleted because the amendments to clause 9.20.2 and the introduction of clauses 9.20.2A to 9.20.2C facilitate payment of a Repaid Amount.

9.20.4. AEMO must apply the Total Amount as follows.

(a) First, AEMO must apply the Total Amount to satisfy:

- i. payment of Service Fee Settlement Amounts to AEMO, the Economic Regulation Authority and the Coordinator (including as contemplated by clause 9.18.10); and
- ii. payments which AEMO is required to make under Supplementary Capacity Contracts or to a provider of a System Restart Contract with AEMO, up to a maximum for any party of the net amount which, if sufficient funds were available, would be payable to that party; ~~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).

...

Explanatory Note

Clause 9.20.11(b) is been amended to change a reference from Rule Participant to Market Participants because only Market Participants pay Default Levies.

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 Market~~ Participant (excluding Market Participants with unrecovered Payment Defaults) for Trading Intervals during the Financial Year as a proportion of the total of those values for all these Market Participants;
- (c) AEMO must compare the amount determined for the Market Participant under clause 9.20.11(b) with the total of the amounts which the Market Participant actually paid under clause 9.20.8;
- (d) AEMO must determine an appropriate adjustment to put each Market Participant in the position it would have been in had it paid the amount determined under clause 9.20.11(b) instead of the amounts actually paid under clause 9.20.8; and
- (e) AEMO must include that adjustment in the Settlement Statement for the most recently completed Trading Week.

...

10 Market Information

Information Policy

10.1. Record Retention

Explanatory Note

AEMO will no longer be required to maintain a list of Market Information and documents that Rule Participants must retain. It is each Rule Participant's responsibility to retain Market Information for seven years or longer if required by law. For example, the Coordinator is required under the State Government's record management policy to retain all business information for seven years.

~~10.1.1. AEMO must develop and publish a list of all information and documents that relate to the Wholesale Electricity Market activities that Rule Participants must retain.~~

~~10.1.2. Effective from the date that AEMO publishes a list containing the relevant information or document, Rule Participants must retain any information or documents of that kind for a period of seven years from the date it is created, or such longer period as may be required by law.~~

10.1.1. Rule Participants, the Coordinator and the Economic Regulation Authority must retain any information or documents that are required to be collected, produced or exchanged under these WEM Rules or the WEM Procedures for a period of seven years from the date it is created, or such longer period as may be required by law.

10.2. Information Confidentiality Status

Explanatory Note

Under the revised Market Information framework, neither AEMO nor the Coordinator will be required to create and maintain a list outlining the confidentiality status of each type of Market Information. Rather, the WEM Rules will contain a list of principles that will guide the classification of Market Information (that is, information required to be produced, collected or exchanged under the WEM Rules or WEM Procedures). The WEM Rules will continue to set out which type of information must be published, and in limited circumstances may specify that information is public or confidential.

There will only be two categories of Market Information, Public Information and Confidential Information, and the classes under clause 10.2.2 are reduced to reflect this. Instead section 10.4 sets out how Confidential Information may be disclosed.

It will be the responsibility of the Information Manager (in the first instance) to determine the status of information. The Information Manager can only be the Coordinator, the ERA, AEMO or a Network Operator, and within this framework will either be the party that collects or the party that produces the Market Information. That party to whom the Market Information belongs (known as the Information Provider) will be able to provide their view to the Information Manager to inform the assessment of confidentiality, however it will be solely up to the Information Manager to make this decision

The Coordinator will be available to resolve any disputes about confidentiality or to provide advice to the Information Manager if requested. The WEM Rules will allow for the Coordinator to publish a procedure with information about assessing confidentiality, as this may be desirable to improve transparency and consistency in decision making across different Information Managers.

The intent of the drafting is that the same 'type' of information, (i.e. information submitted under a certain section, clause or sub-clause of the WEM Rules) maintains the same confidentiality status over time. It seeks to avoid a type of Market Information being treated as Confidential Information as it relates to one Rule Participant, but Public Information as it relates to another Rule Participant, or differently over time.

~~10.2.1. The Coordinator must, in accordance with the WEM Rules and WEM Procedures, determine the confidentiality status for each type of market related information and document produced or exchanged in accordance with the WEM Rules or WEM Procedures.~~

10.2.1. An Information Manager must, in accordance with the WEM Rules and WEM Procedures, determine the confidentiality status for each type of Market Information it is responsible for under clause 10.2.12.

10.2.1A. No confidentiality status will be given to information, documents or data provided to AEMO, Western Power, the Coordinator or the Economic Regulation Authority if that information is not Market Information.

10.2.2. The classes of confidentiality status are:

- (a) Public Information, in which case the ~~relevant information or documents~~ Market Information may be made available to any person by any person; and
- (b) ~~[Blank]~~Confidential Information, in which case the Market Information may only be disclosed in accordance with clauses 10.4.4 and 10.4.19.
- ~~(c) Rule Participant Market Restricted, in which case the relevant information or documents may only be made available to:~~
 - ~~i. a specific Rule Participant;~~
 - ~~ii. [Blank]~~
 - ~~iiA. AEMO;~~
 - ~~iiB. [Blank]~~
 - ~~iiC. the Coordinator;~~
 - ~~iii. the Electricity Review Board;~~
 - ~~iv. the Economic Regulation Authority; and~~
 - ~~v. other Regulatory or Government Agencies in accordance with applicable laws;~~
- ~~(d) Rule Participant Dispatch Restricted, in which case the relevant information or documents may only be made available to:~~
 - ~~i. a specific Rule Participant;~~
 - ~~ii. [Blank]~~
 - ~~iiA. a Delegate (but only to the extent necessary for it to carry out the delegated functions);~~
 - ~~iii. [Blank]~~
 - ~~iiiA. AEMO;~~
 - ~~iiiB. the Coordinator;~~
 - ~~iv. the Electricity Review Board;~~
 - ~~v. the Economic Regulation Authority; and~~
 - ~~vi. other Regulatory or Government Agencies in accordance with applicable laws;~~
- ~~(e) System Operation Confidential, in which case the relevant information or documents may only be made available to:~~
 - ~~i. AEMO;~~

- ~~iA. a Delegate (but only to the extent necessary for it to carry out the delegated functions);~~
 - ~~ii. [Blank]~~
 - ~~iiA. the Coordinator;~~
 - ~~iii. the Electricity Review Board;~~
 - ~~iv. the Economic Regulation Authority; and~~
 - ~~v. other Regulatory or Government Agencies in accordance with applicable laws;~~
- ~~(f) AEMO Confidential, in which case the relevant information or documents may only be made available to:~~
 - ~~i. [Blank]~~
 - ~~ii. the Electricity Review Board;~~
 - ~~iiA. AEMO;~~
 - ~~iiB. the Coordinator;~~
 - ~~iii. the Economic Regulation Authority; and~~
 - ~~iv. other Regulatory or Government Agencies in accordance with applicable laws;~~
- ~~(g) Rule Participant Network Restricted, in which case the relevant information or documents may only be made available to:~~
 - ~~i. a specific Rule Participant;~~
 - ~~ii. a relevant Network Operator;~~
 - ~~iii. AEMO;~~
 - ~~iiiA. a Delegate (but only to the extent necessary for it to carry out the delegated functions);~~
 - ~~iv. [Blank]~~
 - ~~ivA. the Coordinator;~~
 - ~~v. the Electricity Review Board;~~
 - ~~vi. the Economic Regulation Authority; and~~
 - ~~vii. any other Regulatory or Government Agencies in accordance with applicable laws; and~~
- ~~(h) Coordinator Restricted, in which case the relevant information or documents may only be made available with the Coordinator's written consent.~~

~~10.2.3. In determining the confidentiality status of a type of market related information or document under clause 10.2.1, subject to clauses 10.3.2B and 10.3.2BA, the Coordinator must have regard to the following principles:~~

- ~~(a) — information that discloses the price of electricity, capacity or any related service, equipment, or plant, or commercially sensitive or potentially defamatory information pertaining to a Rule Participant is not made public or revealed to other Rule Participants except in accordance with legal requirements or requirements of these WEM Rules;~~
- ~~(b) — subject to clause 10.2.3(a), Rule Participants are to have access to information pertaining to current and expected future conditions of the power system that may impact on their ability to trade, deliver, or consume energy;~~
- ~~(c) — the Coordinator may restrict the availability of information to a person where this is required by law, or these WEM Rules;~~
- ~~(d) — the Coordinator may declare incomplete working documents to be Confidential;~~
- ~~(e) — subject to this clause 10.2.3, the confidentiality status must seek to maximise the number of parties that may view the information or document;~~
- ~~(f) — information already in the public domain, other than by reason of a breach of existing confidentiality obligations, has a confidentiality status of Public;~~
- ~~(g) — information already known to a person, other than by reason of a breach of existing confidentiality obligations, is available to that person;~~
- ~~(h) — information that would otherwise be confidential may be disclosed to the extent that the Coordinator is satisfied its disclosure is with the consent of the party to whom the information is confidential; and~~
- ~~(i) — information that may be aggregated or provided in a form that does not disclose material that would otherwise be confidential, is to be Public.~~

~~10.2.3A. The Coordinator, AEMO, the Economic Regulation Authority or a Network Operator may make available to any person information if the Coordinator, AEMO, the Economic Regulation Authority or the Network Operator, as applicable, are required to do so by law or these WEM Rules.~~

~~10.2.4 — Subject to clauses 10.2.5, 10.2.6 and 10.4.1, a Rule Participant must not provide information or documents of a given confidentiality status to any person.~~

~~10.2.5. — clause 10.2.4 does not apply to information or documents:~~

- ~~(a) — that, other than as a result of a breach of confidentiality obligations, is or becomes available in the public domain;~~
- ~~(b) — that, other than as a result of a breach of confidentiality obligations, is or becomes known to a person receiving it;~~
- ~~(c) — required to be provided by law or a stock exchange having jurisdiction over the Rule Participant~~
- ~~(d) — required in connection with resolving a legal dispute; or~~

~~(e) that would otherwise be confidential, where the Coordinator is satisfied disclosure is with the consent of the party to whom the information is confidential.~~

~~10.2.6. A Rule Participant may disclose information or a document to:~~

~~(a) any person (including another Rule Participant) where the confidentiality status of the information or document is set as Public by the Coordinator under clause 10.2.1;~~

~~(b) [Blank]~~

~~(c) the specific Rule Participant able to receive the information or document in accordance with the confidentiality status, where the confidentiality status of the information or document is set as either Rule Participant Market Restricted or Rule Participant Dispatch Restricted by the Coordinator under clause 10.2.1; or~~

~~(d) a Representative of the Rule Participant or a Representative of any person able to receive the information or document under clauses 10.2.6(a), 10.2.6(b) or 10.2.6(c).~~

~~10.2.7. The Coordinator must document in a WEM Procedure the process it follows in determining the confidentiality status of information in section 10.2.~~

10.2.3. Subject to clauses 10.2.4 and 10.2.5, an Information Manager must classify Market Information as confidential if it:

(a) is contained in a bilateral contract;

(b) could, in the reasonable opinion of the Information Manager, pose a material risk to Power System Security or Power System Reliability if released;

(c) relates to:

i. the Generator Register established and maintained by a Network Operator in accordance with clause 3A.7.1;

ii. a Generator Monitoring Plan agreed under section 3A.6; or

iii. other information about the technical parameters of a Facility that is not otherwise available in the public domain;

(d) reveals personal details about an individual;

(e) may, in the reasonable opinion of the Information Manager (or Coordinator in the case of a dispute under section 10.5), cause commercial detriment to a Rule Participant or another person if released; or

(f) is otherwise specified as Confidential Information under these WEM Rules.

10.2.4. Market Information must be classified as Public Information if it is:

(a) specified as Public Information under these WEM Rules;

- (b) required to be published or otherwise released under these WEM Rules; or
- (c) available in the public domain, other than where Market Information of this type has been made available by reason of a breach.
- 10.2.5. Clause 10.2.3 does not prevent the release or publication of Market Information if it can be aggregated or combined with other data such that it does not reveal any Confidential Information.
- 10.2.6. Each time Market Information is created or modified as a result of Amending Rules, the Coordinator may determine that that Market Information should be specified as Confidential Information or Public Information in the WEM Rules.
- 10.2.7. A Rule Participant may make a submission to an Information Manager about which types of Market Information it considers to be Confidential Information, and the rationale for classifying the Market Information as Confidential Information against the principles in clause 10.2.3, unless the confidentiality status is specified in clause 10.2.4 or is otherwise specified in these WEM Rules.
- 10.2.8. A submission from a Rule Participant made under clause 10.2.7 must be considered by the Information Manager (or the Coordinator in the case of a dispute under section 10.5) when classifying Market Information. However the Information Manager (or Coordinator in the case of a dispute under section 10.5) will not be bound by any submission provided by a Rule Participant in making its decision.
- 10.2.9. Subject to clauses 10.4.4 and 10.4.19, and unless otherwise required by these WEM Rules, an Information Manager or Rule Participant must not provide Confidential Information to any person.
- 10.2.10. The Coordinator may document in a WEM Procedure guidance for Information Managers to assist with determining the confidentiality status of Market Information in accordance with clause 10.2.3.

Explanatory Note

The intent is that the Information Manager is the party that Market Information is delivered to in the first instance. It is expected that in the majority of cases that this will be AEMO but that in any case it can only be AEMO, a Network Operator, the Coordinator or the ERA – i.e. a Market Participant cannot be an Information Manager.

Given that Market Information is not always delivered to a party (i.e. sometimes AEMO or Western Power may produce their own Market Information), clause 10.2.12 sets out a hierarchy to guide Rule Participants and other interested parties on who the Information Manager for a particular type of Market Information is (as there cannot be two Information Managers for one type of Market Information). Given that circumstances may arise where it is unclear which party should take responsibility, clause 10.2.12(c) allows the Coordinator of Energy to make a determination on who the Information Manager is.

10.2.11. Only one party may be the Information Manager for a given type of Market Information, and the Information Manager may only be the Coordinator, AEMO, a Network Operator or the Economic Regulation Authority.

10.2.12. Subject to clause 10.2.11, the Information Manager for a type of Market Information is:

- (a) in the first instance, the party who produces Market Information in accordance with the WEM Rules or the WEM Procedures;
- (b) if clause 10.2.12(a) does not apply, then the party who receives Market Information under the WEM Rules or WEM Procedures; or
- (c) if neither of clauses 10.2.12(a) or 10.2.12(b) apply, or it is unclear who the Information Manager is under clauses 10.2.12(a) or 10.2.12(b) then the Coordinator may determine the Information Manager.

10.3. ~~The WEM Website~~Public website requirements

Explanatory Note

Clause 10.3.1 has been amended to require all parties who may be Information Managers to maintain a website for the purposes of publishing information as required by the WEM Rules and WEM Procedures. Guidance is provided on how long information must be maintained on a website.

~~10.3.1. AEMO must maintain a WEM Website for the purpose of:~~

- ~~(a) providing information on the nature and operation of the market;~~
- ~~(b) providing information on market performance; and~~
- ~~(c) disseminating reports and documents.~~

10.3.1. AEMO, the Coordinator, the Economic Regulation Authority and each Network Operator must maintain a website for the purpose of publishing information as required under the WEM Rules or WEM Procedures.

10.3.2. Subject to clause ~~10.4.2~~ 10.4.7, the Coordinator, AEMO, the Economic Regulation Authority or a Network Operator must not require a fee for information or documents required to be released or published by the Coordinator, AEMO, the Economic Regulation Authority or the Network Operator ~~via the WEM Website, or via AEMO's website, the Coordinator's Website, the Economic Regulation Authority's website or the Network Operator's website~~ in accordance with the WEM Rules or WEM Procedures.

10.3.3. ~~[Blank]~~ Subject to clause 10.3.4, Market Information required to be published must, where practical, be maintained on an Information Manager's website for as long as that Market Information is required to be retained in accordance with clause 10.1.1.

10.3.4. ~~[Blank]~~ Where it is no longer practical or efficient to maintain Market Information on a website in accordance with clause 10.3.3, an Information Manager must retain

the Market Information as required by clause 10.1.1 and make the Market Information available to any person on application.

~~10.3.5. [Blank]~~

10.4. Information to be Released on Application Managing Market Information

Explanatory Note

Section 10.4 outlines how Market Information must be managed, including:

- how Confidential Information must be secured;
- how Market Information can be requested;
- managing the release of Public Information on request; and
- managing the disclosure of Confidential Information on request.

This first subsection outlines general obligations for managing Market Information.

~~10.4.1. AEMO must make information and documents available on application by any person subject to that person being a member of the class of persons able to receive information or documents in accordance with the relevant confidentiality status.~~

~~10.4.2. AEMO may charge a person a fee for providing information or documents provided in accordance with clause 10.4.1, where that fee may not exceed AEMO's costs, not otherwise included in AEMOs budget, of:~~

- ~~(a) collating and transmission of information or documents; and~~
- ~~(b) preparing documents not otherwise required by the WEM Rules, applicable law or regulation.~~

10.4.1. The Coordinator, Economic Regulation Authority and Rule Participants must manage Market Information in accordance with this section 10.4.

10.4.2. An Information Manager or Rule Participant in possession of Confidential Information must:

- (a) take all reasonable measures to protect the Confidential Information from unauthorised use or disclosure;
- (b) use that Confidential Information only to the extent the Information Manager considers reasonably required to perform its functions under sections 2.1A, 2.2A, 2.2C or 2.2D, as applicable; and
- (d) if it is made aware that the Confidential Information has come into its possession erroneously, take reasonable steps to destroy that Confidential Information.

10.4.3. Clause 10.4.2(a) does not prevent the disclosure of information to:

- (a) an employee or officer of the Information Manager or the Rule Participant, or a related body corporate of the Rule Participant, who possesses the Confidential Information; or
- (b) a legal or other professional adviser, auditor or other consultant of the Information Manager or Rule Participant who possesses that Confidential Information, which requires the Market Information for the purposes of the WEM Rules, or for the purpose of advising the Information Manager or Rule Participant.

Explanatory Note

Clause 10.4.4 is intended to ensure that AEMO is not prevented from allowing Rule Participants access to their own data in AEMO's systems (e.g. meter data provided by Western Power to AEMO is available to each Rule Participant as it directly pertains to them).

10.4.4. Despite any other clauses in this Chapter 10, an Information Manager should not be prevented from allowing a Rule Participant access to Market Information that, other than by reason of a breach, is already known to that Rule Participant.

Explanatory Note

Clause 10.4.5 allows an Information Manager to publish a list that demonstrates how they intend to classify Market Information they are responsible for. This list will not be binding, and will not necessarily need to be comprehensive. Rule Participants and other relevant parties will still be able to dispute the classification, proposed release or disclosure under section 10.5 despite any classification on this list.

10.4.5. An Information Manager may, at its discretion, publish a list outlining its proposed classification for each type of Market Information it is responsible for. This classification shall not be binding on the Information Manager or the Coordinator in the case of a dispute under Clause 10.5.

Requesting access to Market Information

Explanatory Note

This subsection outlines how Market Information that is not required by the WEM Rules to be published can be requested by any person, and the fees that the Information Manager can charge.

10.4.6. Where Market Information is not already available in the public domain, any person may request access to that Market Information by submitting a written request to the Information Manager.

10.4.7. Where Market Information is not required to be published or otherwise released in accordance with these WEM Rules or a WEM Procedure, an Information Manager may charge a person a fee for providing Market Information or documents provided in accordance with this section 10.4, where that fee may not exceed the Information Manager's reasonable costs, not otherwise included in its budget, of:

- (a) collation and transmission of information or documents; and

- (b) preparation of documents not otherwise required by these WEM Rules, or other applicable law or regulation.

10.4.8. An Information Manager may not charge the Coordinator, AEMO, the Economic Regulation Authority or Network Operator for Market Information requested in accordance with the WEM Rules.

Managing the release of Public Information

Explanatory Note

The release of Public Information (as deemed by the Information Manager) requires consultation with the Information Provider if the Information Provider has indicated the Market Information is Confidential Information at the time the Market Information was submitted.

The Information Manager is required to justify why their assessment of confidentiality differs from the Information Provider's, and the Information Provider is permitted to lodge a dispute with the Coordinator if they disagree with the assessment by the Information Manager.

10.4.9. If the Information Manager considers that the Market Information requested under clause 10.4.6 is Public Information, it must:

- (a) subject to clause 10.4.10, clause 10.4.16(c) and section 10.5, if it continues to possess the Market Information, it must release the relevant Market Information to the requesting party within 20 Business Days; or
- (b) if it is not the Information Manager for that Market Information, refer the party that requested the Market Information to the appropriate Information Manager or the Coordinator.

10.4.10. If a submission was made under clause 10.2.7 that the Market Information requested under clause 10.4.6 is Confidential Information, and the Information Manager has deemed the Market Information to be Public Information and intends to release it under clause 10.4.9, the Information Manager must notify the Information Provider in writing, advising:

- (a) that it intends to release the Market Information, specifying the time and nature of the intended release;
- (b) why it is of the opinion that the Market Information is not Confidential Information; and
- (c) that the Information Provider, subject to clause 10.4.11, may lodge a dispute with the Coordinator within five Business Days if it disagrees with this assessment.

Explanatory Note

Disputes about whether information is public or confidential have not been allowed in the circumstances set out below as the information could be disclosed (without a dispute being allowed for) in these circumstances even if the Market Information is Confidential Information.

The Information Manager is required to advise the party receiving the Market Information that it was submitted as confidential.

- 10.4.11. The Information Provider may not lodge a dispute under clause 10.4.10(c) if the Market Information:
- (a) has been requested by the Coordinator or Economic Regulation Authority;
 - (b) is required to be provided by law or a stock exchange having jurisdiction over the Rule Participant;
 - (c) is required for court, tribunal or Electricity Review Board proceedings;
 - (d) is being released to ensure the safety of personnel, equipment or the power system; or
 - (e) is required by AEMO or the relevant Network Operator to carry out their functions under these WEM Rules.
- 10.4.12. If a dispute is not permitted in accordance with clause 10.4.11, the Information Manager must:
- (a) release the Market Information within 20 Business Days; and
 - (b) advise the party receiving the Market Information that while the Information Manager has deemed it Public Information, the Information Provider had indicated that it was Confidential Information.
- 10.4.13. If clause 10.4.11 does not apply and a dispute is allowed, the Information Manager must not release the Market Information during the timeframe referred to in clause 10.4.10(c).
- 10.4.14. If the Information Provider disagrees with the assessment by the Information Manager, and clause 10.4.11 does not apply, it may provide the Coordinator and the Information Manager with a notice of dispute within the timeframe specified in clause 10.4.10(c).
- 10.4.15. The notice of dispute must be in writing and must contain:
- (a) the date on which the notice of dispute was issued;
 - (b) the identity of the Rule Participant or relevant person issuing the notice of dispute;
 - (c) the identities of any other relevant parties to the dispute;
 - (d) the details of the Market Information in dispute, including a rationale for disputing the assessment by the Information Manager; and
 - (e) the contact person for the Rule Participant issuing the dispute, and their contact details.
- 10.4.16. If the Information Provider issues a notice of dispute in accordance with clause 10.4.15, then:
- (a) the Coordinator and the Information Manager must acknowledge the notice of dispute within one Business Day of receiving the notice;

- (b) the Coordinator must determine the dispute in accordance with section 10.5; and
- (c) the Information Manager must not release or disclose the Market Information while the dispute is being determined.

10.4.17. If 10.4.11 does not apply, and the Information Provider does not provide a notice of dispute within the timeframe specified in clause 10.4.10(c), the Information Manager must release the Market Information as Public Information within the timeframe specified in 10.4.6(a).

Managing disclosure of Confidential Information

Explanatory Note

This section sets out the circumstances under which Confidential Information can be disclosed.

10.4.18. If the Information Manager considers that the Market Information requested under clause 10.4.6 is Confidential Information, it must:

- (a) if required under clause 10.4.19, disclose the Market Information with 20 Business Days; or
- (b) advise the party requesting it that the Market Information is Confidential Information and is unable to be released.

10.4.19. Subject to clause 10.4.20 and section 10.5, the Information Manager must disclose Confidential Information that has been requested under clause 10.4.6 if:

- (a) the Information Manager has the written consent of the Information Provider;
- (b) the Market Information is required to be provided by law or a stock exchange having jurisdiction over the Rule Participant;
- (c) disclosure of the Market Information is required for court, tribunal or Electricity Review Board proceedings;
- (d) the disclosure of the Market Information is necessary for the safety of personnel, equipment or the power system;
- (e) the Market Information is required by the Economic Regulation Authority or Coordinator;
- (f) the Market Information is required by the AEMO or relevant Network Operator to carry out their functions under these Rules;
- (g) the Market Information can be disclosed in aggregated or anonymised form such that it does not reveal confidential information; or
- (h) in the reasonable opinion of the Information Manager (or Coordinator in a dispute under Section 10.5), the benefit to electricity consumers of the disclosure of the Market Information outweighs any commercial detriment.

Explanatory Note

An Information Manager is required to consult with the Information Provider before Confidential Information is released, and the Information Provider is permitted in certain circumstances to dispute the disclosure of Market Information in some circumstances.

Clause 10.4.20 does not allow the Information Provider to lodge a dispute on the basis that Information is disclosed in accordance with a law or stock exchange with jurisdiction over the Rule Participant, where it is required for legal proceedings, where it is required for the safety or personnel, equipment or the power system. This is to ensure the Information Manager is not placed in a situation where it has to compromise safety or compliance with other laws to wait for a dispute to be determined.

Disputes are also not allowed where Market Information is required by the Economic Regulation Authority or Coordinator, as these two bodies already have wide ranging powers to request access any Market Information collected under the WEM Rules.

10.4.20. If an Information Manager intends to disclose Market Information requested under clause 10.4.6 in accordance with clause 10.4.19, it must first provide notice to the Information Provider in writing, advising:

- (a) that it intends to disclose the Market Information, specifying the nature of the intended disclosure;
- (b) why it is of the opinion the Market Information should be released in accordance with clause 10.4.19; and
- (c) that, if the Market Information is being released in accordance with clauses 10.4.19(a), 10.4.19(g) or 10.4.19(h), the Information Provider may lodge a dispute with the Coordinator within five Business Days if it disagrees with the Information Manager's assessment.

10.4.21. If the Market Information is being released in accordance with clause 10.4.19(a), 10.4.19(g) or 10.4.19(h), an Information Manager must not release or disclose any Market Information during the timeframe referred to in clause 10.4.20(c).

10.4.22. If the Information Provider wishes to submit a dispute, it must provide the Coordinator and Information Manager with a notice of dispute within five Business Days of the notification provided under clause 10.4.20(c).

10.4.23. If the Information Manager advises a party requesting Market Information that the Market Information is Confidential Information that cannot be released under clause 10.4.19, the party requesting the Market Information may advise the Coordinator and the Information Manager in writing that it wishes to lodge a dispute regarding the assessment by the Information Manager of either:

- (a) confidentiality under clause 10.2.3; or
- (b) eligibility for disclosure under clause 10.4.19.

10.4.24. The notice of dispute lodged under 10.4.22 or 10.4.23 must be in writing and must contain:

- (a) the date on which the notice of dispute was issued;

- (b) the identity of the Rule Participant or person issuing the notice of dispute;
- (c) the identities of any other relevant parties to the dispute;
- (d) the details of the Market Information in dispute, including the rationale for disputing the assessment of the Information Manager; and
- (e) the contact person for the Rule Participant or person issuing the dispute, and its contact details.

10.4.25. If a dispute is lodged in accordance with clause 10.4.24, then:

- (a) the Coordinator and the Information Manager must acknowledge the notice of dispute within one Business Day of receiving the notice;
- (b) the Coordinator must determine the dispute in accordance with section 10.5; and
- (c) the Information Manager must not release or disclose the Market Information under dispute while the dispute is being determined.

10.4.26. If the Information Provider does not lodge a dispute within five Business Days, or if a dispute is not allowed under clause 10.4.20(c), the Information Manager must disclose the Market Information within the timeframe referred to in clause 10.4.18(a).

Information to be Released via the WEM Website

10.5. Public Information Resolving disputes regarding the release of Market Information

Explanatory Note

Section 10.5 outlines the requirements the Coordinator must comply with to resolve disputes regarding the release or disclosure of Market Information. It requires the Coordinator to publish a WEM procedure to guide Rule Participants on the detail of the process.

~~10.5.1 The confidentiality status for the following information under clause 10.2.1 as Public and AEMO must make each item of information available from or via the WEM Website after that item of information becomes available to AEMO:~~

- ~~(a) [Blank]~~
- ~~(b) [Blank]~~
- ~~(c) details of all Rule Participants including:
 - ~~i. name;~~
 - ~~ii. mailing address, telephone and facsimile number;~~
 - ~~iii. the name and title of a contact person;~~
 - ~~iv. details of applicable licenses held;~~
 - ~~v. applicable Rule Participant classes;~~~~

- vi. ~~applicable Market Participant classes;~~
- vii. ~~names and capacities of Registered Facilities; and~~
- viii. ~~names and capacities of Intermittent Loads and the Energy Producing Systems which supply them, including a unique name for each electricity producing unit in the Energy Producing System;~~
- (d) ~~the precise basis for determining the Bank Bill Rate;~~
- (e) ~~details of bid, offer and clearing price limits as approved by the Economic Regulation Authority including:~~
 - i. ~~the Benchmark Reserve Capacity Price;~~
 - ii. ~~the Maximum STEM Price;~~
 - iii. ~~the Alternative Maximum STEM Price; and~~
 - iv. ~~the Minimum STEM Price;~~~~including rules that could cause different values to apply at different times;~~
- (f) ~~the following Reserve Capacity information (if applicable):~~
 - i. ~~Requests for Expressions of Interest described in clause 4.2.3 for the previous five Reserve Capacity Cycles;~~
 - ii. ~~the summary of Requests for Expressions of Interest described in clause 4.2.7 for the previous five Reserve Capacity Cycles;~~
 - iii. ~~the Reserve Capacity Information Pack published in accordance with clause 4.7.2 for the previous five Reserve Capacity Cycles;~~
 - iiiA. ~~for each Market Participant that was assigned Certified Reserve Capacity, the level of Certified Reserve Capacity assigned to each Facility for each Reserve Capacity Cycle;~~
 - iv. ~~for each Market Participant holding Capacity Credits, the Capacity Credits provided by each Facility for each Reserve Capacity Cycle;~~
 - ivA. ~~the summary of the aggregate quantity of MW of Capacity Credits assigned to Facilities and the associated capacity prices described in clause 4.20.5AA;~~
 - ivB. ~~the values determined for Trans_Ceiling and Trans_Floor in accordance with clause 4.29.1C that are used in the formula in clause 4.29.1B;~~
 - v. ~~the identity of each Market Participant from which AEMO procured Capacity Credits in the most recent Reserve Capacity Auction, and the total amount procured, where this information is to be published by 7 January of the year following the Reserve Capacity Auction;~~
 - vi. ~~[Blank]~~
 - vii. ~~all Reserve Capacity Offer quantities and prices, including details of the bidder and facility, for a Reserve Capacity Auction, where this~~

- information is to be published by 7 January of the year following the Reserve Capacity Auction;
- viii. ~~reports summarising the outcomes of Reserve Capacity Tests and reasons for delays in those tests, as required by clause 4.25.11;~~
 - ix. ~~the following ratios calculated by AEMO when it determines the Indicative Individual Reserve Capacity Requirements or the Individual Reserve Capacity Requirements for a Trading Month, or recalculates the Individual Reserve Capacity Requirements for a Trading Month as required by clause 4.28.11A:
 - 1. ~~NTDL_Ratio as calculated in accordance with Step 8A of Appendix 5;~~
 - 2. ~~TDL_Ratio as calculated in accordance with Step 8C of Appendix 5; and~~
 - 3. ~~Total_Ratio as calculated in accordance with Step 10 of Appendix 5;~~~~
 - x. ~~the following information identified for a Reserve Capacity Cycle under the Relevant Level Methodology:
 - 1. ~~the Existing Facility Load for Scheduled Generation for each Trading Interval in the five year period determined under Step 1(a) of Appendix 9; and~~
 - 2. ~~the 12 Trading Intervals occurring on separate Trading Days with the highest Existing Facility Load for Scheduled Generation for each 12 month period in the five year period;~~~~
 - xi. ~~for a Facility that has had its Capacity Credits cancelled for the Capacity Year, the information specified in clause 4.20.12(a), 4.20.12(c) and 4.20.12(d);~~
 - 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);~~
- (g) ~~the Ancillary Service report referred to in clause 3.11.11;~~
- (h) ~~for each Trading Interval in each completed Trading Day in the previous 12 calendar months:
 - i. ~~the sum of the Metered Schedule generation for Scheduled Generators and Non-Scheduled Generators registered to Synergy; and~~~~

- ii. ~~the sum of the Metered Schedule generation for Scheduled Generators and Non-Scheduled Generators registered to Market Participants other than Synergy;~~
- (i) ~~the following STEM summary information:~~
 - i. ~~for each Trading Interval in each completed Trading Day in the previous 12 calendar months:~~
 - 1. ~~the total STEM Offer quantity;~~
 - 2. ~~the total STEM Bid quantity;~~
 - 3. ~~whether the STEM was suspended in relation to the relevant Trading Interval;~~
 - 4. ~~where the STEM was not suspended, the STEM quantity purchased by AEMO; and~~
 - 5. ~~where the STEM was not suspended, the STEM Clearing Price;~~
 - ii. ~~for each Trading Interval in each Trading Day during the 12 calendar months, before the end of the seventh day from the start of the Trading Day:~~
 - 1. ~~the STEM Offers by Market Participant;~~
 - 2. ~~the STEM Bids by Market Participant;~~
 - 3. ~~the quantity bought or sold in the STEM by Market Participant; and~~
 - 4. ~~the Fuel Declaration, Availability Declaration and, if applicable, Ancillary Service Declaration made by Market Participant;~~
- (iA) ~~the following Balancing Market summary information:~~
 - i. ~~for each Trading Interval in each completed Trading Day in the previous 12 calendar months:~~
 - 1. ~~where available, each Balancing Forecast;~~
 - 2. ~~where available, the most recent Forecast BMO, excluding information that would identify specific Market Participants;~~
 - 3. ~~where available, the Relevant Dispatch Quantity; and~~
 - 4. ~~where available, the Balancing Price; and~~
 - ii. ~~for each Trading Interval in each completed Trading Day in the previous 12 calendar months, before the end of the seventh day from the start of the Trading Day, full details of the most recent Balancing Submissions submitted for each Balancing Facility and the Balancing Portfolio;~~

- (iB) ~~the following LFAS summary information for each Trading Interval in each completed Trading Day in the previous 12 calendar months:~~
 - i. ~~the Downwards LFAS Merit Order;~~
 - ii. ~~the Upwards LFAS Merit Order;~~
 - iii. ~~where available, the Upwards LFAS Quantity and the Downwards LFAS Quantity; and~~
 - iv. ~~where available, the Upwards LFAS Price and the Downwards LFAS Price;~~
- (iC) ~~for each Trading Interval in each completed Trading Day in the previous 12 calendar months, before the end of the seventh day from the start of the Trading Day, the LFAS Submissions by Market Participant;~~
- (j) ~~for each Trading Interval in each completed Trading Day in the previous 12 calendar months the following dispatch summary information:~~
 - i. ~~the LFAS Prices and the Backup LFAS Prices;~~
 - ii. ~~the Load Forecast prepared by AEMO in accordance with clause 7.2.1;~~
 - iii. ~~the sum of the Metered Schedule load for all Non-Dispatchable Load and Interruptible Load;~~
 - iv. ~~estimates of the energy not served due to involuntary load curtailment; and~~
 - v. ~~any shortfalls in Ancillary Services;~~
- (jA) ~~- i. ~~for each Trading Interval in each completed Trading Day in the previous 12 calendar months, before the end of the seventh day from the start of the Trading Day, any changes to a Facility's Consumption Decrease Price; and~~
 - ii. ~~the values of any Consumption Decrease Price of a Facility that has been dispatched pursuant to a Dispatch Instruction, as soon as practicable;~~~~
- (jB) ~~for each Trading Month which has been settled under Chapter 9, reports providing the MWh quantities of energy dispatched under NCESS Contracts, by Facility, and by Trading Interval, as specified by AEMO in accordance with clause 7.13.1(dA);~~
- (k) ~~any Market Advisories and Dispatch Advisories released in the previous 12 months;~~
- (l) ~~Loss Factors for each network connection point in accordance with section 2.27;~~
- (m) ~~the most current Statement of Opportunities Report;~~

- ~~(n) — the medium term PASA report described in clause 3.16.9;~~
- ~~(o) — the Short Term PASA report described in clause 3.17.9;~~
- ~~(p) — details of resolved Disputes, including all Public Information associated with the dispute, but not aspects of the resolution or information associated with the resolution which, in accordance with its confidentiality status class, cannot be made public;~~
- ~~(q) — public consultation proceedings;~~
- ~~(r) — public reports pertaining to the Wholesale Electricity Market issued by:

 - ~~i. — the Coordinator;~~
 - ~~iA. — AEMO;~~
 - ~~ii. — [Blank]~~
 - ~~iii. — the Electricity Review Board;~~
 - ~~iv. — the Economic Regulation Authority; or~~
 - ~~v. — the Minister;~~~~
- ~~(s) — event reports explaining what happened during unusual market or dispatch events but not aspects of such reports which, in accordance with its confidentiality status class, cannot be made public;~~
- ~~(t) — AEMO budget information for the current financial year;~~
- ~~(u) — a schedule of fees for services provided by AEMO;~~
- ~~(v) — summary information pertaining to the account maintained by AEMO for market settlement for the preceding 24 calendar months, including:

 - ~~i. — the end of month balance;~~
 - ~~ii. — the total income received for transactions in each of the Reserve Capacity Mechanism, the STEM, Balancing Settlement, Market Fees, System Operation Fees, Regulator Fees and a single value for all other income;~~
 - ~~iii. — the total outgoings paid for transactions in each of the Reserve Capacity Mechanism (excluding Supplementary Capacity Contracts), Supplementary Capacity Contracts, the STEM, Balancing Settlement and a single value for all other expenses; and~~
 - ~~iv. — Service Fee Settlement Amount paid to AEMO and the Economic Regulation Authority;~~~~
- ~~(vA) — reports providing the MWh of non-compliance of Synergy by Trading Interval, as specified by AEMO in accordance with clause 7.13.1A(a), for each Trading Month which has been settled;~~
- ~~(w) — the STEM Price for each Trading Interval of the current Trading Month for which STEM auction results have been released to Market Participants;~~

- ~~(x) — for each Trading Interval of the current Trading Month for which Balancing Price results have been released to Market Participants, the value of the Balancing Price;~~
- ~~(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;~~
- ~~(zA) — the current Tolerance Range determined by AEMO in accordance with clause 2.13.6D;~~
- ~~(zB) — any Facility Tolerance Ranges determined by AEMO in accordance with clause 2.13.6E, and, if applicable, any Facility Tolerance Ranges which AEMO has varied in accordance with clause 2.13.6H;~~
- ~~(zC) — summary information on Disputes in progress that may impact other Rule Participants;~~
- ~~(zD) — [Blank]~~
- ~~(zE) — the Non-Balancing Dispatch Merit Orders;~~
- ~~(zF) — audit reports;~~
- ~~(zG) — documentation of the functionality of:
 - ~~i. — any software used to run the Reserve Capacity Auction;~~
 - ~~ii. — the STEM Auction software; and~~
 - ~~iii. — the Settlement System software;~~~~
- ~~(zH) — information relating to Commissioning Tests;~~
- ~~(zI) — the Refund Exempt Planned Outage Count for each Scheduled Generator for each of the 1,000 Trading Days up to and including the most recent Trading Day which AEMO has recorded in accordance with clause 7.13.1A(b); and~~
- ~~(zJ) — as soon as practicable, the consumption data information under clause 7.13.1(eH).~~

- ~~10.5.2. The Coordinator must set the class of confidentiality status for the following information under clause 10.2.1, as Public:~~
- ~~(a) SCADA data by Facility;~~
 - ~~(b) the sum of each LF_Up_Market_Payment referred to in clause 9.9.2(a) that was made in a Trading Month;~~
 - ~~(c) the sum of each LF_Down_Market_Payment referred to in clause 9.9.2(b) that was made in a Trading Month;~~
 - ~~(d) the sum of each total Trading Month LF_Market_Payment referred to in clause 9.9.2(d) that was made in a Trading Month;~~
 - ~~(e) the payment referred to in clause 9.9.2(e) for each Trading Interval in a Trading Month;~~
 - ~~(f) the payment referred to in clause 9.9.2(f) for each Trading Interval in a Trading Month;~~
 - ~~(g) the payment referred to in clause 9.9.2(g);~~
 - ~~(h) the cost referred to in clause 9.9.2(h) for each Trading Interval in a Trading Month;~~
 - ~~(i) the cost referred to in clause 9.9.2(i) for each Trading Interval in a Trading Month;~~
 - ~~(j) the cost referred to in clause 9.9.2(m);~~
 - ~~(k) the cost referred to in clause 9.9.2(o);~~
 - ~~(l) the cost referred to in clause 9.9.2(p); and~~
 - ~~(m) the information in the Congestion Information Resource.~~

10.5.1. If the Coordinator receives notice of a dispute in accordance with clause 10.4.10 or 10.4.19, it must resolve the dispute in accordance with this section 10.5.

10.5.2. The Coordinator must document in a WEM Procedure the process for resolving a dispute.

10.5.3. If the Coordinator considers that a notice of dispute does not contain sufficient justification for the dispute, or that the dispute is frivolous or vexatious, the Coordinator may dismiss the dispute and in this case the original decision of the Information Manager will be final.

10.5.4. The Coordinator must conduct reasonable consultation with the Information Manager, Information Provider and the person requesting the Market Information as part of the dispute resolution process.

10.5.5. The Coordinator must make its determination against the requirements in clauses 10.2.3 and 10.4.19.

- 10.5.6. Within 20 Business Days of being notified of a dispute, the Coordinator must inform the parties to the dispute in writing of either:
- (a) its determination; or
 - (b) if more time is required for a decision, the expected date for that decision.
- 10.5.7. If the timeframe for a determination is extended under clause 10.5.6(b), the Coordinator must deliver its determination within that extended timeframe.
- 10.5.8. The Coordinator may direct the Information Manager to:
- (a) release or disclose all or part of the Market Information;
 - (b) release or disclose all or part of the Market Information with conditions attached; or
 - (c) not release or disclose the Market Information.
- 10.5.9. Until a decision is made by the Coordinator under clause 10.5.8, the Market Information under dispute will be deemed Confidential Information and may not be released or disclosed by the Information Manager to any party, except as otherwise required under these WEM Rules.
- 10.5.10. Where the Coordinator makes a determination under clause 10.5.8, the Coordinator must:
- (a) advise the parties to the dispute of the outcome; and
 - (b) publish its determination on the Coordinator's Website, redacting any commercially sensitive or other Confidential Information.
- 10.5.11. A determination under clause 10.5.10 must include the nature of the Market Information that has been determined to be Public Information or Confidential Information, and any submissions or justification put forward by the parties to the dispute or any other parties consulted by the Coordinator.
- 10.5.12. If the Coordinator makes a determination in accordance with clauses 10.5.8(a) or 10.5.8(b), the Information Manager must release or disclose the Market Information in accordance with this determination within 10 Business Days.
- 10.5.13. If the Coordinator makes a determination in accordance with clause 10.5.8(c) the Information Manager must not release or disclose the Market Information.
- 10.5.14. If a dispute is lodged under clauses 10.4.10 or 10.4.19, but the Coordinator has already made a determination on Market Information of the same nature, the Coordinator will not be required to determine the dispute in accordance with this section 10.5 and may direct the parties to the dispute to the relevant determination.

Market Information to be released via the WEM Website

10.6. [Blank]Public Information

Explanatory Note

The requirement to publish information under clause 10.5.1 (in the current version of the WEM Rules), or to classify information as public under clause 10.5.2 (in the current version of the WEM Rules) has, in general, been moved to the section or chapter of the WEM Rules that the information relates to.

For example, the information previously required to be published under clause 10.5.1(f) about the Reserve Capacity Mechanism has been moved to Chapter 4. Where information was already required to be published it has not been replaced elsewhere in the WEM Rules.

Where information is generic or relates to multiple chapters of the WEM Rules, it has been included in clauses 10.6.1(a) to 10.6.1(g) below.

The new location for types of information in clauses 10.6.1(h) – 10.6.1(n) is yet to be resolved and these clauses will be relocated at a later date.

10.6.1. The confidentiality status for the following Market Information under section 10.2 is Public Information and the relevant Information Manager must make each item of information available from or via its website after that item of information becomes available to it:

- (a) the precise basis for determining the Bank Bill Rate;
- (b) details of resolved disputes, including all Public Information associated with the dispute, but not aspects of the resolution or information associated with the resolution which contain Confidential Information;
- (c) public consultation proceedings;
- (d) public reports pertaining to the Wholesale Electricity Market issued by the relevant Information Manager;
- (e) reports pertaining to the Wholesale Electricity Market produced by the Electricity Review Board and the Minister;
- (f) event reports explaining what happened during unusual market or dispatch events but not aspects of such reports which contain Confidential Information;
- (g) summary information on disputes in progress that may impact other Rule Participants;
- (h) for each Trading Interval in each completed Trading Day in the previous 12 calendar months:
 - i. the sum of the Metered Schedule generation for Scheduled Generators and Non-Scheduled Generators registered to Synergy; and
 - ii. the sum of the Metered Schedule generation for Scheduled Generators and Non-Scheduled Generators registered to Market Participants other than Synergy;

- (i) for each Trading Month which has been settled under Chapter 9, reports providing the MWh quantities of energy dispatched under NCESS Contracts, by Facility, and by Trading Interval, as specified by AEMO in accordance with clause 7.13.1(dA);
- (j) a schedule of fees for services provided by AEMO;
- (k) summary information pertaining to the account maintained by AEMO for market settlement for the preceding 24 calendar months, including:
 - i. the end of month balance;
 - ii. the total income received for transactions in each of the Reserve Capacity Mechanism, the STEM, Balancing Settlement, Market Fees, System Operation Fees, Regulator Fees and a single value for all other income;
 - iii. the total outgoings paid for transactions in each of the Reserve Capacity Mechanism (excluding Supplementary Capacity Contracts), Supplementary Capacity Contracts, the STEM, Balancing Settlement and a single value for all other expenses; and
 - iv. Service Fee Settlement Amount paid to AEMO and the Economic Regulation Authority;
- (l) 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;
- (m) 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; and
- (n) the Refund Exempt Planned Outage Count for each Scheduled Generator for each of the 1,000 Trading Days up to and including the most recent Trading Day which AEMO has recorded in accordance with clause 7.13.1A(b).

10.6.2. Information required to be published on an Information Manager's website under Clause 10.6.1 is in addition to any information that is required to be published in the rest of the WEM Rules and WEM Procedures.

Explanatory Note

Sections 10.7, 10.8 and 10.9 have been deleted to implement the two confidentiality classes of “Public Information” and “Confidential Information”.

~~10.7. — Rule Participant Market Restricted Information~~

~~10.7.1. — The Coordinator must set the class of confidentiality status for the following information under clause 10.2.1, as Rule Participant Market Restricted and AEMO must make this information available from the WEM Website:~~

- ~~(a) — [Blank]~~
- ~~(b) — Market Participant specific Reserve Capacity Obligations;~~
- ~~(c) — Market Participant specific Individual Reserve Capacity Requirements partitioned into those associated with Intermittent Loads and those not associated with Intermittent Loads;~~
- ~~(d) — for each completed Trading Day for the past 12 months:
 - ~~i. — Market Participant specific Bilateral Submissions; and~~
 - ~~ii. — Market Participant specific STEM Submissions and Standing STEM Submissions used in the absence of a STEM Submission except that information published in accordance with clause 10.5.1(i); and~~~~
- ~~(e) — for the past 12 months:
 - ~~i. — Non-STEM Settlement Statements; and~~
 - ~~ii. — STEM Settlement Statements.~~~~

~~10.7.2. — The Coordinator must set the class of confidentiality status for all information provided by a Market Participant to the Economic Regulation Authority under clauses 6.20.23 and 6.20.24 as Rule Participant Market Restricted.~~

~~10.8. — Rule Participant Dispatch Restricted Information~~

~~10.8.1. — [Blank]~~

~~10.8.2. — The Coordinator must set the class of confidentiality status for all Synergy information specified in clause 7.6A as Rule Participant Dispatch Restricted Information with the exception of information specified by Synergy under clauses 7.6A.2(g) and 7.6A.3(c).~~

~~10.9. — System Operation Confidential Information~~

~~10.9.1. — The Coordinator must set the class of confidentiality status for all information provided by a Network Operator under clause 2.28.3B and clause 2.28.3C as System Operation Confidential.~~

11. Glossary

...

Explanatory Note

The definition of AEMO Confidential is no longer required.

~~**AEMO Confidential:** An information confidentiality status whereby information or documents, and any information or documents to which a confidentiality status under clause 10.2.2(f) may only be made available to the parties described in clause 10.2.2(f).~~

~~This includes an information confidentiality status which was set by the IMO under clause 10.2.2(f) prior to its abolition on the day the *Electricity Industry (Independent Market Operator) Repeal Regulations 2018* commenced.~~

~~Note: the *Electricity Industry (Independent Market Operator) Repeal Regulations 2018* commenced on 10 April 2018.~~

...

Explanatory Note

The definition of Applicable DSP Ramp Rate Limit is deleted because ramp rates are no longer required for Demand Side Programmes.

~~**Applicable DSP Ramp Rate Limit:** For a Demand Side Programme for a Trading Interval, the DSP Ramp Rate Limit specified in the Standing Data for the Facility for the Trading Interval.~~

...

Explanatory Note

The definition of Automatic Generation Control System is amended to clarify that the system is applicable for implementing both Dispatch Targets and Dispatch Caps.

Automatic Generation Control System (AGC): The system into which Dispatch Targets or Dispatch Caps are entered and processed by AEMO for Registered Facilities operating on automatic generation control.

...

Explanatory Note

The definition of Available Capacity is amended to clarify that the concept does not relate specifically to synchronisation, and includes intermittent capacity and other non-synchronous capacity.

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 minimum times to synchronise in its Real-Time Market Submission Injection or Withdrawal capacity that the Market Participant is not expecting to make ready for dispatch in the Dispatch Interval, but expects to be able to make ready for dispatch in the Dispatch Interval if given notice before the relevant Start Decision Cutoff, allowing for expected operating conditions and the effect of any Outages that have not been rejected for the Registered Facility. To avoid doubt, Available Capacity is not limited by the expected availability of intermittent fuels for an Intermittent Generating System such as wind.~~

...

Explanatory Note

The definition of Balancing Facility Maximum Capacity is no longer required.

Balancing Facility Maximum Capacity:

- ~~(a) — for a Balancing Facility, other than the Balancing Portfolio, that is:
 - i. — a Scheduled Generator, the capacity provided as the Standing Data in Appendix 1(b)(iii); and
 - ii. — a Non-Scheduled Generator, the capacity provided as the Standing Data in Appendix 1(e)(iiiA); and~~
- ~~(b) — for the Balancing Portfolio, the sum of all of the Standing Data in Appendix 1(b)(iii) and Appendix 1(e)(iiiA) for each Facility in the Balancing Portfolio.~~

...

Explanatory Note

The definition of Base ESS Quantity is amended to use the correct defined terms “SESSM Availability Payment” and “SESSM Availability Quantity”.

Base ESS Quantity: For a Dispatch Interval and a SESSM Award where there is a non-zero ~~Availability Payment~~ SESSM Availability Payment, the quantity of the relevant Frequency Co-optimised Essential System Service which the Facility would have been capable of providing if not granted the SESSM Award, and which must be offered in addition to the ~~Availability Quantity~~ SESSM Availability Quantity.

...

Bilateral Submission Results Window: For a point in time in the 24-hour period starting at 8:00 AM on a Scheduling Day, the period of eight consecutive Trading Days starting with the Trading Day for the Scheduling Day.

...

Explanatory Note

The definition of Capacity-Adjusted Consequential Outage Quantity is no longer required.

~~**Capacity-Adjusted Consequential Outage Quantity:** For a Scheduled Generator for a Trading Interval, the total MW capacity of the Scheduled Generator for which Capacity Credits are assigned that is subject to an approved Consequential Outage for the Trading Interval, calculated in accordance with the formula in clause 3.21.6(c).~~

...

Capacity Adjusted Forced Outage Quantity: Means, the quantity, in MW, of the derating of a Facility or Separately Certified Component in a Dispatch Interval or Trading Interval from the Reserve Capacity Obligation Quantity for the Facility or Separately Certified Component as determined by AEMO in accordance with:

- (a) for a Separately Certified Component in a Dispatch Interval, the formula in clause ~~3.21.8~~ 3.21.7;
- (b) for a Separately Certified Component in a Trading Interval, the formula in clause ~~3.21.8A~~ 3.21.7A;
- (c) for a Facility in a Trading Interval, the formula in clause ~~3.21.8B~~, 3.21.7B; and
- (d) for a Facility in a Dispatch Interval, the formula in clause 3.21.7C.

...

Explanatory Note

The definition of Capacity-Adjusted Forced Outage Quantity is no longer required. The defined term is being replaced by "Capacity Adjusted Forced Outage Quantity" (without the hyphen between "Capacity" and "Adjusted").

~~**Capacity-Adjusted Forced Outage Quantity:** For a Scheduled Generator for a Trading Interval, the total MW capacity of the Scheduled Generator for which Capacity Credits are assigned that is subject to a Forced Outage for the Trading Interval, calculated in accordance with the formula in clause 3.21.6(a).~~

...

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~~ 3.21.8;
- (b) for a Separately Certified Component in a Trading Interval, the formula in clause 3.21.8A;
- (c) for a Facility in a Trading Interval, the formula in clause 3.21.8B-; and
- (d) for a Facility in a Dispatch Interval, the formula in clause 3.21.8C.

...

Explanatory Note

The definition of Capacity-Adjusted Planned Outage Quantity is no longer required. The defined term is being replaced by “Capacity Adjusted Planned Outage Quantity” (without the hyphen between “Capacity” and “Adjusted”).

~~**Capacity-Adjusted Planned Outage Quantity:** For a Scheduled Generator for a Trading Interval, the total MW capacity of the Scheduled Generator for which Capacity Credits are assigned that is subject to an approved Planned Outage for the Trading Interval, calculated in accordance with the formula in clause 3.21.6(b).~~

...

Explanatory Note

A definition for the new confidentiality status of “Confidential Information” is inserted.

~~**Confidential Information:** Market Information classified as confidential by an Information Manager under clause 10.2.3 or the Coordinator under section 10.5.~~

...

Explanatory Note

The definition of Coordinator Fees is no longer required (replaced by Market Participant Coordinator Fees).

~~**Coordinator Fees:** The fees determined by AEMO in accordance with section 2.24, and payable by Market Participants to AEMO for the services provided by the Coordinator in undertaking its functions under these WEM Rules.~~

...

Explanatory Note

The definition of Dispatch Advisory is no longer required because advisories of this type are now called Market Advisories.

~~**Dispatch Advisory:** Means a communication by AEMO to Market Participants and Network Operators that there has been, or is likely to be, an event that will require dispatch of Demand Side Programmes or Facilities Out of Merit, or will restrict communication between AEMO and any of the Market Participants or Network Operators.~~

...

Explanatory Note

The definition of Dispatch Forecast is amended as a consequence of introducing the concepts of Unconstrained Injection Forecasts and Unconstrained Withdrawal Forecasts, and clarifies how the Dispatch Algorithm uses these quantities to determine an overall Dispatch Forecast for

Dispatch Forecast: The total MW level of Injection or Withdrawal expected to be reached by a Semi-Scheduled Facility or Non-Scheduled Facility at the end of the Dispatch Interval which is:

- (a) for a Non-Scheduled Facility; the Market Participant's Unconstrained Injection Forecast or Unconstrained Withdrawal Forecast, as applicable, for the Non-Scheduled Facility for the Dispatch Interval, as may be replaced by AEMO under clause 7.2.4A; and
 - ~~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.~~
 - i. if AEMO has specified a Dispatch Target for the Semi-Scheduled Facility for the Dispatch Interval, that Dispatch Target;
 - ii. otherwise, if the Semi-Scheduled Facility is expected to be Injecting at the end of the Dispatch Interval, the lesser of:
 - 1. the Dispatch Cap for the Semi-Scheduled Facility for the Dispatch Interval; and
 - 2. the Market Participant's Unconstrained Injection Forecast for the Semi-Scheduled Facility for the Dispatch Interval, as may be replaced by AEMO under clause 7.2.4A; and
 - iii. otherwise, the greater of:
 - 1. the Dispatch Cap for the Semi-Scheduled Facility for the Dispatch Interval; and
 - 2. the Market Participant's Unconstrained Withdrawal Forecast for the Semi-Scheduled Facility for the Dispatch Interval, as may be replaced by AEMO under clause 7.2.4A.

...

Explanatory Note

The definition of Dispatch Interval is amended to include a missing interval.

Dispatch Interval: Means each 5 minute period commencing at 0, 5, 10, 15, 20, 25, 30, 35, 40, 45, 50 and 55 minutes past the hour.

...

Explanatory Note

The definition of Dispatch Target is amended to remove the reference to Demand Side Programmes, which have specific Dispatch Instruction arrangements and no longer receive “Dispatch Targets”.

Dispatch Target: For a Scheduled Facility or Semi-Scheduled Facility, the level of Injection or Withdrawal to be reached at the end of a Dispatch Interval.:

- ~~(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.~~~~

...

Explanatory Note

The definition of Downwards Out of Merit Generation is no longer required.

~~**Downwards Out of Merit Generation:** Has the meaning given in clauses 6.16A.2 and 6.16B.2, as applicable.~~

...

Explanatory Note

The following definitions are added to support the new arrangements for Demand Side Programme submissions, dispatch and publications:

- DSP Constrained Withdrawal Quantity and DSP Unconstrained Withdrawal Quantity;
- DSP Forecast Capacity and DSP Forecast Reduction;
- DSP Schedule, DSP Pre-Dispatch Schedule and DSP Week-Ahead Schedule; and
- DSP Withdrawal Profile Submission.

The definition of DSP Ramp Rate Limit deleted because ramp rates are no longer required for Demand Side Programmes.

DSP Constrained Withdrawal Quantity: A Market Participant's estimate of the absolute value of the average MW Withdrawal of its Demand Side Programme in a Dispatch Interval, taking into account any information about the potential or actual dispatch of the Demand Side Programme that is provided by AEMO in Market Advisories under clause 7.11.6(cA), Dispatch Instructions under clause 7.6.15 or notifications under clause 4.25.9(h).

DSP Forecast Capacity: An estimate of the potential reduction in the absolute value of Withdrawal of a Demand Side Programme in a Dispatch Interval if the Demand Side Programme was fully dispatched by AEMO in accordance with its Reserve Capacity Obligations, determined by AEMO in accordance with clause 7.8A.3.

DSP Forecast Reduction: An estimate of the expected reduction in the absolute value of Withdrawal of a Demand Side Programme in a Dispatch Interval based on DSP Withdrawal Profile Submissions provided by the Market Participant, determined by AEMO in accordance with clause 7.8A.4.

DSP Pre-Dispatch Schedule: Has the meaning given in clause 7.8A.1.

DSP Ramp Rate Limit: For a Demand Side Programme, the Market Participant's best estimate of the rate, in MW per minute, on a linear basis, at which the Facility is physically able to decrease its consumption, as specified in the Standing Data from time to time.

DSP Schedule: A DSP Week-Ahead Schedule or a DSP Pre-Dispatch Schedule.

DSP Unconstrained Withdrawal Quantity: A Market Participant's estimate of the absolute value of the average MW Withdrawal of its Demand Side Programme in a Dispatch Interval, assuming that the Demand Side Programme does not receive any notifications under clause 4.25.9(h) or Dispatch Instructions under clause 7.6.15 that affect its Withdrawal in the Dispatch Interval.

DSP Week-Ahead Schedule: Has the meaning given in clause 7.8A.1.

DSP Withdrawal Profile Submission: A submission made by a Market Participant to AEMO which provides a DSP Unconstrained Withdrawal Quantity and DSP Constrained Withdrawal Quantity for a Demand Side Programme for a Dispatch Interval.

...

Explanatory Note

The definition of Equipment Limit is amended to correct a typographical error.

Equipment Limit: ~~has~~ Has the meaning given in clause 3.2.1.

...

Explanatory Note

The definition of Estimated Enablement Losses will be reviewed and amended, as necessary, together with any other changes resulting from the review of the Market Power Mitigation Strategy.

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.

...

Explanatory Note

The Tranches 2 and 3 Amendments both insert a definition of Facility (Schedule C, paragraph 126.1) and replace the existing definition (Schedule C, paragraph 126.32). The Tranche 5 Amendments also insert a definition of Facility (Schedule I, paragraph 63.1).

To achieve the intended outcome, the Tranches 2 and 3 and Tranche 5 changes will not commence, and the Tranche 6 Amendments will replace the existing definition with the Tranche 5 definition as shown below.

~~**Facility:** Any of the facilities described in clause 2.29.1.~~

Facility: Has the meaning given in clause 2.29.1B, which can be an unregistered Facility or Registered Facility.

...

Explanatory Note

The definition of Gate Closure is amended to update clause references and correct a typographical error.

Gate Closure: ~~Means the~~ 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)~~ clause 7.4.35, as determined by AEMO under clauses 7.4.30 or 7.4.32 and published on the WEM Website.

...

Explanatory Note

The definition of In-Service Capacity is amended to clarify that it does not relate specifically to synchronisation, and includes decisions Market Participants make around equipment under their control within the Facility. The clarification regarding the availability of intermittent fuels is included to support the proposed changes to the way in which Semi-Scheduled Facilities and Non-Scheduled Facilities provide their Injection forecasts to AEMO.

In-Service Capacity: ~~Means, for~~ 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 ~~Injection or Withdrawal capacity that the Market Participant expects to be ready for dispatch in the Dispatch Interval, allowing for expected operating conditions, commitment and control intentions and the effect of any Outages that have not been rejected for the Registered Facility. To avoid doubt, In-Service Capacity is not limited by the expected availability of intermittent fuels for an Intermittent Generating System such as wind.~~

...

Explanatory Note

The defined terms Information Manager and Information Provider are required to support the new Market Information framework.

Information Manager: The party responsible for managing Market Information, in accordance with 10.2.11 and 10.2.12.

Information Provider: a Rule Participant, or the ERA or Coordinator, who submits Market Information to an Information Manager in accordance with the WEM Rules or WEM Procedures.

...

Explanatory Note

The proposed insertion of the defined term Island in the Tranches 2 and 3 Amendments (Schedule C, paragraph 126.1) will not commence because an appropriate definition already exists in the WEM Rules. The existing definition is amended to use title case for the defined term Energy Producing System.

Island: Means a part of the SWIS that includes interconnected ~~energy producing systems~~ 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~~ Energy Producing Systems (or other energy sources) capable of supplying the Load in accordance with the Frequency Operating Standards within the part of the SWIS that has been disconnected,

but does not include an Embedded System or Disconnected Microgrid.

...

Explanatory Note

The definition of Market Fees is amended to include Market Participant Coordinator Fees and use standard terminology for sections and clauses in the WEM Rules.

Market Fees: The fee rates and other fees payable by Rule Participants to AEMO as determined by AEMO in accordance with ~~clause~~ section 2.24 and, for Market Participant Market Fees, Market Participant Coordinator Fees and Market Participant Regulator Fees, as calculated for each Market Participant in accordance with section 9.12.

...

Explanatory Note

The defined term Market Information is required to support the new Market Information framework.

Market Information: any information or document that is required to be produced, provided or exchanged under the WEM Rules.

...

Explanatory Note

A definition of Market Participant Coordinator Fees is added to support the new Market Fee arrangements.

Market Participant Coordinator Fees: The fees, the rates of which are determined by AEMO in accordance with section 2.24, and calculated as payable by Market Participants in accordance with clause 9.12.4A to AEMO for the services provided by the Coordinator in undertaking her or his functions under these WEM Rules and the WEM Regulations.

Explanatory Note

The definition of Market Participant Market Fees is amended to correct a clause reference error and use standard terminology for sections and clauses in the WEM Rules.

Market Participant Market Fees: The fees payable by Market Participants to AEMO the rate of which is determined by AEMO in accordance with ~~clause~~ section 2.24, and as calculated for each Market Participant in accordance with ~~clause~~ 9.12.2 9.12.3.

Explanatory Note

The definition of Market Participant Regulator Fees is amended to remove an obsolete reference to the Rule Change Panel and use standard terminology for sections and clauses in the WEM Rules.

Market Participant Regulator Fees: The fees, the rates of which are determined by AEMO in accordance with ~~clause~~ section 2.24, and calculated as payable by Market Participants in

accordance with clause 9.12.4 to AEMO for the services provided by the Economic Regulation Authority ~~and the Rule Change Panel~~ in undertaking ~~their respective its~~ Wholesale Electricity Market related functions and other functions under these WEM Rules.

...

Maximum Consumption Capability: ~~For each a Market Participant is, the maximum cumulative MWh quantity that the Market Participant is permitted to include in a Portfolio Demand Curve for a Trading Interval, determined as calculated~~ in accordance with clause ~~6.3A.3(d), 6.3A.3(f).~~

...

Maximum Facility Supply Capability: ~~The MWh contribution of a Scheduled Facility, Semi-Scheduled Facility or Non-Scheduled Facility over a Dispatch Interval or Trading Interval to the Maximum Supply Capability of a Market Participant, determined in accordance with clauses 6.3A.3(c) (for a Dispatch Interval) and 6.3A.3(d) (for a Trading Interval).~~

...

Explanatory Note

The definition of Maximum Participant Generation Refund is amended to clarify which Facilities are included in the calculation.

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 (other than Facilities with a Facility Class or indicative Facility Class of Demand Side Programme)~~ and in relation to a Capacity Year assuming ~~that— that:~~

- (a) AEMO acquires all of the Capacity Credits held by the Market Participant in relation to ~~its generating those~~ Facilities; and
- (b) the cost of each Capacity Credit so acquired is determined in accordance with clause 4.28.2(d).

...

Maximum Supply Capability: ~~For each a Market Participant is, the maximum cumulative MWh quantity that the Market Participant is permitted to include in a Portfolio Supply Curve for a Trading Interval, determined as calculated~~ in accordance with clause ~~6.3A.2(a) 6.3A.3(e).~~

...

Explanatory Note

The Tranches 2 and Tranche 3 Amendments insert a new definition of Medium Term PASA but the term is already defined in the WEM Rules. To achieve the intended outcome, the current definition is replaced with the new definition and the Tranches 2 and 3 Amending Rule will not commence.

~~**Medium Term PASA:** A PASA study conducted in accordance with section 3.16 in order to assist AEMO in determining Ancillary Service Requirements, outage planning for Registered Facilities and also assessing the availability of Facilities in respect of which Capacity Credits are held.~~

~~**Medium Term PASA:** A PASA covering the period in clause 3.16.1(a).~~

...

Explanatory Note

The definition of Minimum Consumption is amended to remove the reference to Standing Data, because this information is not Standing Data and is maintained through the Associated Loads processes set out in section 2.29, not the Standing Data update processes in section 2.34.

Minimum Consumption: For an Associated Load means the amount specified under clause 2.29.5B(c) as the amount below which the Associated Load does not wish to be curtailed in the course of dispatching the ~~DSM Facility, as recorded and updated from time to time in Standing Data under Appendix 1, item (h)(xiv) Demand Side Programme.~~

...

Explanatory Note

The definition of Near-Binding Constraint Equation is added to clarify the publication requirements in section 7.13. The definition is intended to capture where the available head-room in a constraint indicates that it is close to operating on one of the control Facilities included in the Constraint Equation.

Near Binding Constraint Equation: For a Constraint Equation used in the Central Dispatch Process, where the absolute value of difference between the value of the left hand side and the value of the right hand side of the Constraint Equation is less than 20 times the absolute value of the largest coefficient on the left hand side of the Constraint Equation.

...

Explanatory Note

The Tranches 2 and Tranche 3 Amendments insert a new definition of Network Limit but the term is already defined in the WEM Rules. To achieve the intended outcome, the current definition is replaced with the new definition and the Tranches 2 and 3 Amending Rule will not commence.

~~**Network Limit:** A limitation or requirement on a Network that gives rise to a Network Constraint.~~

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.

Explanatory Note

A definition for the Network Quality and Reliability of Supply Code has been added.

Network Quality and Reliability of Supply Code: The Electricity Industry (Network Quality and Reliability of Supply) Code 2005.

Explanatory Note

The definition of New Information is amended correct a clause reference error.

New Information: Is defined in clause ~~2.25.5LA~~ 2.29.5LA.

...

Explanatory Note

The definition of Nominated Excess Capacity is amended to clarify that the requirement specified in the definition applies to any continuous 12-month period.

Nominated Excess Capacity: In respect of a Facility containing an Intermittent Load, the maximum quantity of Injection (in MW) that the Market Participant intends the Facility to make in any Dispatch Interval, which must not be exceeded in more than 120 Dispatch Intervals ~~in any 12 month period~~ within any continuous 12-month period.

...

Explanatory Note

The definition of Outage Completion Interval has been added to improve clarity on the information required in an Outage Plan and to improve clarity in subsequent clauses.

Outage Completion Interval: The Dispatch Interval specified in an Outage Plan or revision in which the Outage is proposed to be completed.

...

Explanatory Note

The definition of Outage Facility Interval is amended to use standard capitalisation for "Self-Scheduling".

Outage Facility: Means an Equipment List Facility or a ~~Self-scheduling~~ Self-Scheduling Outage Facility.

...

Explanatory Note

The definition of Outage Period is amended to simplify the wording and clarify how the period is defined relative to the Outage Commencement Interval and Outage Completion Interval.

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. In respect of an Outage Plan, the period of time between the start of the Outage Commencement Interval and the end of the Outage Completion Interval.~~

...

Explanatory Note

The following definitions have been added to support the requirement for mandatory information to be included in an Outage Plan and published on the WEM Website where an Outage is required to be temporarily returned to service at different times throughout its duration:

- Outage Return To Service Commencement Interval;
- Outage Return To Service Completion Interval; and
- Outage Return To Service Period.

Outage Return To Service Commencement Interval: The first Dispatch Interval in an Outage Return To Service Period.

Outage Return To Service Completion Interval: The last Dispatch Interval in an Outage Return To Service Period.

Outage Return To Service Period: A period of time within the Outage Period of an Outage Plan, during which the relevant Outage Capability is intended to be returned to service, which starts at the start of its Outage Return To Service Commencement Interval and ends at the end of its Outage Return To Service Completion Interval.

...

Explanatory Note

The definition of Participant Capacity Rebate is amended to reflect that the amount is determined for a Trading Interval in clause 4.26.4.

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~~ Interval, as calculated in accordance with clause 4.26.4.

...

~~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.~~

...

Explanatory Note

The definition of Per-Dispatch Interval Availability Payment is amended to use the correct defined terms “SESSM Availability Payment” and “SESSM Availability Quantity”.

Per-Dispatch Interval Availability Payment: For a SESSM Award, the SESSM Availability Payment divided by the number of Dispatch Intervals in the SESSM Award Duration for which the SESSM Availability Quantity is greater than zero.

...

Explanatory Note

The Tranches 2 and 3 Amendments (Schedule C) incorrectly refers to deleting a definition of “Payment Outage” and replacing it with a definition of “Planned Outage”. To achieve the intended outcome, the Tranches 2 and 3 Amending Rule will not commence and the current definition of Planned Outage is replaced by the new definition.

~~**Planned Outage:** Has the meaning given in clause 3.19.11.~~

Planned Outage: An Outage Plan that has been approved by AEMO.

...

Explanatory Note

The definition of Portfolio Downwards Out of Merit Generation is no longer required.

~~**Portfolio Downwards Out of Merit Generation:** Means the amount calculated in accordance with clause 6.16B.2.~~

...

Explanatory Note

The definition of Portfolio Upwards Out of Merit Generation is no longer required.

~~**Portfolio Upwards Out of Merit Generation:** Means the amount calculated in accordance with 6.16B.1.~~

...

Explanatory Note

The confidentiality status of “Public” is deleted and replaced with the new confidentiality status of “Public Information”.

~~**Public:** When used in reference to information confidentiality, information or documents that are not confidential and may be made available to any person.~~

~~**Public Information:** Market Information that is not confidential and may be made available to any person.~~

...

Explanatory Note

The term 'Refund Exempt Planned Outage' is replaced with 'Refund Exempt Planned Outage Quantity' to clarify that AEMO's determinations apply to Capacity Adjusted Planned Outage Quantities rather than Planned Outages.

~~**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.~~

~~**Refund Exempt Planned Outage Quantity:** A Capacity Adjusted Planned Outage Quantity for a Separately Certified Component of a Scheduled Facility or Semi-Scheduled Facility in a Trading Interval for which a Facility Reserve Capacity Deficit Refund is not payable, as determined by AEMO under clauses 4.26.1C or 4.26.1CA.~~

Explanatory Note

The definition of Refund Exempt Planned Outage Count is amended to account for the transition from the current market arrangements to the new market arrangements.

~~**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.~~

~~**Refund Exempt Planned Outage Count:** In respect of a Separately Certified Component of a Scheduled Facility or Semi-Scheduled Facility and a period of time, the sum over all Trading Intervals in that period of:~~

- ~~(a) if no Capacity Credits were associated with the Separately Certified Component in the Trading Interval, zero;~~
- ~~(b) if the Trading Interval occurs before 8:00 AM on 1 June 2016, zero;~~
- ~~(c) if the Trading Interval occurs on or after 8:00 AM on 1 June 2016 and before New WEM Commencement Day, the total MW quantity of Refund Exempt Planned Outage determined for the relevant Scheduled Generator~~

(or Scheduled Generators) in the Trading Interval under the WEM Rules that were in force immediately before New WEM Commencement Day, divided by the number of Capacity Credits associated with the Scheduled Generator (or Scheduled Generators) in the Trading Interval; or

(d) if the Trading Interval occurs on or after New WEM Commencement Day, the total Refund Exempt Planned Outage Quantity determined by AEMO for the Separately Certified Component in the Trading Interval under clauses 4.26.1C or 4.26.1CA, divided by the number of Capacity Credits associated with the Separately Certified Component in the Trading Interval.

Explanatory Note

The term 'Refund Payable Planned Outage' is replaced with 'Refund Payable Planned Outage Quantity' to clarify that AEMO's determinations apply to Capacity Adjusted Planned Outage Quantities rather than Planned Outages.

~~**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.~~

~~**Refund Payable Planned Outage Quantity:** A Capacity Adjusted Planned Outage Quantity for a Separately Certified Component of a Scheduled Facility or Semi-Scheduled Facility in a Trading Interval for which a Facility Reserve Capacity Deficit Refund is payable, as determined by AEMO under clauses 4.26.1C or 4.26.1CA.~~

...

Explanatory Note

The definition of Remaining Available Capacity is amended to clarify that the quantities that need to be entered will depend on the Facility Class, Facility Technology Type and the Market Service affected by the Outage. For example, Remaining Available Capacity for RoCoF Service will be in terms megawatt seconds. The detailed requirements will be provided in the WEM Procedure referred to in clause 3.18.4.

~~**Remaining Available Capacity:** For each Dispatch Interval included in an Outage, the remaining capacity capability of the a Facility, Separately Certified Component of a Facility, or item of equipment or Facility Technology Type of a Facility, as relevant, to provide the an 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 described in the WEM Procedure for other Outage Capabilities referred to in clause 3.18.4.~~

...

Explanatory Note

The defined term Repaid Amount has been amended to correct a cross reference error.

~~**Repaid Amount:** Has the meaning given in clause 9.24.2(a) 9.20.2(a).~~

Explanatory Note

The defined term Repaid Amount Levy is introduced to enable AEMO to disgorge, repay or pay a Repaid Amount and recover the payment from Market Participants through a levy in line with the provisions for the Default Levy without having to draw on its own funds or short pay any Market Participants.

The new defined term is introduced in conjunction with amendments to clause 9.20.2(b) and introduction of new clauses 9.20.2A to 9.20.2C.

Repaid Amount Levy: The amount, in respect of a given Market Participant and in the circumstance of a particular Repaid Amount, determined by AEMO in accordance with clause 9.20.2A.

...

Explanatory Note

The confidentiality statuses Rule Participant Dispatch Restricted and Rule Participant Market Restricted are deleted because they are no longer required under the new Market Information framework.

~~**Rule Participant Dispatch Restricted:** An information confidentiality status whereby information or documents may only be made available to the parties described in clause 40.2.2(d).~~

~~**Rule Participant Market Restricted:** An information confidentiality status whereby information or documents may only be made available to the parties described in clause 40.2.2(c).~~

...

Explanatory Note

The existing definition of Self-Scheduling Outage Facility is amended to be consistent with the definition of "Self-scheduling Outage Facility" that was proposed to be inserted by the Tranches 2 and 3 Amendments. To avoid duplicating the definition, the Tranches 2 and 3 Amending Rule will not commence.

~~**Self-Scheduling Outage Facility:** Has the meaning given in clause 3.18.2A(a).~~ A Facility that is included on the Self-Scheduling Outage Facility List.

Explanatory Note

The definition of Self-Scheduling Outage Facility List is amended to use standard capitalisation for "Self-Scheduling".

~~**Self-scheduling Self-Scheduling Outage Facility List:** Means the The list maintained by AEMO under clause-3.18A.6.~~

...

Explanatory Note

The definition of SESSM Availability Payment is amended to use the correct defined term “SESSM Availability Quantity”.

SESSM Availability Payment: Means the dollar amount payable to the Market Participant for offering the SESSM Availability Quantity of Frequency Co-optimised Essential System Service into the market according to the SESSM Service Specification.

...

Explanatory Note

The definition of SESSM Availability Requirement is amended to use the correct defined term “SESSM Availability Quantity”.

SESSM Availability Requirement: For a SESSM Award, the percentage of Dispatch Intervals in the SESSM Service Timing in which the Facility must include the sum of the SESSM Availability Quantity and the Base ESS Quantity in its Real-Time Market Submissions for the relevant Frequency Co-optimised Essential System Service from an Available Capacity or In-Service Capacity or be required to pay a Facility SESSM Refund calculated under Appendix 2C.

...

Explanatory Note

The Tranche 5 Amendments insert a new definition of Small Aggregation but the term is already defined in the WEM Rules. To achieve the intended outcome, the current definition is replaced with the new definition and the Tranche 5 Amending Rule will not commence.

~~**Small Aggregation:** The aggregation of a number of electricity producing resources connected to the distribution system and located at the same Electrical Location.~~

Small Aggregation: One or more Facilities connected to the distribution system and located at the same Electrical Location.

...

Explanatory Note

The term Standing DSP Withdrawal Profile Submission replaces the former term Standing Withdrawal Profile.

Standing DSP Withdrawal Profile Submission: A default DSP Withdrawal Profile Submission for a Demand Side Programme for Dispatch Intervals starting at specified times on Trading Days of a specified type.

...

Explanatory Note

The definition of Standing Real-Time Market Submission is amended to clarify its meaning, consistent with the changes proposed in section 7.4.

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. A default Real-Time Market Submission for a Registered Facility and Market Service for Dispatch Intervals starting at specified times on Trading Days of a specified type.~~

...

Explanatory Note

The term Standing Withdrawal Profile is replaced with the term Standing DSP Withdrawal Profile Submission.

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.~~

...

Explanatory Note

The definition of Start Decision Cutoff is amended to clarify that the time is relative to the Dispatch Interval in the relevant Real-Time Market Submission, and that the concept of Available Capacity is not just related to synchronisation but relates generally to a decision to make capacity ready for dispatch.

Start Decision Cutoff: For a Registered Facility and Dispatch Interval, the latest time before the start of the Dispatch Interval at which a Market Participant could decide to change a quantity of Available Capacity to In-Service Capacity so as to ~~achieve synchronisation for the energy for~~ make the capacity ready for dispatch in that Dispatch Interval, as reflected in its Real-Time Market Submission.

...

STEM Reserve Capacity Obligation Quantity: An estimate of the Reserve Capacity Obligation Quantity for a Separately Certified Component of a Scheduled Facility or Semi-Scheduled Facility for a Dispatch Interval that is determined by AEMO on the Scheduling Day for the relevant Trading Day in accordance with ~~Chapter 6~~ clause 6.3A.3(h).

...

STEM Submission Information Window: For a Scheduling Day, the period of eight consecutive Trading Days starting with the Trading Day for the Scheduling Day.

STEM Submission Results Window: For a point in time in the 24-hour period starting at 8:30 AM on a Scheduling Day, the period of eight consecutive Trading Days starting with the Trading Day for the Scheduling Day.

...

Explanatory Note

The definition of Supplementary Capacity Contract is amended to end with a full stop.

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.

...

Explanatory Note

The Tranches 2 and Tranche 3 Amendments insert a new definition of System Inertia but the term is already defined in the WEM Rules. To achieve the intended outcome, the current definition is replaced with the new definition and the Tranches 2 and 3 Amending Rule will not commence.

~~**System Inertia:** The total Inertia provided by Registered Facilities, Network equipment and other equipment connected to the SWIS.~~

System Inertia: The total Inertia provided by Registered Facilities, Loads, Network equipment and other equipment connected to the SWIS.

...

Explanatory Note

The confidentiality status System Operation Confidential is no longer required under the new Market Information framework.

~~**System Operation Confidential:** An information confidentiality status whereby information or documents may only be made available to the parties described in clause 10.2.2(e).~~

Explanatory Note

The definition of System Operation Fees is no longer required.

~~**System Operation Fees:** The fees determined by AEMO in accordance with section 2.24, and payable by Market Participants to AEMO for performing System Operation Functions in accordance with these WEM Rules.~~

...

Explanatory Note

The definition of System Size is amended to correct minor typographical errors.

System Size: Means, in respect of a Facility, 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 Contract Maximum Demand in MW of the Facility, where the Contract Maximum Demand is a positive quantity; and
 - ii. negative one multiplied by the sum over all Electric Storage Resources in the Energy Producing System at the Facility (calculated for each individual Electric Storage Resource), of each Electric Storage Resource's maximum MW consumption quantity (where that consumption quantity is negative).

...

Explanatory Note

The Tranches 2 and Tranche 3 Amendments insert a new definition of System Strength but the term is already defined in the WEM Rules. To achieve the intended outcome, the current definition is replaced with the new definition and the Tranches 2 and 3 Amending Rule will not commence.

~~**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: 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.

...

Explanatory Note

The definition of Trading Week is amended to align the start of the first Trading Week with the New WEM Commencement Day (8:00 AM on Sunday, 1 October 2023).

~~**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 of seven days commencing at 8:00 AM on the day of the week on which the New WEM Commencement Day commences.~~

...

Explanatory Note

The definitions of Unadjusted Consequential Outage Quantity, Unadjusted Forced Outage Quantity, Unadjusted Planned Outage Quantity and Unadjusted Semi-Scheduled Injection Forecast are no longer required.

~~**Unadjusted Consequential Outage Quantity:** For a Scheduled Generator or Non-Scheduled Generator for a Trading Interval, the total quantity of de-rating recorded for any approved Consequential Outages for the Facility in AEMO's outage management system.~~

~~**Unadjusted Forced Outage Quantity:** For a Scheduled Generator or Non-Scheduled Generator for a Trading Interval, the total quantity of de-rating recorded for any Forced Outages for the Facility in AEMO's outage management system.~~

~~**Unadjusted Planned Outage Quantity:** For a Scheduled Generator or Non-Scheduled Generator for a Trading Interval, the total quantity of de-rating recorded for any approved Planned Outages for the Facility in AEMO's outage management system.~~

~~**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 clauses 2.35.4 and 7.13.3.~~

...

Explanatory Note

The definitions of Unconstrained Injection Forecast and Unconstrained Withdrawal Forecast are added to support the proposed changes to the provision of Injection and Withdrawal forecasts for Semi-Scheduled Facilities and Non-Scheduled Facilities.

~~**Unconstrained Injection Forecast:** The expected MW level of Injection at the end of a Dispatch Interval for a Semi-Scheduled Facility or Non-Scheduled Facility, assuming that the Facility will not be subject to a Dispatch Instruction or direction from AEMO that limits its Injection, and allowing for expected conditions, commitment and control intentions and the effect of any Outages that have not been rejected for the Facility.~~

~~**Unconstrained Withdrawal Forecast:** The expected MW level of Withdrawal at the end of a Dispatch Interval for a Semi-Scheduled Facility or Non-Scheduled Facility, assuming that the Facility will not be subject to a Dispatch Instruction or direction from AEMO that limits its Withdrawal, and allowing for expected conditions, commitment and control intentions and the effect of any Outages that have not been rejected for the Facility.~~

...

Explanatory Note

The definition of Upwards Out of Merit Generation is no longer required.

~~**Upwards Out of Merit Generation:** Has the meaning given in clauses 6.16A.1 and 6.16B.1, as applicable.~~

...

Explanatory Note

The definition of Withdrawal is amended to clarify how the quantity is measured for different Facility Classes.

Withdrawal: The quantity of power or energy received from a Network, as measured ~~at:~~

- (a) for a ~~Registered Facility~~ Scheduled Facility, Semi-Scheduled Facility or Non-Scheduled Facility with a single defined network connection point, at the network connection point;
- (b) for a ~~Registered Facility~~ Scheduled Facility, Semi-Scheduled Facility or Non-Scheduled Facility with multiple network connection points with the same Electrical Location, at the Electrical Location; ~~and~~
- (c) for a ~~Registered Facility~~ Scheduled Facility, Semi-Scheduled Facility or Non-Scheduled Facility with network connection points at more than one Electrical Location, at the Reference Node;~~;~~
- (d) for a Non-Dispatchable Load, at the network connection point; and
- (e) for a Demand Side Programme, as the sum of the Withdrawal quantities of each Associated Load of the Demand Side Programme,

which is measured in instantaneous MW unless specified as MWh over a time period, and is represented as a negative number or zero.

Explanatory Note

The term Withdrawal Profile is replaced by the term DSP Withdrawal Profile Submission.

~~**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.~~

...

Explanatory Note

Appendix 1 has been redrafted to:

- use the new registration taxonomy;
- rearrange the lists within the Appendix in the following order:
 - lists of items required as a pre-condition of Rule Participant registration;
 - lists of items required as a pre-condition for Facility registration in a specific Facility Class; and
 - list of items that are not required as pre-conditions for registration;
- include new Standing Data items required to support the new market arrangements;
- remove Standing Data items that are no longer required;
- remove items that are not maintained using the Standing Data processes set out in section 2.34 (e.g. the Capacity Credits held by a Facility); and
- clarify the requirements for some existing Standing Data items.

~~Appendix 1: Standing Data~~

~~This Appendix describes the Standing Data to be maintained by AEMO for use by AEMO in market processes and in dispatch processes.~~

~~Standing Data required to be provided as a pre-condition of Facility Registration and which Rule Participants are to update as necessary, is described in clauses (a) to (h).~~

~~Standing Data not required to be provided as a pre-condition of Facility Registration but which AEMO is required to maintain, and which Rule Participants are to update as necessary, includes the data described in clauses (j) to (n).~~

~~(a) — [Blank]~~

~~(b) — for a Scheduled Generator:~~

- ~~i. — evidence that the communication and control systems required by section 2.35 are in place and operational;~~
- ~~ii. — the nameplate capacity of the generator, expressed in MW;~~
- ~~iiA. — the minimum load at the connection point of the generator that will automatically trip off if the generator fails, expressed in MW;~~
- ~~iii. — the sent out capacity of the generator, expressed in MW;~~
- ~~iiiA. — the dependence of capacity on the type of fuel used by the facility for each fuel described in (xi);~~
- ~~iv. — the dependence of capacity on temperature at the location of the facility;~~
- ~~v. — the normal ramp up and ramp down rates as a function of output level;~~

- vi. ~~emergency ramp up and ramp down rates;~~
- vii. ~~the over-load capacity of the generator, if any, expressed in MW;~~
- viii. ~~the AGC capabilities of the facility;~~
- ix. ~~the Black Start capability of the facility;~~
- 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.~~
- xi. ~~details of the fuel or fuels that the facility can use, including dual fuel capabilities and the process for changing fuels;~~
- xii. ~~details of any potential energy limits of the facility;~~
- xiii. ~~the minimum stable loading level of the generator, expressed in MW;~~
- xiv. ~~the minimum dispatchable loading level of the generator, expressed in MW;~~
- xv. ~~any output range between minimum dispatchable loading level and nameplate capacity in which the facility is incapable of stable or safe operation;~~
- xvi. ~~sub-transient, transient and steady state impedances (positive, negative and zero sequence) for the facility;~~
- xvii. ~~the minimum time to synchronisation from each of the following states:

 - 1. ~~cold;~~
 - 2. ~~warm;~~
 - 3. ~~hot;~~~~and the number of hours that must have elapsed since the facility last ran for it to be considered in each of these states;~~~~
- xviii. ~~the minimum time before the facility can be restarted after it is shut down;~~
- xix. ~~the facility's minimum physical response time before the facility can begin to respond to a Dispatch Instruction;~~
- xx. ~~the Metering Data Agent for the facility;~~
- xxi. ~~the single line diagram for the facility, including the locations of transformers, switches, operational and settlement meters;~~
- xxii. ~~the point on the network at which the facility can connect; and~~
- xxiii. ~~the short circuit capability of facility equipment.~~

(c) ~~[Blank]~~

- (d) ~~[Blank]~~
- (e) ~~for a Non-Scheduled Generator:~~
- ~~i. evidence that the communication and control systems required by section 2.35 are in place and operational;~~
 - ~~ii. the nameplate capacity of the generator, expressed in MW;~~
 - ~~iiA. the minimum load at the connection point of the generator that will automatically trip off if the generator fails, expressed in MW;~~
 - ~~iii. the ramp down rates;~~
 - ~~iiiA. the sent out capacity of the generator, expressed in MW;~~
 - ~~iv. [Blank]~~
 - ~~v. [Blank]~~
 - ~~vi. the minimum response time before the facility can begin to respond to an instruction from AEMO to change its output;~~
 - ~~vii. the Metering Data Agent for the facility;~~
 - ~~viii. the single line diagram for the facility, including the locations of transformers, switches, operational and settlement meters;~~
 - ~~ix. the point on the network at which the facility can connect;~~
 - ~~x. the short circuit capability of facility equipment; and~~
 - ~~xi. sub-transient, transient and steady state impedances (positive, negative and zero sequence) for the facility;~~
- (f) ~~for a Market Participant serving Non-Dispatchable Load, or a Registered Facility containing an Intermittent Load:~~
- ~~i. the connection points at which electricity is delivered to the Market Customer including for supply to Customers;~~
 - ~~ii. the connection points at which the Market Customer holds Arrangements for Access, where evidence of such Arrangements for Access must be provided to AEMO;~~
 - ~~iii. the Market Customer's nominated maximum consumption quantity, in units of MWh per Trading Interval for each connection point referred to in paragraph (i);~~
 - ~~iv. the Metering Data Agent for the Market Customer;~~
 - ~~v. the metering points at which the quantity of electricity, delivered to the Market Customer is to be measured;~~
 - ~~vi. the identity of metering points serving Intermittent Loads that are contained in Non-Dispatchable Loads or Registered Facilities;~~
 - ~~vii. for each metering point identified in (vi) the maximum allowed level of Intermittent Load, where this cannot exceed the quantity in (iii);~~

viii. ~~for each metering point identified in (vi) the maximum level of net consumption at that meter which is not separately metered and which is not Intermittent Load; and~~

ix. ~~for each metering point identified in (vi) the separately metered generating systems and loads behind that meter which are not to be included in the definition of that Intermittent Load.~~

(g) ~~for an Interruptible Load:~~

i. ~~the Market Participant's nominated maximum consumption quantity, in units of MWh per Trading Interval;~~

ii. ~~evidence that the communication and control systems required by section 2.35 are in place and operational;~~

iii. ~~real-time telemetry capabilities;~~

iv. ~~the maximum amount of load that can be interrupted;~~

v. ~~the maximum duration of any single interruption;~~

vi. ~~the capability to provide Contingency Reserve Raise as a function of consumption;~~

vii. ~~the Metering Data Agent for the facility;~~

viii. ~~the single line diagram for the facility, including the locations of transformers, switches, operational and settlement meters;~~

ix. ~~the network nodes at which the facility can connect; and~~

x. ~~the short circuit capability of facility equipment.~~

(h) ~~for a Demand Side Programme:~~

i. ~~[Blank]~~

ii. ~~evidence that the communication and control systems required by clause 2.35 are in place and operational;~~

iii. ~~the maximum amount of load that can be curtailed;~~

iv. ~~the maximum duration of any single curtailment;~~

v. ~~[Blank]~~

vi. ~~for a Demand Side Programme that is registered to a Market Participant, data comprising:~~

1. ~~a Consumption Decrease Price for Peak Trading Intervals; and~~

2. ~~a Consumption Decrease Price for Off-Peak Trading Intervals,~~

~~where these prices must be expressed in units of \$/MWh to a precision of \$0.01/MWh;~~

- vii. ~~the minimum response time before the Demand Side Programme can begin to respond to an instruction from AEMO to change its output;~~
- viii. ~~details of the real-time telemetry capabilities of the Facility;~~
- ix. ~~the Trading Intervals where the Demand Side Programme can be curtailed;~~
- x. ~~any restrictions on the availability of the Demand Side Programme;~~
- xi. ~~the DSP Ramp Rate Limit for each Trading Interval, and the rate at which the Facility is expected to increase its consumption when dispatch ends, as a function of output level, if applicable;~~
- xii. ~~emergency ramp up and ramp down rates, if applicable (which information does not limit a request under clause 7.7.3B);~~
- xiii. ~~[Blank]~~
- 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~~
- xv. ~~a good faith forecast of a consumption profile or profiles at which the Facility is likely to operate for the rest of the Trading Day, if it is issued a Dispatch Instruction by AEMO in accordance with 7.6.1H (eg. a Market Participant may provide different profiles to reflect different operation depending on the time of day at which the Dispatch Instruction takes effect).~~

~~(i) [Blank]~~

~~(j) [Blank]~~

~~(k) for each Registered Facility:~~

- ~~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 41oC (if applicable);~~
 - ~~4. the Reserve Capacity Obligation Quantity of the facility at 45oC (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).~~~~
- ~~ii. Non-Co-optimised Essential System Service information including:~~

1. ~~the identity of any Network Operator that has entered into a Network Control Service Contract in relation to the Facility;~~
2. ~~the unique identifier for any NCESS Contract applicable to the Facility provided by a Network Operator in accordance with clause 5.3A.1(c); and~~
3. ~~whether the Facility is subject to a NCESS Contract that requires the Facility not to be part of an aggregated Facility; and~~

iii. ~~the Settlement Tolerance;~~

(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~~

(m) ~~[Blank]~~

(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.~~

Appendix 1: Standing Data

This Appendix describes the Standing Data to be maintained by AEMO for use by AEMO in market processes and in dispatch processes.

Standing Data required to be provided as a pre-condition of Market Participant registration and which Market Participants are to update as necessary, is described in Appendix 1(a).

Standing Data required to be provided as a pre-condition of Facility registration and which Rule Participants are to update as necessary, is described in Appendix 1(b) to 1(f).

Standing Data not required to be provided as a pre-condition of Facility registration but which AEMO is required to maintain, and which Rule Participants are to update as necessary, includes the data described in Appendix 1(g) to 1(i).

- (a) For each Market Participant, the maximum Loss Factor adjusted quantity of energy, in units of MWh, that could be consumed during a Trading Interval by the Market Participant's Registered Facilities and Non-Dispatchable Loads.
- (b) For a Scheduled Facility:
 - i. the total nameplate capacity of the Facility's Energy Producing System, expressed in MW;
 - ii. the nameplate capacity of each Facility Technology Type in the Facility, excluding Loads;
 - iii. the System Size;
 - iv. if the Facility is a Small Aggregation;
 - v. the maximum sent out capacity of the Facility under optimal conditions, expressed in MW;
 - vi. the maximum Withdrawal capacity of the Facility under optimal conditions, expressed in MW;
 - vii. the dependence of sent out capacity on temperature at the location of the Facility;
 - viii. the method to be used for determining the ambient temperature at the site of the Facility (where if no method is specified, a constant temperature of 41 degrees Celsius will be assumed);

- ix. if the Facility has a Separately Certified Component that is a Non-Intermittent Generating System, the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from the Non-Intermittent Generating System when it is operated normally at an ambient temperature of:

 - 1. 41 degrees Celsius; and
 - 2. 45 degrees Celsius;
- x. if the Facility has a Separately Certified Component that is a Non-Intermittent Generating System, the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from the Non-Intermittent Generating System under optimal conditions;
- xi. if the Facility has a Separately Certified Component that is an Electric Storage Resource, the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from the Electric Storage Resource when it is operated normally at an ambient temperature of:

 - 1. 41 degrees Celsius; and
 - 2. 45 degrees Celsius;
- xii. if the Facility has a Separately Certified Component that is an Electric Storage Resource, the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply across the Electric Storage Resource Obligation Duration, to the relevant Network from the Electric Storage Resource under optimal conditions;
- xiii. if the Facility has a Separately Certified Component that is an Electric Storage Resource, the minimum Charge Level capability of the Electric Storage Resource;
- xiv. details of the fuel or fuels that each Non-Intermittent Generating System in the Facility can use, including dual fuel capabilities and the process for changing fuels;
- xv. the dependence of capacity on the type of fuel used by each Non-Intermittent Generating System in the Facility for each fuel described in Appendix 1(b)(xiv);
- xvi. details of any potential energy limits of the Facility;
- xvii. if the Facility is a Fast Start Facility;
- xviii. the minimum time to synchronisation for the Facility from each of the following states, if applicable:

 - 1. cold;

- 2. warm; and
- 3. hot,
and the number of hours that must have elapsed since the Facility last ran for it to be considered in each of these states:
- xix. the minimum time before each Facility Technology Type in the Facility can be restarted after it is shut down, excluding Loads;
- xx. the minimum stable loading level of the Facility, expressed in sent out MW;
- xxi. the minimum dispatchable loading level of the Facility, expressed in sent out MW;
- xxii. the minimum physical response time before the Facility can begin to respond to a Dispatch Instruction, when the Facility is running;
- xxiii. any output range between minimum dispatchable loading level and nameplate capacity in which the Facility is incapable of stable or safe operation;
- xxiv. the minimum load at the connection point of the Facility that will automatically trip off if the Facility fails, expressed in MW;
- xxv. sub-transient, transient and steady state impedances (positive, negative and zero sequence) for the Facility;
- xxvi. the Standing Maximum Upwards Ramp Rate;
- xxvii. the Standing Maximum Downwards Ramp Rate;
- xxviii. the emergency upwards ramp rate;
- xxix. the emergency downwards ramp rate;
- xxx. the overload Injection capacity of the Facility, if any, expressed in MW;
- xxxi. the overload Withdrawal capacity of the Facility, if any, expressed in MW;
- xxxii. the AGC capabilities of the Facility;
- xxxiii. the black start capability of the Facility;
- xxxiv. the short circuit capability of Facility equipment;
- xxxv. evidence that the communication and control systems required by section 2.35 are in place and operational;
- xxxvi. the single line diagram for the Facility, including the locations of transformers, switches, operational and settlement meters;
- xxxvii. the network node or nodes at which the Facility can connect;
- xxxviii. the Transmission Node Identifier;

- xxxix. the National Meter Identifier of each metering point for the Facility, where applicable;
- xl. the Metering Data Agent for the Facility;
- xli. start-up costs; and
- xlii. minimum generation costs.

(c) For a Semi-Scheduled Facility:

- i. the total nameplate capacity of the Facility's Energy Producing System, expressed in MW;
- ii. the nameplate capacity of each Facility Technology Type in the Facility, excluding Loads;
- iii. the System Size;
- iv. if the Facility is a Small Aggregation;
- v. the maximum sent out capacity of the Facility under optimal conditions, expressed in MW;
- vi. the maximum Withdrawal capacity of the Facility under optimal conditions, expressed in MW;
- vii. the dependence of sent out capacity on temperature at the location of the Facility, if applicable;
- viii. the method to be used for determining the ambient temperature at the site of the Facility (where if no method is specified, a constant temperature of 41 degrees Celsius will be assumed);
- ix. if the Facility has a Separately Certified Component that is a Non-Intermittent Generating System, the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from the Non-Intermittent Generating System when it is operated normally at an ambient temperature of:
 - 1. 41 degrees Celsius; and
 - 2. 45 degrees Celsius;
- x. if the Facility has a Separately Certified Component that is a Non-Intermittent Generating System, the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from the Non-Intermittent Generating System under optimal conditions;
- xi. if the Facility has a Separately Certified Component that is an Electric Storage Resource, the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from the Electric Storage Resource when it is operated normally at an ambient temperature of:

1. 41 degrees Celsius; and
2. 45 degrees Celsius;
- xii. if the Facility has a Separately Certified Component that is an Electric Storage Resource, the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply across the Electric Storage Resource Obligation Duration, to the relevant Network from the Electric Storage Resource under optimal conditions;
- xiii. if the Facility has a Separately Certified Component that is an Electric Storage Resource, the minimum Charge Level capability of the Electric Storage Resource;
- xiv. details of the fuel or fuels that each Non-Intermittent Generating System in the Facility can use, including dual fuel capabilities and the process for changing fuels;
- xv. the dependence of capacity on the type of fuel used by each Non-Intermittent Generating System in the Facility for each fuel described in Appendix 1(c)(xiv);
- xvi. if the Facility is a Fast Start Facility;
- xvii. the minimum time to synchronisation for the Facility from each of the following states, if applicable:
 1. cold;
 2. warm; and
 3. hot,and the number of hours that must have elapsed since the Facility last ran for it to be considered in each of these states;
- xviii. the minimum time before each Facility Technology Type in the Facility can be restarted after it is shut down, excluding Loads;
- xix. the minimum stable loading level of the Facility, expressed in sent out MW;
- xx. the minimum dispatchable loading level of the Facility, expressed in sent out MW;
- xxi. the minimum physical response time before the Facility can begin to respond to a Dispatch Instruction, when the Facility is running;
- xxii. any output range between minimum dispatchable loading level and nameplate capacity in which the Facility is incapable of stable or safe operation, if applicable;
- xxiii. the minimum load at the connection point of the Facility that will automatically trip off if the Facility fails, expressed in MW;

- xxiv. sub-transient, transient and steady state impedances (positive, negative and zero sequence) for the Facility;
- xxv. the Standing Maximum Upwards Ramp Rate;
- xxvi. the Standing Maximum Downwards Ramp Rate;
- xxvii. the emergency upwards ramp rate, if applicable;
- xxviii. the emergency downwards ramp rate, if applicable;
- xxix. the overload Injection capacity of the Facility, if any, expressed in MW;
- xxx. the overload Withdrawal capacity of the Facility, if any, expressed in MW;
- xxxi. the short circuit capability of Facility equipment;
- xxxii. evidence that the communication and control systems required by section 2.35 are in place and operational;
- xxxiii. the single line diagram for the Facility, including the locations of transformers, switches, operational and settlement meters;
- xxxiv. the network node or nodes at which the Facility can connect;
- xxxv. the Transmission Node Identifier;
- xxxvi. the National Meter Identifier of each metering point for the Facility, where applicable;
- xxxvii. the Metering Data Agent for the Facility;
- xxxviii. start-up costs; and
- xxxix. minimum generation costs.

(d) for a Non-Scheduled Facility:

- i. the total nameplate capacity of the Facility's Energy Producing System, expressed in MW;
- ii. the nameplate capacity of each Facility Technology Type in the Facility, excluding Loads;
- iii. the System Size;
- iv. if the Facility is a Small Aggregation;
- v. the maximum sent out capacity of the Facility under optimal conditions, expressed in MW;
- vi. the maximum Withdrawal capacity of the Facility under optimal conditions, expressed in MW;
- vii. the dependence of sent out capacity on temperature at the location of the Facility, if applicable;

- viii. details of the fuel or fuels that each Non-Intermittent Generating System in the Facility can use, including dual fuel capabilities and the process for changing fuels;
- ix. the minimum dispatchable loading level of the Facility, expressed in sent out MW;
- x. the minimum physical response time before the facility can begin to respond to a direction from AEMO to change its output when the Facility is running;
- xi. the minimum load at the connection point of the Facility that will automatically trip off if the Facility fails, expressed in MW;
- xii. sub-transient, transient and steady state impedances (positive, negative and zero sequence) for the Facility;
- xiii. the Standing Maximum Upwards Ramp Rate;
- xiv. the Standing Maximum Downwards Ramp Rate;
- xv. the emergency upwards ramp rate, if applicable;
- xvi. the emergency downwards ramp rate, if applicable;
- xvii. the overload Injection capacity of the Facility, if any, expressed in MW;
- xviii. the overload Withdrawal capacity of the Facility, if any, expressed in MW;
- xix. the short circuit capability of equipment;
- xx. evidence that the communication and control systems required by section 2.35 are in place and operational;
- xxi. the single line diagram for the, including the locations of transformers, switches, operational and settlement meters;
- xxii. the network node or nodes at which the Facility can connect;
- xxiii. the Transmission Node Identifier;
- xxiv. the National Meter Identifier of each metering point for the Facility, where applicable;
- xxv. the Metering Data Agent for the Facility;
- xxvi. start-up costs; and
- xxvii. minimum generation costs.

(e) For an Interruptible Load:

- i. evidence that the communication and control systems required by section 2.35 are in place and operational;
- ii. details of the real-time telemetry capabilities;
- iii. the short circuit capability of Facility equipment;

- iv. the single line diagram for the Facility, including the locations of transformers, switches, operational and settlement meters, if applicable;
- v. the network nodes at which the Associated Loads of the Facility can connect; and
- vi. the Transmission Node Identifier.

(f) For a Demand Side Programme:

- i. the maximum number of hours per day that the Facility will be available to provide Reserve Capacity if issued a Dispatch Instruction;
- ii. the Trading Intervals where the Demand Side Programme can be curtailed;
- iii. any restrictions on the availability of the Demand Side Programme;
- iv. the minimum notice period required for dispatch under clause 7.6.15 of the Facility;
- v. evidence that the communication and control systems required by clause 2.35 are in place and operational; and
- vi. details of the real-time telemetry capabilities of the Facility.

(g) For a Market Participant serving Non-Dispatchable Loads containing Intermittent Loads:

- i. the identity of the metering points measuring the Intermittent Loads;
- ii. for each metering point identified in Appendix 1(g)(i), the maximum allowed level of Intermittent Load;
- iii. for each metering point identified in Appendix 1(g)(i), the maximum level of net consumption at that meter which is not separately metered and which is not Intermittent Load; and
- iv. for each metering point identified in Appendix 1(g)(i), the separately metered Energy Producing Systems and Loads behind that meter which are not to be included in the definition of that Intermittent Load.

(h) For each Facility accredited to provide a Frequency Co-optimised Essential System Service, the Frequency Co-optimised Essential System Service Accreditation Parameters.

(i) For each Facility accredited for RoCoF Ride-Through Capability, the RoCoF Ride-Through Capability of the Facility determined by AEMO.

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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.
 - 1.3 Each electricity producing unit in an Energy Producing System supplying an Intermittent Load to which clause 2.1(c) of this Appendix 2A applies is treated as a separate Facility for the purposes of this Appendix 2A.
- 2. Define Facility Sets and Facility Contingencies**
 - 2.1 Determine Facilities(DI) as the set of all:
 - (a) Scheduled Facilities and Semi-Scheduled Facilities that do not contain an Intermittent Load in Dispatch Interval DI;
 - (b) Scheduled Facilities, Semi-Scheduled Facilities, Non-Scheduled Facilities and Non-Dispatchable Loads that contain an Intermittent Load in Dispatch Interval DI, where:
 - i. in AEMO's reasonable opinion, the information provided under clause 2.30B.3(g) establishes that if a Contingency Event or an event behind the relevant connection point affects the Energy Producing System supplying the Intermittent Load, the net Injection or Withdrawal of the Facility will change by less than 10 MW; or
 - ii. the Facility Risk for f in Dispatch Interval DI as published under clause 7.13.1E(g)(i) is greater than the highest instantaneous output (in MW) of any electricity producing unit in the Energy Producing System supplying the Intermittent Load as provided under clause 2.30B.3(h); and
 - (c) electricity producing units in Energy Producing Systems supplying Intermittent Loads which are not part of a Facility included in Facilities(DI) under clause 2.1(b) of this Appendix 2A, and for which, in AEMO's reasonable opinion, the information provided under clause 2.30B.3(g) does not establish that if a Contingency Event or an event behind the relevant connection point affects the Energy Producing System the net Injection or Withdrawal of the Facility will change by less than 10 MW.

- 2.1A Determine AdditionalIMLFacilities(DI) as the set of all Scheduled Facilities, Semi-Scheduled Facilities, Non-Scheduled Facilities and Non-Dispatchable Loads that contain an Intermittent Load in Dispatch Interval DI and are not included in Facilities(DI).
- 2.2 For each member in Facilities(DI) or AdditionalIMLFacilities(DI), f, calculate the FacilityRisk(f,DI) to be:
- (a) where f is a member of AdditionalIMLFacilities(DI) or was included in Facilities(DI) under clauses 2.1(a) or 2.1(b) of this Appendix 2A, the Facility Risk for f in Dispatch Interval DI as published under clause 7.13.1E(g)(i); or
 - (b) where f was included in Facilities(DI) under clause 2.1(c) of this Appendix 2A, the MWh output or consumption of the electricity producing unit in the Dispatch Interval immediately prior to Dispatch Interval DI as published under clause 7.13.1E(a)(v), multiplied by 12 to convert to MW.

Explanatory Note

Clause 2.3 is amended to clarify how the members of ApplicableFacilities(DI) are determined.

- 2.3 Determine ApplicableFacilities(DI), ~~which is a subset of Facilities(DI), such that which comprises those members f of Facilities (DI) for which:~~

$$FacilityRisk(f, DI) \geq 10MW \quad \forall f \in \text{ApplicableFacilities}(DI)$$

Explanatory Note

The Tranche 5 Amendments 'replacement' of clause 2.4 will not commence because the clause does not exist to be replaced. The Tranche 6 Amendments will insert the clause, which is amended from the Tranche 5 version to clarify how the members of AdditionalApplicableFacilities(DI) are determined.

- 2.4 Determine AdditionalApplicableFacilities(DI), which comprises those members f of AdditionalIMLFacilities(DI) for which:

$$FacilityRisk(f, DI) \geq 10MW$$

...

Explanatory Note

Clause 3.1 is amended to reflect that the information previously required to be published under clause 10.5.1(c) has been relocated to clause 2.34B.1(f).

3. Applicable Facility Shares~~F~~

- 3.1 Rank the 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 Facilities in that set have the same FacilityRisk(f,DI) value, AEMO shall rank those Facilities, as between each other,

in ascending alphabetical order of the name of the Facilities recorded by AEMO in accordance with clause ~~10.5.1(c)(vii)~~ 2.34B.1(f). The Facility with the lowest FacilityRisk(f,DI) value will have rank(f, DI) = 1, and the Facility with the highest FacilityRisk(f,DI) value will have rank(f, DI) = n, where n is the number of Facilities in the set ApplicableFacilities(DI).

...

4. Network Contingency Shares

Explanatory Note

Clause 4.1 is amended to remove a superfluous word.

- 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 ~~clause~~ 7.2.4 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 Network Risk in Dispatch Interval DI as published by AEMO in clause 7.13.1E(g)(ii)(1), if nc sets the Largest Credible Supply Contingency in Dispatch Interval DI; and
 - (b) NetworkRisk(nc,DI) = 0 otherwise.

Explanatory Note

Clause 4.3 is amended to clarify how the members of ApplicableNetworkContingencies(DI) are determined.

- 4.3 Determine ApplicableNetworkContingencies(DI) ~~as a subset of NetworkContingencies(DI), such that,~~ which comprises those members nc of NetworkContingencies(DI) for which:
- $$\text{NetworkRisk}(nc,DI) > 0 \text{ MW } \forall nc \in \text{ApplicableNetworkContingencies}(DI)$$
- 4.4 Calculate m(DI), as the number of members of ApplicableNetworkContingencies(DI).

Explanatory Note

Clause 4.5 is amended to reflect that the information previously required to be published under clause 10.5.1(c) has been relocated to clause 2.34B.1(f).

- 4.5 For each member in ApplicableNetworkContingencies(DI), nc, perform the following steps:
- (a) from the information published under clause 7.13.1E(g)(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 the union of ApplicableFacilities(DI) and AdditionalApplicableFacilities(DI) as defined in clauses 2.3 and 2.4 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. 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(e)(vii)~~ 2.34B.1(f). 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:

$$\text{NetworkRunwayShare}(nc,f,DI) = \sum_{i=1}^{\text{Rank}(nc,f,DI)} \frac{\text{NetworkMW}(nc,i,DI) - \text{NetworkMW}(nc,i-1,DI)}{\text{NetworkMW}(nc,n_{nc},DI) \times (n_{nc} + 1 - i)}$$

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 ∈ CauserFacilities(nc,DI);
- ii. Rank(nc,f,DI) is the rank of Registered Facility f ∈ 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:

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:

$$\text{FacilityComponent}(DI) = 1 - \text{NetworkComponent}(DI)$$

Explanatory Note

Clause 5.2 is amended to include a 'where' clause.

- 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:

$$\text{NetworkShare}(nc, f, DI) = \frac{1}{m(DI)} \times \text{NetworkRunwayShare}(nc, f, DI)$$

where:

- (a) $m(DI)$ is determined in clause 4.4 of this Appendix 2A; and
- (b) $\text{NetworkRunwayShare}(nc, f, DI)$ is determined in clause 4.5(c) of this Appendix 2A.

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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

Explanatory Note

Clause 2.1 of Appendix 2B is amended to reflect that Western Power, who is a Rule Participant, could have to pay for the cost of Minimum RoCoF Control Service.

- 2.1 AEMO must calculate a Market Rule 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.

Explanatory Note

Clause 2.2 of Appendix 2B is amended to:

- reflect that Western Power is the only Network Operator who may be required to pay for the cost of Minimum RoCoF Control Service;
- to give effect to the intent that every a facility cannot change between being an Injection Causer and an Offtake Causer; and
- improve consistency and readability of the drafting.

- 2.2 For each Trading Interval t, define the set of RoCoF Causers(t), being each ~~of:of—~~

- (a) Network Causer(t): the set of ~~Facilities Networks~~ registered to ~~Network Operators Western Power~~ which are RoCoF Causers under clause 2.34A.12J in Trading Interval t;
- (b) Injection Causer(t): the set of Registered Facilities ~~which inject energy into the SWIS~~ which are Scheduled Facilities, Semi-Scheduled Facilities or Non-Scheduled Facilities that are recorded in Standing Data as including an Energy Producing System, which have a non-zero Metered Schedule in Trading Interval t and which are RoCoF Causers under clause 2.34A.12J in Trading Interval t; and
- (c) Offtake Causer(t): the set ~~of:of—~~
- i. all Registered Facilities ~~which are Scheduled Facilities, Semi-Schedules Facilities or Non-Scheduled Facilities~~ which comprise only 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 are RoCoF Causers under clause 2.34A.12J in Trading Interval t.

- 2.3 For each Trading Interval t, define a Causer Factor for each subset of RoCoF Causers(t) as follows:

- (a) $\text{NetworkCauserFactor}(t) = \begin{cases} 0 & \text{if the Network Causer}(t) \text{ subset is empty,} \\ 1 & \text{otherwise;} \end{cases}$

$$(b) \quad \text{InjectionCauserFactor}(t) = \begin{cases} 0 & \text{if the Injection Causer}(t) \text{ subset is empty,} \\ 1 & \text{otherwise,} \end{cases}$$

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) NetworkCauserFactor(t) is the Causer Factor for the subset Network Causer(t) in Trading Interval t as calculated in clause 2.3(a) of this Appendix 2B.
- (b) InjectionCauserFactor(t) is the Causer Factor for the subset Injection Causer(t) in Trading Interval t as calculated in clause 2.3(b) of this Appendix 2B.
- (c) OfftakeCauserFactor(t) is the Causer Factor for the subset Offtake Causer(t) in Trading Interval t as calculated in clause 2.3(c) of this Appendix 2B.

Explanatory Note

Clause 2.5 of Appendix 2B is amended to:

- reflect that Western Power is the only Network Operator who may be required to pay for the cost of Minimum RoCoF Control Service; and
- improve consistency and readability of the drafting.

2.5 Determine ~~the Network Operator's Western Power's~~ share of the Minimum RoCoF Control Requirement component of the RoCoF Control Service cost in Trading Interval t as follows:

$$\del{\text{NOShare}(p,t)} \text{WPShare}(t) = \frac{1}{n(t)} \times \text{NetworkCauserFactor}(t)$$

where:

- ~~(a)~~ ~~p is the Network Operator;~~
- ~~(b)~~(a) NetworkCauserFactor(t) is the Causer Factor for the subset Network Causer(t) in Trading Interval t as calculated in clause 2.3(a) of this Appendix 2B; and
- ~~(c)~~(b) $n(t)$ is the total number of causer groups in Trading Interval t as calculated in clause 2.4 of this Appendix 2B.

2.6 For each Registered Facility, f , which is a member of Injection Causer(t), determine its share of the Minimum RoCoF Control Requirement component of RoCoF Control Service cost in Trading Interval t as follows:

$$\text{InjectionShare}(f,t) =$$

$$\frac{1}{n(t)} \times \text{InjectionCauserFactor}(t) \times \frac{|\text{MeteredSchedule}(f,t)|}{\sum_{i \in \text{InjectionCauser}(t)} |\text{MeteredSchedule}(i,t)|}$$

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) $\text{InjectionCauserFactor}(t)$ is the Causer Factor for the subset $\text{InjectionCauser}(t)$ in Trading Interval t as calculated in clause 2.3(b) of this Appendix 2B;
- (c) $\text{MeteredSchedule}(f,t)$ is the value of the Metered Schedule for Registered Facility f which is a member of the subset $\text{InjectionCauser}(t)$, 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 $\text{InjectionCauser}(t)$, such subset as defined in clause 2.2(b) of this Appendix 2B, in Trading Interval t ; and
- (e) $\text{MeteredSchedule}(i,t)$ is the value of the Metered Schedule for Registered Facility i in the subset $\text{InjectionCauser}(t)$, 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 $\text{OfftakeCauser}(t)$, 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) $\text{OfftakeCauserFactor}(t)$ is the Causer Factor for the subset $\text{OfftakeCauser}(t)$ in Trading Interval t as calculated in clause 2.3(c) of this Appendix 2B.
- (c) $\text{MeteredSchedule}(l,t)$ is the value of the Metered Schedule for member l of the subset $\text{OfftakeCauser}(t)$, 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 $\text{OfftakeCauser}(t)$, as defined in clause 2.2(c) of this Appendix 2B in Trading Interval t ; and
- (e) $\text{MeteredSchedule}(i,t)$ is the value of the Metered Schedules for a member i of the subset $\text{OfftakeCauser}(t)$, such subset as defined in clause 2.2(c) of this Appendix 2B in Trading Interval t .

Explanatory Note

Clause 2.8 of Appendix 2B is amended to:

- reflect that Western Power is the only Network Operator who may be required to pay for the cost of Minimum RoCoF Control Service; and
- improve consistency and readability of the drafting.

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) $f \in p$ denotes all Registered Facilities which are a member of Injection Causer(t) and registered to Rule Participant p;
- (c) OfftakeShare(l,t) is the share of the Minimum RoCoF Control Requirement component of the RoCoF Control Service cost in Trading Interval t for each facility which is a member of Offtake Causer(t), as calculated in clause 2.7 of this Appendix 2B;
- (d) $l \in p$ denotes all facilities which are members of Offtake Causer(t) and associated with Rule Participant p; and
- (e) NOShare(p,t) is, for ~~the Network Operator Western Power, the Network Operator's share of the Minimum RoCoF Control Requirement components of the RoCoF Control Service cost in Trading Interval t~~ WPSHare(t), as calculated in clause 2.5 of this Appendix 2B, and for all other Rule Participants, zero.

Appendix 2C: SESSM refund calculation method

Explanatory Note

Appendix 2C is amended to reflect the changes made to SESSM Award holder obligations under clause 7.4.5.

Other minor changes have been made to the appendix to:

- add missing variable definitions and remove an unused variable definition;
- correct typographical errors; and
- apply standard formatting and clause numbering conventions.

The amendments are expected to commence on New WEM Commencement Day, immediately after the insertion of Appendix 2C by the Tranches 2 and 3 Amendments.

1. Interpretation

1.1 Where anything is to be determined, calculated or done in this Appendix ~~2B~~ 2C, then except where otherwise stated, AEMO will determine, calculate or do, as the case may be, those things.

2. Supplementary Essential System Service Mechanism refund calculation methodology

2.1 AEMO must calculate the refund payable by a Market Participant in respect of their Registered Facility for not meeting the SESSM Availability Requirements set out in the relevant SESSM Awards by following each of the steps set out in the rest of this Appendix 2C.

2.2 Where AEMO has made a SESSM Award a in respect of a Registered Facility to provide a specific Frequency Co-optimised Essential System Service, that award specifies the following terms (which terms are applicable to the rest of this Appendix 2C):

- (a) the $BaseQuantity(a,DI)$, which is the Base ESS Quantity for SESSM Award a in Dispatch Interval DI;
- (b) the $AvailabilityQuantity(a,DI)$, which is the SESSM Availability Quantity for SESSM Award a in Dispatch Interval DI ;
- (c) the $AvailabilityPayment(a,DI)$, which is:
 - i. the Per-Dispatch Interval Availability Payment for SESSM Award a in Dispatch Interval DI if $AvailabilityQuantity(a,DI)$ is greater than zero; or
 - ii. if otherwise, zero; and
- (d) $MinAvailability(a)$, which is the SESSM Availability Requirement for SESSM Award a.

2.3 For each Registered Facility that is providing a Frequency Co-optimised Essential System Service under a SESSM Award a, and for the duration of that SESSM Award a:

- (a) determine N(a) to be the number of Dispatch Intervals in the SESSM Service Timing where AvailabilityQuantity(a,DI) is greater than zero;
- (b) determine the maximum number of Dispatch Intervals for which the Registered Facility providing a Frequency Co-optimised Essential System Service under SESSM Award a may be unavailable during the SESSM Service Timing, as follows:

$$\text{MaxUnavailability}(a) = \text{FLOOR} \left(N(a) \times (1 - \text{MinAvailability}(a)) \right)$$

where:

- i. the FLOOR() function rounds any non-integer figure down to the nearest integer; and
- ii. MinAvailability(a) is the percentage determined under clause 2.2(d) of this Appendix 2C; and

- (c) determine the total SESSM Availability Payments that would be made over the SESSM Service Timing if it met its SESSM Availability Requirement under SESSM Award a:

$$\text{PaymentCap}(a) = \sum_{DI \in a} \text{AvailabilityPayment}(a,DI)$$

where:

- i. $DI \in a$ denotes all Dispatch Intervals in the SESSM Service Timing; and
- ii. AvailabilityPayment(a,DI) is the quantity determined under clause 2.2(c) of this Appendix 2C.

Explanatory Note

The calculation of the effective FCESS offer quantity for a Facility subject to a SESSM Award in a Dispatch Interval (ESSOffer(f,c,DI)) is amended to reflect the proposed changes to SESSM Award holder obligations under clause 7.4.5. Under the revised drafting:

- by default, ESSOffer(f,c,DI) is equal to the total quantity offered by the Market Participant for Facility f and FCESS c in Dispatch Interval DI in its Real-Time Market Submission (clause 2.4(a));
- however, AEMO may estimate a lower quantity if the Facility is subject to an Outage during the Dispatch Interval and AEMO considers the quantities in the Real-Time Market Submission did not accurately reflect the actual capability of the Facility during that Dispatch Interval; and
- if the Market Participant fails to meet its obligations under new clause 7.4.5(c), i.e. it does not update its Real-Time Market Submission to offer FCESS capacity that is projected to be required as In-Service Capacity, then AEMO will set ESSOffer(f,c,DI) to its reasonable estimate of the actual In-Service capability of the Facility in the Dispatch Interval.

2.4 For each Dispatch Interval DI determine whether a Registered Facility f was available (in respect of its obligations under SESSM Award a to provide Frequency Co-optimised Essential System Service c):

$$\text{IsAvailable}(a,DI) = \begin{cases} 1 & \text{if } \text{ESSOffer}(f,c,DI) \geq (\text{BaseQuantity}(a,DI) + \text{AvailabilityQuantity}(a,DI)) \\ & \text{or } \text{AvailabilityQuantity}(a,DI) = 0, \\ 0 & \text{otherwise} \end{cases}$$

where:

(a) ESSOffer(f,c,DI) is:

i. the sum of the quantities offered in the relevant Market Participant's Real-Time Market Submission in respect of Registered Facility f to provide Frequency Co-optimised Essential System Service c in Dispatch Interval DI; or

ii. if:

~~A-1.~~ Registered Facility f is subject to a Planned Outage or a Forced Outage in Dispatch Interval DI; and

~~B-2.~~ in AEMO's view, the sum of the quantities offered in the relevant Market Participant's Real-Time Market Submission in respect of Registered Facility f does not accurately reflect the Facility's capability to provide Frequency Co-optimised Essential System Service c in Dispatch Interval DI,

then, AEMO's reasonable estimate of Registered Facility f's capability in MW or MWs, as the case may be, to provide Frequency Co-optimised Essential System Service c in Dispatch Interval DI, if that quantity is lower than the quantity specified in clause 2.4(a)(i) of this Appendix 2C; or

iii. if the relevant Real-Time Market Submission:

1. did not present the relevant Essential System Service Enablement Quantity as In-Service Capacity in accordance with clause 7.4.5(c)(i); or

2. did not offer sufficient capacity as In-Service for energy to allow the Registered Facility to be dispatched for energy between its enablement limits in accordance with clause 7.4.5(c)(ii).

then AEMO's reasonable estimate of Registered Facility f's capability in MW or MWs, as applicable, that was In-Service Capacity in respect of Frequency Co-optimised Essential System Service c in Dispatch Interval DI, if that quantity is lower than the quantities specified in clauses 2.4(a)(i) or (if applicable) 2.4(a)(ii) of this Appendix 2C;

(b) BaseQuantity(a,DI) is the quantity determined under clause 2.2(a) of this Appendix 2C; and

(c) AvailabilityQuantity(a,DI) is the quantity determined under clause 2.2(b) of this Appendix 2C.

2.5 Calculate the number of Dispatch Intervals the Registered Facility providing Frequency Co-optimised Essential System Services under SESSM Award a has been unavailable for, from the first Dispatch Interval in the SESSM Service Timing up to and including Dispatch Interval DI:

$$\text{SESSMOutageCount}(a,DI) = \sum_{i=1}^{DI} (1 - \text{IsAvailable}(a,i))$$

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:

$$\text{SESSMRefund}(a,DI) =$$

$$\left\{ \begin{array}{l} 0 \text{ if } \text{SESSMOutageCount}(a,DI) \leq \text{MaxUnavailability}(a) \text{ or} \\ \sum_{i=1}^{DI-1} \text{SESSMRefund}(a,i) \geq \text{PaymentCap}(a) \text{ or} \\ \text{AvailabilityQuantity}(a,DI) = 0, \\ \min \left(\begin{array}{l} \text{AvailabilityPayment}(a,DI) \times \text{SESSMRefundFactor} \times \text{SESSMShortfall}(a,DI), \\ \text{PaymentCap}(a) - \sum_{i=1}^{DI-1} \text{SESSMRefund}(a,i) \end{array} \right) \end{array} \right\} \text{otherwise}$$

where:

- (a) SESSMOutageCount(a,DI) is the quantity determined under clause 2.5 of this Appendix 2C;
- (b) MaxUnavailability(a) is the number of Dispatch Intervals determined in clause 2.3(b) of this Appendix 2C;
- (c) SESSMRefund(a,i) is the refund due in Dispatch Interval i for the relevant Registered Facility providing Frequency Co-optimised Essential System Services under SESSM Award a;
- (d) PaymentCap(a) is the quantity determined under clause 2.3(c) of this Appendix 2C;
- (e) SESSMRefundFactor is 3;
- (f) ~~[Blank] 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.(a)~~ AvailabilityQuantity(a,DI) is the quantity determined under clause 2.2(b) of this Appendix 2C;
- ~~ii.(b)~~ ESSOffer(f,c,DI) is the quantity determined under clause 2.4(a) of this Appendix 2C; and

~~ii-(c)~~ BaseQuantity(a,DI) is the quantity determined under clause 2.2(a) of this Appendix 2C.

2.8 Calculate the Per-Dispatch Interval Facility Availability Payments and Facility SESSM Refunds for Registered Facility f, as follows:

(a) calculate the Per-Dispatch Interval Facility Availability Payments for Registered Facility f in respect of each Frequency Co-optimised Essential System Service in Dispatch Interval DI as follows:

~~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.i.~~ a_{ARR} is the set of SESSM Awards awarded to the Market Participant to whom Registered Facility f is registered to provide Regulation Raise in Dispatch Interval DI;

~~B.ii.~~ a_{ARL} is the set of SESSM Awards awarded to the Market Participant to whom Registered Facility f is registered to provide Regulation Lower in Dispatch Interval DI;

~~C.iii.~~ a_{ACR} is the set of SESSM Awards awarded to the Market Participant to whom Registered Facility f is registered to provide Contingency Reserve Raise in Dispatch Interval DI;

~~D.iv.~~ a_{ACL} is the set of SESSM Awards awarded to the Market Participant to whom Registered Facility f is registered to provide Contingency Reserve Lower in Dispatch Interval DI;

~~E.v.~~ a_{ARCS} is the set of SESSM Awards awarded to the Market Participant to whom Registered Facility f is registered to provide RoCoF Control Service in Dispatch Interval DI; and

~~F.vi.~~ AvailabilityPayment(a,DI) is the quantity determined under clause 2.2(c) of this Appendix 2C; and

(b) calculate the Facility SESSM Refunds for Registered Facility f in respect of each Frequency Co-optimised Essential System Service in Dispatch Interval DI, as follows:

~~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.i.~~ $SESSMRefund(a,DI)$ is the quantity determined under clause 2.6 of this Appendix 2C;
- ~~B.ii.~~ $a \in ARR$ 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.iii.~~ $a \in ARL$ 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.iv.~~ $a \in ACR$ 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.v.~~ $a \in ACL$ 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 ; and
- ~~F.vi.~~ $a \in ARCS$ 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 .

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Explanatory Note

Appendix 4A is amended to remove an invalid clause reference in the last dot point.

Appendix 4A: Individual Intermittent Load Reserve Capacity Requirements

This Appendix describes how the Individual Intermittent Load Reserve Capacity Requirement for Intermittent Load k for Trading Month n is determined.

The Individual Intermittent Load Reserve Capacity Requirement is only to be determined for Intermittent Loads that are and continue to be deemed to be Intermittent Loads under clause 1.48.2.

Define:

- $MaxL(k)$ is the nominated load level for Intermittent Load k to apply for Trading Month n as specified in [clause 4.28.8\(c\)](#);
- RM is the reserve margin for the Reserve Capacity Cycle defined as negative one plus the ratio of the Reserve Capacity Requirement for the relevant Capacity Year as described in clause 4.6.1 and the expected peak demand for the relevant Capacity Year as described in clause 4.6.2;

Calculate Req(k), which equals MaxL(k) multiplied by RM.

When setting the Individual Intermittent Load Reserve Capacity Requirement for an Intermittent Load k for a Trading Month n in accordance with Appendix 5:

- If, at the time AEMO determines the Indicative Individual Reserve Capacity Requirements for Trading Month n, Intermittent Load k is registered and operating or AEMO reasonably expects it to be registered and operating during Trading Month n (based on information provided to AEMO in accordance with [clause 4.28.8\(c\)](#)), then set the Individual Intermittent Load Reserve Capacity Requirement for Intermittent Load k equal to Req(k).
- If, at the time AEMO determines the Indicative Individual Reserve Capacity Requirements for Trading Month n, AEMO reasonably expects Intermittent Load k not to be registered or operating during Trading Month n (based on information provided to AEMO in accordance with [clause 4.28.8\(c\)](#) ~~or 4.28.8A~~), then set the Individual Intermittent Load Reserve Capacity Requirement for Intermittent Load k equal to zero.

Explanatory Note

Appendix 5 is amended to clarify that the only relevant Registered Facilities for IRCR calculations are Scheduled Facilities, Semi-Scheduled Facilities and Non-Scheduled Facilities.

Appendix 5: Individual Reserve Capacity Requirements

...

For the purpose of this Appendix:

...

10. A meter measuring a ~~Registered Facility~~ Scheduled Facility, Semi-Scheduled Facility or Non-Scheduled Facility not containing an Intermittent Load is to be included in these calculations and included in the set indexed by u or v as applicable, with metered consumption calculated in accordance with clause 12 of this Appendix 5.

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Explanatory Note

Appendix 5A is amended to require AEMO to assess the NTDL status of non-aggregated Scheduled Facilities, Semi-Scheduled Facilities and Non-Scheduled Facilities (which may be served by multiple network connection points/NMIs) the same way as for Aggregated Facilities, i.e. on a per-connection point/NMI basis. The current drafting requires AEMO to process non-aggregated Registered Facilities on a per-Facility basis, which is unwarranted and would impose additional IT costs on AEMO.

Appendix 5A is also amended to:

- clarify that Scheduled Facilities, Semi-Scheduled Facilities and Non-Scheduled Facilities are the only Registered Facilities to which applications for NTDL assessment apply; and
- correct clause reference errors in the introduction and in Step 2.

Appendix 5A: Non-Temperature Dependent Load Requirements

This Appendix specifies how AEMO must determine whether or not to accept a Load measured by an interval meter nominated in accordance with clauses 4.28.8(a) or 4.28.8C(a) as a Non-Temperature Dependent Load for the purposes of clause 4.28.9.

For the purpose of this Appendix:

- AEMO must use the current set of meter data (as at the time when it commences its calculations);
- the 4 Peak SWIS Trading Intervals in a Trading Month are the 4 Peak SWIS Trading Intervals determined and published by AEMO under clause 4.1.23B for that Trading Month; and
- AEMO must treat: each connection point measured by an interval meter measuring a Scheduled Facility, Semi-Scheduled Facility or Non-Scheduled Facility as if it were a separate Non-Dispatchable Load.
 - ~~each connection point measured by an interval meter measuring an Aggregated Facility as if it were a separate Non-Dispatchable Load; and~~
 - ~~each Registered Facility that is not an Aggregated Facility as if it were a single Non-Dispatchable Load.~~

AEMO must perform the following steps (in sequential order) when determining whether or not to accept a Load measured by an interval meter nominated in accordance with clauses 4.28.8(a) or 4.28.8C(a) as a Non-Temperature Dependent Load for the purposes of clause 4.28.9:

...

Step 2:

- If, in accordance with clauses 4.28.8(a) or 4.28.8C(a), the Market Participant provides AEMO in Trading Month n-2 with the identity of an interval meter associated with that Market Participant which measures a Load that it nominates as a Non-Temperature Dependent Load from Trading Month n;
- If the Load was not treated as a Non-Temperature Dependent Load in Trading Month n-1; and
- If the Load was not treated as a Non-Temperature Dependent Load for any of the Trading Months in the Capacity Year in which Trading Month n falls,

then AEMO must accept the Load as a Non-Temperature Dependent Load for Trading Month n if:

- (a) the median value of the metered consumption for the Load during the 4 Peak SWIS Trading Intervals in Trading Month n-3 exceeded 1.0 MWh; and
- (b) the metered consumption for the Load did not deviate downwards from the median value in paragraph (a) by more than 10% for more than 10% of the time during Trading Month n-3, except during Trading Intervals for which:
 - i. the metered consumption was 0 MWh; or
 - ii. consumption was reduced at the request of AEMO; or
 - iii. AEMO has accepted a Consumption Deviation Application for the Load under clause 4.28.9D.

...

Explanatory Note

Appendix 6(b) and Appendix 6(c) are amended to implement an alternative to the use of Participant Interval Minimum STEM Price and Participant Interval Maximum STEM Price. Under the alternative approach:

- if the minimum STEM Price Curve quantity is equal to the maximum STEM Price Curve quantity for every price between the Minimum STEM Price and the Alternative Maximum STEM Price (i.e. there are no entries in the STEM Price Curve with a non-zero quantity range) then the STEM Price Curve entry for the Minimum STEM Price or Alternative Maximum STEM Price (as applicable) is adjusted to cover the Net Bilateral Position;
- otherwise, the lowest-price or highest-price entry (as applicable) in the STEM Price Curve which has a non-zero quantity range is adjusted to cover the Net Bilateral Position.

Appendix 6: STEM Price Curve Determination

The first part of this appendix describes a process for converting a Market Participant's Portfolio Supply Curve and Portfolio Demand Curve into a single STEM Price Curve and to then convert a Market Participant's STEM Price Curve into STEM Bids and STEM Offers relative to its Net Bilateral Position.

For each Market Participant and for each Trading Interval in the Trading Day except those for which AEMO has recorded that the Market Participant has not made a STEM Submission:

- (a) Determine for every price between the Minimum STEM Price and the Alternative Maximum STEM Price:
 - i. the maximum cumulative quantity the Market Participant is prepared to sell into the STEM from all of its Price-Quantity Pairs in its Portfolio Supply Curve;

- ii. the minimum cumulative quantity the Market Participant is prepared to sell into the STEM from all of its Price-Quantity Pairs in its Portfolio Supply Curve;
- iii. the maximum cumulative quantity the Market Participant is prepared to buy from the STEM from all of its Price-Quantity Pairs in its Portfolio Demand Curve;
- iv. the minimum cumulative quantity the Market Participant is prepared to buy from the STEM from all of its Price-Quantity Pairs in its Portfolio Demand Curve;
- v. the STEM Price Curve quantity for that price where:
 - 1. the minimum STEM Price Curve quantity for that price equals the value in [Appendix 6\(a\)\(ii\)](#) less the value in [Appendix 6\(a\)\(iii\)](#);
 - 2. the maximum STEM Price Curve quantity for that price equals the value in [Appendix 6\(a\)\(i\)](#) less the value in [Appendix 6\(a\)\(iv\)](#); and
 - 3. the STEM Price Curve for that price includes all quantities between those in [Appendix 6\(a\)\(v\)\(1\)](#) and [Appendix 6\(a\)\(v\)\(2\)](#).

~~(b) If the minimum 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. If the minimum of the quantities determined under [Appendix 6\(v\)\(1\)](#) for the Market Participant for the Trading Interval is greater than the Net Bilateral Position of the Market Participant in the Trading Interval then:~~

- ~~i. if, for every price between the Minimum STEM Price and the Alternative Maximum STEM Price, the quantity determined under [Appendix 6\(a\)\(v\)\(1\)](#) is equal to the quantity determined under [Appendix 6\(a\)\(v\)\(2\)](#), then amend the STEM Price Curve for the Minimum STEM Price to include all quantities between the Net Bilateral Position of the Market Participant and the quantity determined for the Minimum STEM Price under [Appendix 6\(a\)\(v\)\(2\)](#); and~~
- ~~ii. otherwise, amend the STEM Price Curve for the lowest price for which the quantity determined under [Appendix 6\(a\)\(v\)\(1\)](#) is not equal to the quantity determined under [Appendix 6\(a\)\(v\)\(2\)](#), to include all quantities between the Net Bilateral Position of the Market Participant and the quantity determined for the price under [Appendix 6\(a\)\(v\)\(2\)](#).~~

(c) ~~If the maximum 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.~~ If the maximum of the quantities determined under Appendix 6(a)(v)(2) for the Market Participant for the Trading Interval is less than the Net Bilateral Position of the Market Participant then:

- i. if, for every price between the Minimum STEM Price and the Alternative Maximum STEM Price, the quantity determined under Appendix 6(a)(v)(1) is equal to the quantity determined under Appendix 6(a)(v)(2), then amend the STEM Price Curve for the Alternative Maximum STEM Price to include all quantities between the quantity determined for the Alternative Maximum STEM Price under Appendix 6(a)(v)(1) and the Net Bilateral Position of the Market Participant; and
- ii. otherwise, amend the STEM Price Curve for the highest price for which the quantity determined under Appendix 6(a)(v)(1) is not equal to the quantity determined under Appendix 6(a)(v)(2), to include all quantities between the quantity determined for the price under Appendix 6(a)(v)(1) and the Net Bilateral Position of the Market Participant.

(d) If the Net Bilateral Position equals the minimum STEM Price Curve quantity then there are no STEM Bids, otherwise:

- i. for the STEM Price Curve between the minimum STEM Price Curve quantity and the Net Bilateral Position of that Market Participant identify each price for which more than one STEM Price Curve quantity is defined;
- ii. for each price identified in [Appendix 6\(d\)\(i\)](#) identify the minimum STEM Price Curve quantity for which that price applies, such that the STEM Price Curve quantity lies between the minimum STEM Price Curve quantity and the Net Bilateral Position;
- iii. for each price identified in [Appendix 6\(d\)\(i\)](#) identify the maximum STEM Price Curve quantity for which that price applies, such that the STEM Price Curve quantity lies between the minimum STEM Price Curve quantity and the Net Bilateral Position;
- iv. for each price identified in [Appendix 6\(d\)\(i\)](#) set a Price-Quantity Pair price equal to that price;
- v. for each price identified in [Appendix 6\(d\)\(i\)](#) set a Price-Quantity Pair quantity equal to the quantity defined in [Appendix 6\(d\)\(iii\)](#) less the quantity defined in [Appendix 6\(d\)\(ii\)](#); and

vi. set the Market Participant's STEM Bids to be the set of Price-Quantity Pairs defined in [Appendix 6\(d\)\(iv\)](#) and [Appendix 6\(d\)\(v\)](#) where each Price-Quantity Pair means that the Market Participant is prepared to buy a quantity of energy from the STEM for that Price-Quantity Pair equal to:

1. 0 MWh if the STEM Clearing Price is greater than the Price-Quantity Pair price;
2. the Price-Quantity Pair quantity if the STEM Clearing Price is less than the Price-Quantity Pair price; and
3. an amount between 0 MWh and the Price-Quantity Pair quantity if the STEM Clearing Price equals the Price-Quantity Pair price; and

(e) If the Net Bilateral Position equals the maximum STEM Price Curve quantity then there are no STEM Offers, otherwise:

- i. for the STEM Price Curve between the Net Bilateral Position of that Market Participant and the maximum STEM Price Curve quantity identify each price for which more than one STEM Price Curve quantity is defined;
- ii. for each price identified in [Appendix 6\(e\)\(i\)](#) identify the minimum STEM Price Curve quantity for which that price applies, such that the STEM Price Curve quantity lies between the Net Bilateral Position and the maximum STEM Price Curve quantity;
- iii. for each price identified in [Appendix 6\(e\)\(i\)](#) identify the maximum STEM Price Curve quantity for which that price applies, such that the STEM Price Curve quantity lies between the minimum STEM Price Curve quantity and the Net Bilateral Position;
- iv. for each price identified in [Appendix 6\(e\)\(i\)](#) set a Price-Quantity Pair price equal to that price;
- v. for each price identified in [Appendix 6\(e\)\(i\)](#) set a Price-Quantity Pair quantity equal to the quantity defined in [Appendix 6\(e\)\(iii\)](#) less the quantity defined in [Appendix 6\(e\)\(ii\)](#); and
- vi. set the Market Participant's STEM Offers to be the set of Price-Quantity Pairs defined in [Appendix 6\(e\)\(iv\)](#) and [Appendix 6\(e\)\(v\)](#) where each Price-Quantity Pair means that the Market Participant is prepared to sell a quantity of energy into the STEM for that Price-Quantity Pair equal to:

1. 0 MWh if the STEM Clearing Price is less than the Price-Quantity Pair price;
2. the Price-Quantity Pair quantity if the STEM Clearing Price is greater than the Price-Quantity Pair price; and

3. an amount between 0 MWh and the Price-Quantity Pair quantity if the STEM Clearing Price equals the Price-Quantity Pair price;

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Appendix 9: Relevant Level Determination

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Explanatory Note

The requirement for AEMO to publish the information previously in 10.5.1(f)(x) has been moved to Appendix 9 as per amendments below.

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.

Step 21: Publish on the WEM Website the following information identified for a Reserve Capacity Cycle under the Relevant Level Methodology:

- (a) the Existing Facility Load for Scheduled Generation for each Trading Interval in the five year period determined under Step 1(a) of Appendix 9; and
- (b) the 12 Trading Intervals occurring on separate Trading Days with the highest Existing Facility Load for Scheduled Generation for each 12 month period in the five year period.

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