DRAFT AMENDING RULES FOR RESERVE CAPACITY MECHANISM AND THE NETWORK ACCESS QUANTITY FRAMEWORK (ME V0.9) (CONSOLIDATED MASTER)

PLEASE NOTE

This version of the Tranche 3 Amending Rules does not address the timing for the commencement of various elements of the RCM reform package are to commence (for example, the Reserve Capacity Cycle in which the NAQ assignment process is to be undertaken for the first time) and the draft reflects the WEM Rules, as they relate to RCM, at market start on 1 October 2022. Staging for the various RCM reform elements will be finalised following further industry consultation on transition options for the implementation of the RCM reforms at a Transformation Design and Operations Working Group (TDOWG) meeting scheduled for 5 November. Following consultation, transitional provisions will be drafted and released for a short consultation period later in November and will be included in the package of Amending Rules to be provided to the Minister for Energy for approval in December.

The Amending Rules have been drafted to account for the new registration taxonomy that is to be gazetted with the Tranche 2 and Tranche 3 Amending Rules to support the new NAQ framework and security constrained market design. This is to allow for facilities to be registered under the new classes and to cater for storage facilities and provide transparency on the market obligations for each registration class. The new taxonomy was described in the Energy Transformation Taskforce Information Paper Registration and Participation Framework in the Wholesale Electricity Market, February 2020, available for download at the Energy Policy WA website. Other aspects of the registration and participation framework, including standing data and amendments to the registration process, will be progressed in early 2021.

This document contains the draft Amending Rules giving effect to the changes to the Reserve Capacity Mechanism (**RCM**), including the introduction of the Network Access Quantity (**NAQ**) framework and for the integration of storage and other consequential changes to support the new security constrained market design.

To support the adoption of a constrained network access model, changes to the assignment of Capacity Credits under the RCM are required so that under the new constrained network access model, the RCM continues to achieve its intended purpose of incentivising the investment needed to ensure a reliable power system.

The design of the NAQ framework has been developed using the following key principles:

- Capacity Credits are assigned based on the available capacity of the network:
- available network capacity should be efficiently rationed to maximise the access of parties and therefore the economic benefit of the network;
- investment certainty should be preserved by allowing existing assets to retain economic value under the RCM as long as facility performance is maintained and the Network continues to be able to support them;
- the new regime should contribute to locational signals for new entrants so they can make informed decisions about risk and opportunity;
- barriers to entry and exit should be minimised; and
- the new regime should be simple, transparent, and readily implemented in the Wholesale Electricity Market with minimal changes to existing processes.

Generally, the NAQ:

- defines the network capacity, in MW, available to a capacity resource for the purpose of determining the Capacity Credits that can be assigned to the capacity resource up to the amount of its Certified Reserve Capacity; and
- establishes a preferential right to receive a Capacity Credit, which can only be reduced in specific circumstances. The primary purpose of the NAQ is to protect a capacity resource's quantity of Capacity Credits from an unhedgeable risk of being inefficiently displaced by new entrant facilities connecting in constrained sections of the network, where that additional capacity is not needed for system reliability but is simply displacing an existing performing resource. This would result in capital inefficiency and add risk to new capacity investment.

Storage facilities share some of the characteristics of other capacity resources in the Wholesale Electricity Market (**WEM**). They are fully controllable like conventional generators, yet like intermittent generators or demand side providers they cannot be available in every interval. They can also act like a generator or load depending on whether they are discharging or charging. This requires a unique method to assessing the value storage can provide to the electricity system in the context of the RCM and what operating standards should be required of them if they hold Capacity Credits. This method must recognise that storage can guarantee its availability during peak demand, but for a shorter duration in comparison to scheduled generators (because it is a limited resource).

The Taskforce has endorsed a derating method for assessing the capacity value of storage facilities in the WEM. Under this approach, the amount of Certified Reserve Capacity assigned to a storage facility is a function of both its maximum output and duration, which determines its contribution to reliability during system peak events.

The policy position with respect to Facilities subject to Network Control Service Contracts is still under consideration. Therefore, any proposed amendments to clauses involving NCS Facilities in these draft Amending Rules or lack of amendments (as the case may be) are placeholders only.

Further information about the changes to the RCM, including to the Reserve Capacity Cycle timetable, the NAQ framework and integration of storage are summarised in Explanatory Notes throughout these draft Amending Rules.

The baseline clauses in these draft Amending Rules reflect the latest version of the WEM Rules published by the Rule Change Panel (including Amending Rules with a deferred commencement date that will commence prior to the expected date of commencement of these draft Amending Rules), amendments made by the Minister (including Amending Rules with a deferred commencement date that will commence prior to the expected date of commencement of these draft Amending Rules).

Explanatory Note

New proposed clause [1.AA.2], provides that a Load or part of a Load that was treated by AEMO as an Intermittent Load under the current WEM Rules will be grandfathered in as an Intermittent Load for the purposes of the new provisions that will apply to new Intermittent Loads.

New proposed clause [1.AA.3] requires AEMO to document the new WEM Procedure for how it will determine Electric Storage Resource Obligation Intervals and clause [1.AA.4] requires AEMO to publish those Trading Intervals by 15 January of the first Reserve Capacity Cycle to which these Amending Rules will apply. Subsequent publications will occur at the same time as AEMO publishes the ESOO.

New proposed clause [1.AA.5] deems Facilities that were assigned Capacity Credits in the [2020] Reserve Capacity Cycle to be 'NAQ facilities' for the purposes of the first time the processes under Appendix 3 are undertaken after commencement of the new Amending Rules. In each subsequent Reserve Capacity Cycle, the definition of 'NAQ facilities' relates to NAQs determined for Facilities and not Capacity Credits assigned to Facilities.

[1.AA.] Specific Transitional Provisions – [Reserve Capacity Mechanism (No. 1)] Amendments

[1.AA.1.] In this section [1.AA]:

[Reserve Capacity Mechanism (No. 1)] Amendments: Means the Amending Rules that will commence on the [Reserve Capacity Mechanism (No. 1)] Amendments Commencement Day made by the Minister under regulation 7(5) of the WEM Regulations by a notice published in the Government Gazette.

<u>IReserve Capacity Mechanism (No. 1)</u> <u>Amendments Commencement Day:</u>
<u>Means the Amending Rules made by the Minister under regulation 7(5) of the WEM Regulations by a notice published in the Government Gazette that will commence at 8:00 AM on day specified in the notice.</u>

Post-Amended Rules: Means the WEM Rules as in force immediately after the [Reserve Capacity Mechanism (No. 1)] Amendments come into effect.

Pre-Amended Rules: Means the WEM Rules as in force immediately before the [Reserve Capacity Mechanism (No. 1)] Amendments come into effect.

- [1.AA.2.] Notwithstanding clause 2.30B.1, a Load or part of a Load that was treated by AEMO as an Intermittent Load under the Pre-Amended Rules is deemed to have met the requirements of clause 2.30B.2 of the Post-Amended Rules for that Load or part of the Load to be treated as an Intermittent Load under the Post-Amended Rules.
- [1.AA.3.] AEMO must document the WEM Procedure referred to in clause 4.11.3A by the last Business Day falling on or before 14 April of Year 1 of the Network Access Quantity Cycle.
- [1.AA.4.] A Facility that was assigned Capacity Credits for the Reserve Capacity Cycle immediately preceding the Network Access Quantity Cycle is deemed to be an 'NAQ Facility' for the purposes of Appendix 3.

Explanatory Note

Clause [1.AA.5] is a placeholder clause regarding Intermittent Loads and further amendments may be required.

- [1.AA.5.] Notwithstanding the provisions of these WEM Rules, from [date to be specified]:
 - (a) AEMO must not certify Reserve Capacity for a new Facility taking into account an Intermittent Load to be served by the Facility; and

(b) references to an Intermittent Load is a reference to a Facility that was registered as an Intermittent Load prior to the [date to be specified].

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Explanatory Note

Clause 2.1A.2(IG) is added to support new section 4.5A (Whole of System Plan).

Functions and Governance

2.1. [Blank]

2.1A. Australian Energy Market Operator

- 2.1A.1. AEMO is conferred functions in respect of the Wholesale Electricity Market under the WEM Regulations and AEMO Regulations.
- 2.1A.2. The WEM Regulations also provide for the WEM Rules to confer additional functions on AEMO. The functions conferred on AEMO are:

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- (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 Network; and
- (IG) to provide information and assistance to the Coordinator in the Coordinator's preparation of the Whole of System Plan; and

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Explanatory Note

Clause 2.2C.1(bA) is added to support new section 4.5A (Whole of System Plan).

2.2C. Network Operators

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:

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(bA) provide information and assistance to the Coordinator in the Coordinator's preparation of the Whole of System Plan;

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Section 2.27A is proposed to be amended to avoid duplication of any clauses in new proposed section 4.1B which deals with RCM Limit Advice and RCM Constraint Equations.

2.27A. Limit Advice and Constraint Equations

- 2.27A.1. A Network Operator must, in accordance with this section 2.27A, provide Limit Advice in respect to its Network to AEMO.
- 2.27A.2. Information to be provided to AEMO by a Network Operator in respect to limitations of, or relating to, its Network ("**Limit Advice**") includes:
 - (a) Limit Equations in respect of Network Limits, excluding Limit Equations for Essential System Services or, if, in respect of a particular Network element, a mathematical expression is not appropriate, the Network Limit Limits for that particular Network element including Network Limits provided in accordance with section 4.1B;
 - (b) Limit Advice Inputs; and
 - (c) supporting information and data specified in the WEM Procedure referred to in clause 2.27A.10(a).
- 2.27A.3. A Network Operator must provide Limit Advice to AEMO in the form and by the dates and times specified in the WEM Procedure referred to in clause 2.27A.10(a).
- 2.27A.4. AEMO may, if it reasonably considers it is required to enable it to carry out its obligations specified in clause 2.27A.7, request:
 - (a) clarification or further information regarding any aspect of information provided under clause 2.27A.2 from the Network Operator who provided it to AEMO; and
 - (b) additional Limit Advice from a Network Operator, and each Network Operator must comply with any such request in accordance with WEM Procedures referred to in clauses 2.27A.10(a) and 2.27A.10(d).
- 2.27A.5. Any information provided by a Network Operator in response to a request by AEMO under clause 2.27A.4(a) is Limit Advice for the purpose of clause 2.27A.2.
- 2.27A.6. A Network Operator must, in respect of Limit Advice:
 - (a) use its reasonable endeavours to ensure that all necessary Limit Advice is complete, current and accurate at the time it is provided to AEMO;
 - (b) 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

(c) update Limit Advice in accordance with the WEM Procedure referred to in clause 2.27A.10(a).

2.27A.7. AEMO must:

- (a) formulate Constraint Equations in accordance with the WEM Procedure referred to in clause 2.27A.10(b);
- (b) develop and maintain the Constraints Library in accordance with the WEM Procedure referred to in clause 2.27A.10(c);
- (c) use its reasonable endeavours to ensure that all necessary Constraint Equations are complete, current and accurate; and
- (d) update Constraint Equations, publish updates to the Constraints Library and notify Rule Participants of updates to the Constraints Library in accordance with the WEM Procedures referred to in clauses 2.27A.10(b) and 2.27A.10(c).
- 2.27A.8. A Constraint Equation that is updated by AEMO under clause 2.27A.7(d) is effective from the date and time determined by AEMO.
- 2.27A.9. The principles that must be taken into account by each Network Operator in developing Limit Advice, and by AEMO in formulating Constraint Equations, are:
 - (a) the Wholesale Market Objectives; and
 - (b) good electricity industry practice.

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

- (a) in respect of the information to be provided by a Network Operator to AEMO under clause 2.27A.2:
 - the information and data to be provided by each Network Operator to AEMO; and
 - ii. the processes to be followed for the provision of and updates to such information and any other information referred to in clause 2.27A.4 from each Network Operator to AEMO, including:
 - 1. the format, form and manner in which such information must be provided; and
 - where these WEM Rules do not provide a timeframe for the provision of such information to AEMO, the time by which such information must be provided;
- (b) the processes to be followed by AEMO and the matters it must consider in formulating and updating Constraint Equations, including:
 - i. the approach to be taken by AEMO in applying:
 - 1. an Operating Margin; and
 - 2. the principles described in clause 2.27A.9; and

- ii. the conventions for assigning a unique identifier to Constraint Equations and Constraint Sets;
- (c) the processes to be followed by AEMO in developing and updating the Constraints Library and notifying Market Participants of updates to the Constraints Library;
- (cA) the processes to be followed and the methodology to be used by AEMO in determining Constraint Equation terms and coefficients for Network Constraints, including the methodology for determining whether the exclusion of a variable from a Fully Co-optimised Network Constraint Equation would have a material effect on Power System Security due to the size of its coefficient;
- (cB) the processes to be followed and the methodology to be used by AEMO in selecting one or more Constraint Equations to respond to a Network Constraint, including in respect of the location of terms on each side of the Constraint Equation;
- (cC) the processes and timeframes to be followed by AEMO for creating new Constraint Equations and Constraint Sets in response to a Non-Credible Contingency Event;
- (cD) wherever a Network Limit gives rise to a Network Constraint, the supporting information and data a Network Operator must provide AEMO; and
- (d) any other processes or procedures relating to Constraints or Network congestion that AEMO considers are reasonably required to enable it to carry out its functions under the WEM Rules.
- 2.27A.11. Each Network Operator must document in a Market Procedure the processes to be followed by the Network Operator and the matters it must consider in developing and updating Limit Advice, including the approach to be taken by the Network Operator in applying:
 - (a) a Limit Margin; and
 - (b) the principles described in clause 2.27A.9.

2.27A.11. Each Network Operator must document in a WEM Procedure:

- (a) the processes to be followed by the Network Operator and the matters it must consider in developing and updating Limit Advice, including the approach to be taken by the Network Operator in applying:
 - i. a Limit Margin; and
 - ii. the principles described in clause 2.27A.9; and
- (b) the processes to be followed by a Network Operator for:
 - i. estimating the configuration and Thermal Network Limits of its

 Network in accordance with clause 4.1B.3; and

ii. allocating the value referred to in clause 4.1B.4(a) for each Transmission Node in accordance with clause 4.1B.4(b).

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Explanatory Note

A Facility, containing an ESR component, which is determined to be "controllable" by AEMO that would otherwise, but for its "controllability", be semi-scheduled will be required to register its ESR component separately from its semi-scheduled component.

2.29. Facility Registration Classes

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- 2.29.5B. A Market ParticipantCustomer with a Demand Side Programme may apply to AEMO to associate a Non-Dispatchable Load or Interruptible Load with the Demand Side Programme. The Market ParticipantCustomer must provide the following information to AEMO in support of the application:
 - (a) evidence satisfactory to AEMO that the Market ParticipantCustomer has entered into a contract with the person who owns, operates or controls the Load to provide curtailment on request by the Market ParticipantCustomer;
 - (b) the connection point of the Load;
 - (c) the expected Minimum Consumption of the Load in units of MW;
 - (d) the contract start date;
 - (e) the contract end date; and
 - (f) where the Load has a generation system that can connect to the network behind its associated meter, a single line diagram for the Load, including the locations of generators, transformers, switches, operational and settlement meters.

Explanatory Note

Electric Storage Resources co-located with a Facility must have a separate meter installed for the purposes of Reserve Capacity Certification and Testing.

- 2.29.5BA. A Market Participant for a Scheduled Facility or Semi-Scheduled Facility containing an Electric Storage Resource must install a separate meter for the Electric Storage Resource and all associated Parasitic Loads. To avoid doubt, meters that are installed under this clause 2.29.5BA must not be used for the purposes of settlement under Chapter 9.
- <u>2.29.5BB. A meter referred to in clause 2.29.5BA must comply with the requirements</u> specified in the WEM Procedure referred to in clause 2.29.5BC.
- <u>2.29.5BC.AEMO must document the following matters in a WEM Procedure in relation to a meter referred to in clause 2.29.5BA:</u>

- (a) the characteristics and requirements, including accuracy requirements, for the meter;
- (b) the procedures to be followed by Market Participants for auditing of the meter;
- (c) the communication requirements and protocols between a Market Participant and AEMO;
- (d) the processes to be followed by a Market Participant for providing meter information to AEMO; and
- (e) any other matters which AEMO considers relevant.

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Explanatory Note

Section 2.30B is proposed to be amended to reflect that Market Participants will not be able to apply to register or for certification of Reserve Capacity for new Intermittent Loads after a prescribed date.

2.30B Intermittent Load

- 2.30B.1 An Intermittent Load is a Load, or a part of a Load associated with consumption in excess of a level specified by the Market Participant, that satisfies the requirements of clause 2.30B.2 and is recorded in Standing Data as being an Intermittent Load.
- 2.30B.2. For a Load or part of a Load to be eligible to be an Intermittent Load AEMO must be satisfied that the following conditions are met:
 - (a) a generation system must exist:
 - i. which can typically supply the maximum amount of that Load to be treated as Intermittent Load either in accordance with clause 2.30B.11 or without requiring energy to be withdrawn from a Network. Where clause 2.30B.11 applies then, for the purpose of this clause 2.30B.2(a)(i), the amount that the generation system can supply must be Loss Factor adjusted from the connection point of the generation system to the connection point of the Intermittent Load;
 - ii. the output of which is netted off consumption of the Load either in accordance with clause 2.30B.12 or by the meter registered to that Load; and
 - iii. which would in the view of AEMO, if it were not serving an Intermittent Load, be eligible to hold an amount of Certified Reserve Capacity, determined in accordance with clause 2.30B.4, at least sufficient to supply the amount of energy that the generation system is required by clause 2.30B.2(a)(i) to be able to supply while

- simultaneously being able to satisfy obligations on any Capacity Credits associated with that generation system;
- (b) the Intermittent Load shall reasonably be expected to have net consumption of energy (based on Metered Schedules calculated in accordance with the methodology prescribed in clause 2.30B.10) for not more than 4320 Trading Intervals in any Capacity Year;
- (c) the Market <u>ParticipantCustomer</u> for that Load must have an agreement in place with a Network Operator to allow energy to be supplied to the Load from a Network; and
- (d) [Blank]
- (e) the Load is not expected (based on applications accepted by AEMO under clause 2.29.5D and any amendments accepted by AEMO under clause 2.29.5K) to be associated with any Demand Side Programme for any period following the registration of the Load or part of the Load as an Intermittent Load-; and
- (f) the Market Participant must have applied to register the Load or part of a Load as an Intermittent Load prior to the date specified in clause [1.AA.5].
- 2.30B.3. AEMO must require that a Market Customer Participant, or applicant to become a Market Customer, applying to register for a Load or part of a Load to be treated as an Intermittent Load provide in regard to the generation system referred to in clause 2.30B.2(a):
 - (a) the maximum capacity in MW, excluding capacity for which Capacity Credits are held, that the generating system can be guaranteed to have available to supply Intermittent Load, when it is operated normally at an ambient temperature of 41°C;
 - (aA) where clause 2.30B.11 applies, the connection point of the generation system;
 - (b) at the option of the applicant:
 - i. the anticipated reduction, measured in MW, in the maximum capacity described in clause 2.30B.3(a) when the ambient temperature is 45°C;
 - ii. the method to be used to measure the ambient temperature at the site of the generating system for the purpose of determining Intermittent Load Refunds, where the method specified may be either:
 - 1. a publicly available daily maximum temperature at a location representative of the conditions at the site of the generating system as reported daily by a meteorological service; or

- a daily maximum temperature measured at the site of the generator by the SCADA system operated by AEMO or the relevant Network Operator (as applicable),
- where no method is specified, a temperature of 41°C will be assumed; and
- (c) details of primary and any alternative fuels, including details and evidence of both firm and non-firm fuel supplies and the factors that determine restrictions on fuel availability that could prevent the generation system from operating at its full capacity.

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2.30B.5. A Market <u>Customer Participant</u>, or applicant to become a <u>Market Customer</u>, may apply for a Load or part of a Load to be treated as an Intermittent Load as part of Market <u>Customer Participant</u> registration (for a Non-Dispatchable Load) or Facility registration (for an Interruptible Load).

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Explanatory Note

Clause 2.33.5(f) is proposed to be deleted as a consequence of the Reserve Capacity Auction being deleted.

2.33. The Registration Forms

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2.33.5. AEMO must prescribe a Facility transfer form that requires an applicant for transfer of a Facility to provide the following:

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- (f) [Blank] evidence to AEMO's satisfaction that the party making the application has assumed the Reserve Capacity Obligations associated with the Facility, and agrees to any Special Price Arrangements associated with the Facility;
- (g) such other information as AEMO considers it requires to process the application; and
- (h) a statement that the information provided is accurate.

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4 Reserve Capacity Rules

Explanatory Note

The proposed amendments to section 4.1 including amendments to reflect the following changes to the Reserve Capacity Cycle timeline:

- Expressions of Interest open on 15 January (currently 31 January) and close on 1 March (currently 15 May);
- Applications for Certified Reserve Capacity open on 14 April (currently 1 May) and close on 24 June (currently 1 July);
- Publication of the ESOO by 17 June (no change proposed);
- AEMO notifies applicants of their Certified Reserve Capacity by 12 August (currently 19 August);
- Notification of bilateral trades and provision of Reserve Capacity Security by 25 August (currently 2 September); and
- AEMO assigns Capacity Credits on 30 September and publishes NAQ related information.

The Reserve Capacity Cycle

4.1. The Reserve Capacity Cycle

Explanatory Note

Clause 4.1.1 is proposed to be amended as a consequence of the Reserve Capacity Auction being deleted.

4.1.1. This section 4.1 sets out the timetable by which the key events described in this Chapter in respect of each Reserve Capacity—Auction—Cycle must occur. The events described below comprise a single Reserve Capacity Cycle, except where otherwise indicated. The Reserve Capacity Cycle will be repeated for each Reserve—Capacity—Auction—Year.

Explanatory Note

Clause 4.1.1A is proposed to be amended to remove the reference to section 4.28B (Treatment of New Small Generators) as that section is proposed to be deleted, and to add a full stop after the clause number for consistency with the drafting style of the WEM Rules.

- 4.1.1A. Sections 4.28B and Section 4.28C take takes precedence over this section 4.1 and events described in sections 4.28B and section 4.28C are not required to comply with the timetable in this section 4.1 except where specified in sections 4.28B and section 4.28C.
- 4.1.1B. The description of an event in this section 4.1 is for the purpose of identifying where it fits into the Reserve Capacity Cycle, and does not affect the interpretation of the relevant provisions of this Chapter 4.
- 4.1.1C. AEMO may modify or extend a date or time set under this section 4.1 and section 4.1B. If AEMO extends a date or time under this clause 4.1.1C, then it must publish notice of the modified or extended date or time on the WEM Website and the modified or extended date or time takes effect for the purposes of these WEM Rules.

Clause 4.1.2 is proposed to be deleted as a consequence of the Reserve Capacity Auction being deleted.

4.1.2. [Blank] The first Reserve Capacity Auction is scheduled to be held in year 2005 with a single Reserve Capacity Auction to be scheduled in each subsequent year.

Explanatory Note

Clause 4.1.3 is proposed to be amended as a consequence of the Reserve Capacity Auction being deleted, to remove the redundant reference to the first Reserve Capacity Cycle and to provide a description of a Reserve Capacity Cycle.

- 4.1.3. Year 1 of a Reserve Capacity Cycle is the Calendar Year in which the Reserve Capacity Auction for that Reserve Capacity Cycle is scheduled to be held, while Year 4 is the final year of the Reserve Capacity Cycle. Year 1 of the first Reserve Capacity Cycle is 2005.
- 4.1.3. Each Reserve Capacity Cycle:
 - (a) occurs over four successive calendar years (Year 1 to Year 4);
 - (b) is identified by reference to the calendar year in which Year 1 of the Reserve Capacity Cycle falls; and
 - (c) relates to the Reserve Capacity required between the period 1 October of Year 3 and 1 October of Year 4 of the Reserve Capacity Cycle.

Explanatory Note

Clause 4.1.4 is proposed to be amended to bring forward the date AEMO is required to advertise for Expressions of Interest for the Reserve Capacity Cycle from 31 January to 15 January.

Reducing the timeframes for the Expression of Interest process will allow time for Network Operators and AEMO to calculate Network Limits and preliminary Constraint Equations for any new facilities that submit an Expression of Interest.

Clause 4.1.4 is proposed to be further amended to remove the redundant reference to the first Reserve Capacity Cycle.

- 4.1.4. In respect of each Reserve Capacity Cycle, AEMO must advertise a Request for Expressions of Interest in accordance with clause 4.2.4 by 5:00 PM on or before 15 January of Year 1 of the Reserve Capacity Cycle.÷
 - (a) 15 October 2004, in the case of the first Reserve Capacity Cycle; and
 - (b) 31 January of Year 1, in the case of subsequent Reserve Capacity Cycles.

Explanatory Note

Clause 4.1.5 is proposed to be amended to bring forward the closing date of submissions in response to AEMO's Request for Expressions of Interest from 1 May to 1 March of the

Reserve Capacity Cycle.

Reducing the timeframes for the Expression of Interest process is to allow time for Network Operators and AEMO to calculate Network Limits and preliminary Constraint Equations for any new facilities that submit an Expression of Interest.

Clause 4.1.5 is proposed to be further amended to remove the redundant reference to the first Reserve Capacity Cycle.

- 4.1.5. AEMO must allow potential Reserve Capacity providers to respond to the Request for Expressions of Interest in accordance with clause section 4.2 until 5:00 PM on the first Business Day falling on or following 1 March of Year 1 of the Reserve Capacity Cycle.÷
 - (a) 10 December 2004, in the case of the first Reserve Capacity Cycle; and
 - (b) 1 May of Year 1, in the case of subsequent Reserve Capacity Cycles.

Explanatory Note

Clause 4.1.6 is proposed to be amended to bring forward the date AEMO is required to publish a summary of the responses to its Request for Expressions of Interest from 15 May to 1 April.

Reducing the timeframes for the Expression of Interest process is to allow time for Network Operators and AEMO to calculate Network Limits and preliminary Constraint Equations for any new facilities that submit an Expression of Interest.

Clause 4.1.6 is proposed to be further amended to remove the redundant reference to the first Reserve Capacity Cycle.

- 4.1.6. AEMO must publish a summary of the responses to its Request for Expressions of Interest in accordance with clause 4.2.7 by 5:00 PM on the first Business Day falling on or following 1 April of Year 1 of the Reserve Capacity Cycle.÷
 - (a) 23 December 2004, in the case of the first Reserve Capacity Cycle; and
 - (b) 15 May of Year 1, in the case of subsequent Reserve Capacity Cycles.

Explanatory Note

Clause 4.1.7 is proposed to be amended to bring forward the opening date for applications for Certified Reserve Capacity from 1 May to 14 April.

Reducing the timeframes for the Expression of Interest process is to allow time for Network Operators and AEMO to calculate Network Limits and preliminary Constraint Equations for any new facilities that submit an Expression of Interest.

Clause 4.1.7 is proposed to be further amended to remove the redundant reference to the first Reserve Capacity Cycle.

- 4.1.7. AEMO must accept lodgement of applications for certification of Reserve Capacity for the Reserve Capacity Cycle in accordance with clause 4.9.1 from 9:00 AM on the first Business Day falling on or following 14 April of Year 1 of the Reserve Capacity Cycle.÷
 - (a) 4 January 2005, in the case of the first Reserve Capacity Cycle; and

- (b) 1 May of Year 1, in the case of subsequent Reserve Capacity Cycles.
- 4.1.8. AEMO must publish a Statement of Opportunities Report produced in accordance with the Long Term PASA process described in clause 4.5.11 by 5:00 PM on the first Business Day falling on or following 17 June of Year 1 of the relevant Reserve Capacity Cycle.

Clause 4.1.9 is proposed to be amended for consistency with the drafting style of the WEM Rules.

- 4.1.9. [BLANKBlank]
- 4.1.10. AEMO must publish on the WEM Website the Reserve Capacity Information Pack in accordance with clause 4.7.2 by 5:00 PM on the first Business Day falling on or following 17 June of Year 1 of the relevant Reserve Capacity Cycle.

Explanatory Note

Clause 4.1.11 is proposed to be amended to bring forward the closing date for applications for Certified Reserve Capacity from 1 July to 24 June.

Reducing the timeframe for some of the Year 1 Reserve Capacity Cycle activities, including the period during which applications for certification of Reserve Capacity must be submitted to AEMO, will allow more time for AEMO to complete some of the activities towards the end of Year 1 of the Reserve Capacity Cycle, including, for example, determining a Network Access Quantity to Facilities.

Clause 4.1.11 is proposed to be further amended to remove the redundant reference to the first Reserve Capacity Cycle.

- 4.1.11. AEMO must cease to accept lodgement of applications for certification of Reserve Capacity for the Reserve Capacity Cycle in accordance with clause 4.9.1 from 5:00 PM on the last Business Day falling on or before 24 June of Year 1 of the Reserve Capacity Cycle.÷
 - (a) 20 July of Year 1 for Reserve Capacity Cycles up to and including 2010; and
 - (b) 1 July of Year 1 for Reserve Capacity Cycles from 2011 onwards.

Explanatory Note

Clause 4.1.12 is proposed to be amended to bring forward the date by which AEMO is to notify applicants of the Certified Reserve Capacity assigned to their facility from 19 August to 12 August.

Reducing the timeframe for some of the Year 1 Reserve Capacity Cycle activities, including the time by which AEMO must notify applicants of the Certified Reserve Capacity assigned to their Facility, will allow more time for AEMO to complete some of the activities towards the end of Year 1 of the Reserve Capacity Cycle, including, for example, determining a Network Access Quantity to Facilities.

Clause 4.1.12 is proposed to be further amended to remove the redundant reference to the

first Reserve Capacity Cycle.

- 4.1.12. AEMO must notify each applicant for certification of Reserve Capacity of the Certified Reserve Capacity to be assigned by 5:00 PM on the last Business Day on, or before 12 August of Year 1 of the Reserve Capacity Cycle.÷
 - (a) 5 August of Year 1 for Reserve Capacity Cycles up to and including 2010; and
 - (b) 19 August of Year 1 for Reserve Capacity Cycles from 2011 onwards.

Explanatory Note

Clause 4.1.13 is proposed to be amended to bring forward the date by which Reserve Capacity Security is required to be provided to AEMO from 2 September to 25 August, and to remove redundant references to previous Reserve Capacity Cycles.

- 4.1.13. Each Market Participant must provide to AEMO any Reserve Capacity Security required in accordance with clause 4.13.1 and any DSM Reserve Capacity Security required in accordance with clause 4.13A.1 not later than 5:00 PM on the last Business Day falling on or before 25 August of Year 1 of the Reserve Capacity Cycle.:
 - (a) for Reserve Capacity Cycles up to and including 2010:
 - i. 10 August of Year 1 of the relevant Reserve Capacity Cycle if any of the Facility's Certified Reserve Capacity is specified to be traded bilaterally in accordance with clause 4.14.1(c); or
 - ii. 29 August of Year 1 of the relevant Reserve Capacity Cycle if any of the Facility's Certified Reserve Capacity is specified to be offered into the Reserve Capacity Auction in accordance with clause 4.14.1(a) and where none of the Facility's Certified Reserve Capacity is specified to be traded bilaterally in accordance with clause 4.14.1(c);
 - (b) for Reserve Capacity Cycles from 2011 onwards:
 - i. 2 September of Year 1 of the relevant Reserve Capacity Cycle if any of the Facility's Certified Reserve Capacity is specified to be traded bilaterally in accordance with clause 4.14.1(c) or if the Facility is subject to a Network Control Service Contract; or
 - ii. 14 September of Year 1 of the relevant Reserve Capacity Cycle if any of the Facility's Certified Reserve Capacity is specified to be offered into the Reserve Capacity Auction in accordance with clause 4.14.1(a) and where clause 4.1.13(b)(i) does not apply.

Explanatory Note

Clause 4.1.14 is proposed to be amended to bring forward the date by which bilateral trade declarations are required to be provided to AEMO from 2 September to 25 August, as a consequence of the deletion of the Reserve Capacity Auction, and to remove redundant

references to previous Reserve Capacity Cycles.

- 4.1.14. Each Market Participant holding Certified Reserve Capacity for the Reserve Capacity Cycle must provide to AEMO notification in accordance with clause 4.14.1 as to how its Certified Reserve Capacity will be dealt with not later than 5:00 PM on the last Business Day falling on or before 25 August of Year 1 of the Reserve Capacity Cycle.:
 - (a) 9 September 2005, in the case of the first Reserve Capacity Cycle;
 - (b) 10 August of Year 1, in the case of subsequent Reserve Capacity Cycles up to and including 2010; and
 - (c) 2 September of Year 1, in the case of Reserve Capacity Cycles from 2011 onwards.
- 4.1.15. By 5:00 PM on the first Business Day following the notification deadline specified in clause 4.1.14, AEMO must confirm to each Market Participant in accordance with clause 4.14.9 the amount of Certified Reserve Capacity that can be traded bilaterally from its Facilities.
- 4.1.15A. AEMO must publish the Certified Reserve Capacity for each Facility in accordance with clause 4.9.9A by 5:00 PM on the first Business Day following the confirmation deadline specified in clause 4.1.15.

Explanatory Note

Clause 4.1.16 is proposed to be amended as a consequence of the Reserve Capacity Auction being deleted.

- 4.1.16. [Blank]AEMO must publish the information required by clauses 4.15.1 and 4.15.2 pertaining to whether or not a Reserve Capacity Auction is required by 5:00 PM on the last Business Day falling on or before:
 - (a) 16 September 2005, in the case of the first Reserve Capacity Cycle;
 - (b) 18 August of Year 1, in the case of subsequent Reserve Capacity Cycles up to and including 2010; and
 - (c) the first Business Day following the confirmation deadline specified in clause 4.1.15, in the case of Reserve Capacity Cycles from 2011 onwards.

Explanatory Note

Clause 4.1.16A is proposed to be amended to require AEMO to confirm to Market Participants the Network Access Quantity determined for each of their facilities, to assign Capacity Credits to facilities and determine whether the Reserve Capacity Requirement has been met by 30 September, and as a consequence of the Reserve Capacity Auction being deleted.

4.1.16A. If the Reserve Capacity Auction is cancelled, then, on the day that AEMO publishes the notice under clause 4.1.16, AEMO must By 5:00 PM on the last

Business Day falling on or before 30 September of Year 1 of the relevant Reserve Capacity Cycle, AEMO must:

- (a) assign Capacity Credits in accordance with clause 4.20.5A(a); and
- (b) determine in accordance with clause 4.20.5A(aA) whether the Reserve Capacity Requirement has been met or exceeded with the Capacity Credits assigned for Year 3:
 - to Facilities to which section 4.13 applies, for which no Reserve Capacity Security was required to be provided under section 4.13;
 or
 - ii. to Demand Side Programmes determined by AEMO to be in Commercial Operation-;
- (c) notify each Market Participant of the Network Access Quantity determined for each of its Facilities in accordance with clause 4.15.10; and
- (d) publish the information required to be published under clause 4.15.15.

Explanatory Note

Clause 4.1.17 is proposed to be deleted as a consequence of the Reserve Capacity Auction being deleted.

- 4.1.17. [Blank]If a Reserve Capacity Auction proceeds, then AEMO must accept submission of Reserve Capacity Offers from Market Participants in accordance with clause 4.17.2:
 - (a) from 9:00 AM on the first Business Day falling on or following:
 - i. 20 September 2005 of Year 1, in the case of the first Reserve Capacity Cycle;
 - ii. 20 August of Year 1, in the case of subsequent Reserve Capacity
 Cycles up to and including 2010; and
 - iii. the second Business Day following the confirmation deadline specified in clause 4.1.15, in the case of Reserve Capacity Cycles from 2011 onwards.
 - (b) until 5:00 PM on the last Business Day falling on or before:
 - i. 29 September 2005, in the case of the first Reserve Capacity Cycle;
 - ii. 29 August of Year 1, in the case of subsequent Reserve Capacity
 Cycles up to and including 2010; and
 - iii 14 September of Year 1, in the case of Reserve Capacity Cycles from 2011 onwards.

Explanatory Note

Clause 4.1.18 is proposed to be deleted as a consequence of the Reserve Capacity Auction being deleted.

- 4.1.18. [Blank] f a Reserve Capacity Auction proceeds, then AEMO must:
 - (a) run the Reserve Capacity Auction on the first Business Day falling on or following:
 - i. 3 October of 2005, in the case of the first Reserve Capacity Cycle;
 - ii. 1 September of Year 1, in the case of subsequent Reserve Capacity Cycles up to and including 2010; and
 - iii. 15 September of Year 1, in the case of Reserve Capacity Cycles from 2011 onwards; and
 - (b) publish the results in accordance with clause 4.19.5 by 5:00 PM on that day.

Clause 4.1.18A is proposed to be amended as a consequence of the Reserve Capacity Auction being deleted.

In accordance with clause 4.1.18A, AEMO is required to publish the Reserve Capacity Price for a Reserve Capacity Cycle by 30 September of Year 1 of the Reserve Capacity Cycle.

- 4.1.18A. AEMO must publish the summary of information described in clause 4.20.5AA by the date and time specified in clause 4.1.16A.÷
 - (a) if a Reserve Capacity Auction is cancelled under clause 4.15.1 by the date and time specified in clause 4.1.16; or
 - (b) if a Reserve Capacity Auction is not cancelled under clause 4.15.1 by the date and time specified in clause 4.1.21A.
- 4.1.19. AEMO must commence a review of the Benchmark Reserve Capacity Price as required by clause 4.16.3 with the objective of completing the review, including consideration of public submissions in relation to that review, so as to allow a reasonable time for the Economic Regulation Authority to approve any proposed change in value and for that value to be implemented prior to the date and time specified in clause 4.1.4 that relates to the following Reserve Capacity Cycle.

Explanatory Note

Clause 4.1.20 is proposed to be deleted as a consequence of the Reserve Capacity Auction being deleted.

4.1.20. [Blank] Each Market Participant holding Certified Reserve Capacity which has been scheduled by AEMO in a Reserve Capacity Auction must provide to AEMO notification, in accordance with clause 4.20, of how many Capacity Credits each Facility will provide not later than 5:00 PM on the last Business Day falling on or before 21 September of Year 1 of the relevant Reserve Capacity Cycle.

Explanatory Note

Clause 4.1.21 is proposed to be amended to extend the date for applications by Market

Participants for the amount of Reserve Capacity Security or DSM Reserve Capacity Security to be recalculated from 24 September to 1 October.

- 4.1.21. A Market Participant may apply to AEMO:
 - (a) under clause 4.13.2A for a recalculation of the amount of Reserve Capacity Security required to be held by AEMO for a Facility in accordance with clause 4.13.2(b); or
 - (b) under clause 4.13A.8 for a recalculation of the amount of DSM Reserve Capacity Security required to be held by AEMO for a Demand Side Programme in accordance with clauses 4.13A.1 or 4.13A.4, as applicable,

after 5:00 PM on the last Business Day falling on or before 24 September 1 October of Year 1 of a Reserve Capacity Cycle.

Explanatory Note

Clause 4.1.21A is proposed to be deleted as a consequence of the Reserve Capacity Auction being deleted.

- 4.1.21A. [Blank]Not later than 5:00 PM on the last Business Day falling on or before 24 September of Year 1 of a Reserve Capacity Cycle, AEMO must, in the event that a Reserve Capacity Auction was required:
 - (a) assign Capacity Credits in accordance with clause 4.20.5A(a); and
 - (b) determine in accordance with clause 4.20.5A(aA) whether the Reserve Capacity Requirement has been met or exceeded with the Capacity Credits assigned for Year 3:
 - to Facilities to which section 4.13 applies, for which no Reserve
 Capacity Security was required to be provided under section 4.13;
 or
 - ii. to Demand Side Programmes determined by AEMO to be in Commercial Operation.
- 4.1.21B. If required under clause 4.20.8, AEMO must issue a Notice of Intention to Cancel Capacity Credits by 5:00 PM on the last Business Day falling on or before 15 August of Year 3 of the relevant Reserve Capacity Cycle, where the notice relates to the Capacity Year that commences on 1 October of Year 3 of that Reserve Capacity Cycle.

4.1.22. [Blank]

Explanatory Note

Clause 4.1.23 is proposed to be amended to remove redundant references to previous Reserve Capacity Cycles.

- 4.1.23. Each Market Participant Customer must provide to AEMO the information described in clause 4.28.8 by 5:00 PM on the last Business Day falling on or before 20 August of Year 3 of the Reserve Capacity Cycle.÷
 - (a) in the case of the first Reserve Capacity Cycle, 5:00 PM on the Business Day being 15 Business Days prior to the day on which the Initial Time occurs; and
 - (b) in the case of a subsequent Reserve Capacity Cycle, 5:00 PM on the last Business Day falling on or before 20 August of Year 3 of that cycle.

Amendments to clauses 4.1.23A and 4.1.23B for weekly settlement.

- 4.1.23A. For each Hot Season, AEMO must determine and publish the 12 Peak SWIS

 Trading Intervals within five Business Days after the Interval Meter Deadline for
 the <u>Trading Week containing the last Trading Day of the</u> last Trading Month in the
 relevant Hot Season. For the avoidance of doubt, AEMO must not revise the 12
 Peak SWIS Trading Intervals after their publication.
- 4.1.23B. For each Trading Month, AEMO must determine and publish the 4 Peak SWIS Trading Intervals within five Business Days after the Interval Meter Deadline for the <u>Trading Week containing the last Trading Day of the</u> relevant Trading Month. For the avoidance of doubt, AEMO must not revise the 4 Peak SWIS Trading Intervals after their publication.

Explanatory Note

Amendments to clauses 4.1.23C and 4.1.24 made for weekly settlement and for registration taxonomy.

No change is expected to be required to the indicative IRCR publication. However, the IRCR publication is now to be published on the same day as the Settlement Statement. IRCR will still be a monthly calculation to calculate a daily IRCR value. The daily IRCR is then used for daily calculations.

- 4.1.23C. For each Trading Month, AEMO must determine and publish the Indicative Individual Reserve Capacity Requirement for each Market CustomerParticipant in accordance with clause 4.28.6 by 5:00 PM on the Business Day that is 10 Business Days prior to the start of the relevant Trading MonthWeek.
- 4.1.24. For each Trading Month, AEMO must determine and publish the Individual Reserve Capacity Requirement for each Market CustomerParticipant in accordance with clause 4.28.7 by 5:00 PM the Settlement Statement Date for the Trading Week containing the first Trading Day in on the Business Day that is five Business Days prior to the Interval Meter Deadline for the relevant Trading Month.
- 4.1.25. [Blank]

Clause 4.1.26 is proposed to be amended as a consequence of the Reserve Capacity Auction being deleted and to remove redundant references to previous Reserve Capacity Cycles.

In particular, clauses 4.1.26(d)(ii)(1), 4.1.26(d)(ii)(2), 4.1.26(e)(iii)(3) and 4.1.26(e)(ii)(4) refer to the date in clause 4.1.12 (i.e. 12 August of Year 1 of the Reserve Capacity Cycle) instead of the scheduled date of the Reserve Capacity Auction in clause 4.1.18(a).

4.1.26. Reserve Capacity Obligations apply:

- (a) [Blank]in the case of the first Reserve Capacity Cycle:
 - i. from the Initial Time, for Facilities that were commissioned before Energy Market Commencement;
 - ii. from the Trading Day commencing on the scheduled date of commissioning, as specified in accordance with clause 4.10.1(c)(iii)(7), for Scheduled Generators and Non-Scheduled Generators commissioned between Energy Market Commencement and 30 November 2007, inclusive; and
 - iii. from the Trading Day commencing on 1 October 2007 for Interruptible Loads commissioned after Energy Market Commencement;
- (b) [Blank] for subsequent Reserve Capacity Cycles up to and including the 2009 Reserve Capacity Cycle:
 - i. from the Trading Day commencing on 1 October of Year 3, for Facilities that were commissioned as at the scheduled time of the Reserve Capacity Auction for the Reserve Capacity Cycle as specified in clause 4.1.18(a) or for Facilities which have provided Capacity Credits in one or both of the two previous Reserve Capacity Cycles;
 - ii. from the Trading Day commencing on the scheduled date of commissioning, as specified in accordance with clause 4.10.1(c)(iii)(7), or as revised in accordance with clause 4.27.11A, for Facilities commissioned between 1 August of Year 3 and 30 November of Year 3; and
 - iii. from the Trading Day commencing on 30 November of Year 3, for new generating systems undertaking Commissioning Tests after 30 November of Year 3;
- (c) [Blank] for subsequent Reserve Capacity Cycles up to and including the 2015 Reserve Capacity Cycle:
 - i. from the Trading Day commencing on 1 October of Year 3, for
 Facilities that were commissioned as at the scheduled time of the
 Reserve Capacity Auction for the Reserve Capacity Cycle as
 specified in clause 4.1.18(a) or for Facilities which have provided

- Capacity Credits in one or both of the two previous Reserve Capacity Cycles;
- ii. from the Trading Day commencing on the scheduled date of commissioning, as specified in accordance with clause 4.10.1(c)(iii)(7), or as revised in accordance with clause 4.27.11A, for Facilities commissioned between 1 June of Year 3 and 1 October of Year 3; and
- iii. from the Trading Day commencing on 1 October of Year 3, for new generating systems undertaking Commissioning Tests after 1
 October of Year 3;
- (d) for subsequent Reserve Capacity Cycles up to and including the 2018 Reserve Capacity Cycle:
 - where AEMO has determined in accordance with clause 4.20.5A(aA) that the Reserve Capacity Requirement has been met or exceeded with the Capacity Credits assigned for Year 3 for which no Reserve Capacity Security was required to be provided under section 4.13, from the Trading Day commencing on 1 October of Year 3; and
 - ii. where AEMO has determined in accordance with clause 4.20.5A(aA) that the Reserve Capacity Requirement has not been met with the Capacity Credits assigned for Year 3 for which no Reserve Capacity Security was required to be provided under section 4.13:
 - from the Trading Day commencing on 1 October of Year 3, for Facilities that were commissioned as at the scheduled time of the Reserve Capacity Auction for the Reserve Capacity Cycle as specified in clause 4.1.18(a)the date and time specified in clause 4.1.12 for the Reserve Capacity Cycle or for Facilities which have provided Capacity Credits in one or both of the two previous Reserve Capacity Cycles;
 - from the Trading Day commencing on 1 June of Year 3, for Facilities commissioned between the scheduled time of the Reserve Capacity Auction for the Reserve Capacity Cycle as specified in clause 4.1.18(a) the date and time specified in clause 4.1.12 for the Reserve Capacity Cycle and 1 June of Year 3;
 - 2A. from the Trading Day commencing on the scheduled date of commissioning, as specified in accordance with clause 4.10.1(c)(iii)(7), or as revised in accordance with clause 4.27.11A, for Facilities commissioned between 1 June of Year 3 and 1 October of Year 3; or

- from the Trading Day commencing on 1 October of Year 3, for new generating systems undertaking Commissioning Tests after 1 October of Year 3; and
- (e) from the 2019 Reserve Capacity Cycle:
 - i. from the Trading Day commencing 1 October of Year 3, where AEMO has determined in accordance with clause 4.20.5A(aA) that the Reserve Capacity Requirement has been met or exceeded with the Capacity Credits assigned for Year 3:
 - to Facilities to which section 4.13 applies, for which no Reserve Capacity Security was required to be provided under section 4.13; or
 - 2. to Demand Side Programmes determined by AEMO to be in Commercial Operation, and
 - ii. where AEMO has determined in accordance with clause4.20.5A(aA) that the Reserve Capacity Requirement has not been met with the Capacity Credits assigned for Year 3:
 - to Facilities to which section 4.13 applies, for which no Reserve Capacity Security was required to be provided under section 4.13; or
 - 2. to Demand Side Programmes determined by AEMO to be in Commercial Operation,

from the Trading Day commencing:

- on 1 October of Year 3, for Facilities that were commissioned as at the scheduled time of the Reserve Capacity Auction for the Reserve Capacity Cycle as specified in clause 4.1.18(a) the date and time specified in clause 4.1.12 for the Reserve Capacity Cycle or for Facilities which have provided Capacity Credits in one or both of the two previous Reserve Capacity Cycles;
- 4. on 1 June of Year 3, for Facilities commissioned between the scheduled time of the Reserve Capacity Auction for the Reserve Capacity Cycle as specified in clause 4.1.18(a) the date and time specified in clause 4.1.12 for the Reserve Capacity Cycle and 1 June of Year 3;
- on the scheduled date of commissioning, as specified in accordance with clause 4.10.1(c)(iii)(7), or as revised in accordance with clause 4.27.11A, for Facilities commissioned between 1 June of Year 3 and 1 October of Year 3; or
- 6. on 1 October of Year 3, for new generating systems undertaking Commissioning Tests after 1 October of Year 3.

- 4.1.27. [Blank]
- 4.1.28. [Blank]

Clause 4.1.29 is proposed to be amended to remove redundant references to previous Reserve Capacity Cycles.

- 4.1.29. The Reserve Capacity Price and each Facility Monthly Reserve Capacity Price for a Reserve Capacity Cycle are applicable between the following time and dates apply from the start of the Trading Day commencing on 1 October of Year 3 of the relevant Reserve Capacity Cycle to the end of the Trading Day ending on 1 October of Year 4 of the Reserve Capacity Cycle.÷
 - (a) from:
 - i. in the case of the first Reserve Capacity Cycle, the start of the Trading Day commencing on the earlier of Energy Market Commencement and the start of the Trading Day commencing on 1 October 2007;
 - ii. in the case of subsequent Reserve Capacity Cycles, the start of the Trading Day commencing on 1 October of Year 3 of the relevant cycle; and
 - (b) to the end of the Trading Day ending on 1 October of Year 4 of the relevant evele.

Explanatory Note

Clause 4.1.30 is proposed to be amended for consistency with the drafting style of the WEM Rules and to improve clarity.

- 4.1.30. The Reserve Capacity Obligations for a Facility arising through holding Capacity Credits for a Reserve Capacity Cycle cease to apply from:
 - (a) subject to paragraph (b) clause 4.1.30(b), the completion of the Trading Day ending on 1 October of Year 4 of the relevant Reserve Capacity Cycle; and
 - (b) the completion of the Trading Day ending on the scheduled date of decommissioning, as specified in accordance with clause 4.10.1(d), for Facilities decommissioned between 1 August of Year 4 of the relevant Reserve Capacity Cycle and 1 October of Year 4 of the Reserve Capacity Cycle.

Explanatory Note

Clauses 4.1.31 to 4.1.33 are proposed to be deleted as a consequence of clauses 4.1.34 to 4.1.38 being deleted.

- 4.1.31. [Blank]
- 4.1.32. [Blank]
- 4.1.33. [Blank]

Clause 4.1.34, 4.1.35, 4.1.36, 4.1.37 and 4.1.38 are proposed to be deleted as the Constrained Access Certification Review referred to in those clauses is now redundant.

- 4.1.34. AEMO must, prior to 1 January of Year 1 of the 2019 Reserve Capacity Cycle, conduct a Constrained Access Certification Review, which will include—
 - (a) reviewing the methodology in Appendix 11 and the concepts of Constrained Access Facility and Constrained Access Entitlement, having regard to the matters set out in clause 4.1.37; and
 - (b) considering whether any changes to these Market Rules are necessary as a result of the review of the methodology and concepts referred to in clause 4.1.34(a).
- 4.1.35. AEMO may, for the purposes of the Constrained Access Certification Review, consult with any person or persons as AEMO considers appropriate.
- 4.1.36. Where AEMO considers that changes to these Market Rules are necessary as a result of the Constrained Access Certification Review, AEMO must draft a suitable Rule Change Proposal and submit it using the rule change process in clause 2.5, allowing reasonable time for the Standard Rule Change Process to be completed and any resulting Amending Rules to come into effect, prior to 30 June of Year 1 of the 2019 Reserve Capacity Cycle.
- 4.1.37. In conducting the Constrained Access Certification Review, AEMO must have regard to the following matters—
 - (a) the Wholesale Market Objectives;
 - (b) any constraints that exist on the Network;
 - (c) the terms and conditions relating to the level of network access under existing Arrangements for Access (including any Network Control Service Contract), here evidence of such arrangements has been provided to AEMO;
 - (d) any submissions received by AEMO during any consultation process conducted by AEMO under clause 4.1.35;
 - (e) the ability of, and cost to, AEMO or a Network Operator to implement any proposed Amending Rules; and
 - (f) the extent to which information or data is used consistently, including under other provisions of these Market Rules relevant to the subject matter of the Constrained Access Certification Review.

4.1.38. The audit conducted by the Market Auditor under clause 2.14 in respect of the period in which the Constrained Access Certification Review occurs will include an audit of AEMO's compliance with clauses 4.1.34 to 4.1.37.

Explanatory Note

Network Access Quantity

AEMO is to determine an initial Network Access Quantity for each Facility that was assigned Capacity Credits for the Reserve Capacity Cycle immediately prior to commencement of these Amending Rules.

The initial Network Access Quantity for a Facility will be the lower of:

- the Capacity Credits held for the Facility for that Reserve Capacity Cycle; and
- the Certified Reserve Capacity that AEMO has assigned to the Facility for the Reserve Capacity Cycle for which these Amending Rules commence.

The purpose of the initial Network Access Quantity is to give existing holders of Reserve Capacity priority over new entrants (which includes any upgrades to existing Facilities) for the purposes of determining Network Access Quantities for Facilities for each Reserve Capacity Cycle.

The initial Network Access Quantity determined for a Facility does not set the Network Access Quantity to be determined for the Facility in any subsequent Reserve Capacity Cycle.

CC Uplift Quantity

The WEM Rules will include a supplementary mechanism to 'uplift' the allocation assigned to the facility in the Reserve Capacity Cycle immediately preceding the commencement of the new NAQ framework. The 'Capacity Credit Uplift' only applies to non GIA generators. The uplift represents the difference between the initial NAQ value assigned to a generator and the Capacity Credits assigned to the facility in the immediately preceding Reserve Capacity Cycle, but is only provided up to the amount of Certified Reserve Capacity assigned to the facility in the Reserve Capacity Cycle that NAQ is first assigned. Capacity Credit Uplift Quantities are treated the same as Capacity Credits for the purpose of the WEM Rules except that they will not be taken into account when AEMO determines whether the Reserve Capacity Requirement has been met.

The sum of a facility's NAQ and its Capacity Credit Uplift must not exceed the facility's Certified Reserve Capacity. If the sum of the NAQ and the Capacity Credit Uplift exceeds the Certified Reserve Capacity for the Facility, then the amount of the Capacity Credit Uplift will be reduced.

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

- 4.1A.1. For the purposes of the Network Access Quantity Cycle, AEMO must determine an Initial Network Access Quantity for each Facility that:
 - (a) was assigned Capacity Credits in the Reserve Capacity Cycle immediately preceding the Network Access Quantity Cycle; and
 - (b) has been assigned Certified Reserve Capacity for the Network Access

 Quantity Cycle that is specified to be traded bilaterally under clause
 14.14.1(c).

- 4.1A.2. The Initial Network Access Quantity for a Facility is a quantity, in MW, equal to the lesser of:
 - (a) the Capacity Credits held by a Facility in the Reserve Capacity Cycle immediately preceding the Network Access Quantity Cycle; and
 - (b) the Certified Reserve Capacity determined by AEMO and intended to be traded bilaterally in accordance with 4.14.1(c) for the Network Access Quantity Cycle.
- 4.1A.3. Each Initial Network Access Quantity is to be expressed to a precision of 0.001 MW.
- 4.1A.4. Subject to clause 4.1A.6, for the Network Access Quantity Cycle, where a Facility, other than a GIA Facility, is assigned a Network Access Quantity in accordance with section 4.11A that is less than the Initial Network Access Quantity determined by AEMO under clause 4.1A.1, AEMO must record the difference as the CC Uplift Quantity for the Facility ("CC Uplift Quantity").
- 4.1A.5. Where, in respect of a Reserve Capacity Cycle:
 - (a) a CC Uplift Quantity has been determined for a Facility; and
 - (b) the sum of the Network Access Quantity assigned to the Facility in accordance with section 4.11A and the CC Uplift Quantity determined for the Facility exceeds the Certified Reserve Capacity for the Facility for the Reserve Capacity Cycle.
 - then AEMO must reduce the CC Uplift Quantity so that the Network Access

 Quantity and the revised CC Uplift Quantity equals the Certified Reserve Capacity
 for the Facility for the Reserve Capacity Cycle.
- 4.1A.6. At any time the maximum amount of CC Uplift Quantity is to be the sum recorded by AEMO under clause 4.1A.4, as may be reduced by AEMO under clause 4.1A.5. To avoid doubt, a CC Uplift Quantity, as may be reduced under clause 4.1A.5, may not be increased in any subsequent Reserve Capacity Cycle.
- 4.1A.7. Any CC Uplift Quantity is deemed to be a Capacity Credit in the same quantities and subject to the same obligations including testing requirements, refunds, payment arrangements and all other provisions applicable to Capacity Credits (including the determination of the Reserve Capacity Price) under these WEM Rules save that for the purposes of determining whether the Reserve Capacity Requirement has been met or exceeded in accordance with clause 4.20.5A(aA), AEMO must disregard any CC Uplift Quantity.

New section 4.1B requires Network Operators to provide information with respect to the thermal capabilities of its Network (at 41 degrees) which AEMO will use to develop Constraint Equations for use in the Network Access Quantity Model. The Network Access Model is to be developed by AEMO to determine a Network Access Quantity (where applicable) for a Facility. A Network Access Quantity is critical to determining the Capacity

Credits to be assigned to a Facility for a Reserve Capacity Cycle. See section 4.15 for further information.

RCM Limit Advice (including supporting information) and RCM Constraint Equations will be published to enable Market Participants to form a view on the potential Network Access Quantity to be determined for their Facility before the window for applications for certification of Reserve Capacity closes.

4.1B. RCM Limit Advice and RCM Constraint Equations

4.1B.1. Each Network Operator must provide RCM Limit Advice to AEMO in respect to its Network in accordance with this section 4.1B and section 2.27A.

Explanatory Note

Proposed new clause 4.1B.2 requires AEMO to provide details to the relevant Network Operator of any Facilities for which an Expression of Interest to provide Reserve Capacity in the Reserve Capacity Cycle has been received by AEMO, and Facilities which are intended to cease operation permanently by 1 October of Year 3 of that Reserve Capacity Cycle.

- 4.1B.2. By 5:00 PM on the last Business Day falling on or before 8 March in Year 1 of a Reserve Capacity Cycle, AEMO must provide each Network Operator, in respect of its Network for the Reserve Capacity Cycle:
 - (a) details of each Facility specified in an Expression of Interest submitted under clause 4.2.6 for the Reserve Capacity Cycle, including the information in clauses 4.4.1(a) to 4.4.1(d); and
 - (b) details of each Facility for which AEMO has received a notice under clause

 4.4A.1 where the intention is for the Facility to cease operation

 permanently by 1 October of Year 3 of the Reserve Capacity Cycle.

Explanatory Note

Proposed new clause 4.1B.3 sets out the information a Network Operator must take into account when in estimating the peak transfer capability of its Network.

- 4.1B.3. By 5:00 PM on the last Business Day falling on or before 15 April in Year 1 of the Reserve Capacity Cycle, each Network Operator must, in respect of its Network, reasonably estimate the configuration, and associated Thermal Network Limits of its Network by:
 - (a) assuming an ambient temperature of 41 degrees Celsius;
 - (b) taking into account:
 - all new network augmentations that will be in-service, including separate Thermal Limits for Facilities nominated to be classified as Network Augmentation Funding Facilities, including for application for Early Certified Reserve Capacity under section 4.28C; and
 - ii. all transmission network assets scheduled to be retired,

- as at 1 October of Year 3 of the Reserve Capacity Cycle;
- (c) including the connection of new Facilities notified by AEMO under clause
 4.1B.2(a) where the relevant Network Operator is able to represent the
 Facility in RCM Limit Advice; and
- (d) including the impact of any Facilities notified by AEMO under clause 4.1B.2(b).
- 4.1B.3A. Where a Network Operator has not been able to provide Non-Thermal Limits for Facilities that are not yet in-service at the time the information is required to be provided to AEMO, AEMO must use Non-Thermal Limits which, in its reasonable opinion, most closely represent the expected Non-Thermal Limit for the Facility.

Proposed new clause 4.1B.4 describes the information each Network Operator is required to provide to AEMO with respect to its Network.

- 4.1B.4. By 5:00 PM on the last Business Day falling on or before 15 April in Year 1 of the Reserve Capacity Cycle, each Network Operator must provide the following information in respect of its Network to AEMO in the form of RCM Limit Advice:
 - (a) the estimated proportion of the peak demand of its Network as at 1 October of Year 3 of the Reserve Capacity Cycle determined under clause 4.1B.3 at each Transmission Node on its Network;
 - its estimate of the configuration and associated Thermal Network Limits of
 its Network as at 1 October of Year 3 of the current Reserve Capacity
 Cycle determined under clause 4.1B.3;
 - (c) any load above 10 MW that is expected to connected to its Network by

 1 October of Year 3 of the Reserve Capacity Cycle; and
 - (d) an explanation for any changes to the RCM Limit Advice provided to

 AEMO for the Reserve Capacity Cycle from the RCM Limit Advice provided to AEMO for a previous Reserve Capacity Cycle.

Explanatory Note

Proposed new clause 4.1B.5 requires AEMO to publish RCM Limit Advice (which includes RCM Limit Advice Inputs) and RCM Constraint Equations.

The information is required to be published in the Constraints Library, which forms part of the Congestion Information Resources on the WEM Website. The definition of "Constraints Library" in the Chapter 11 glossary is proposed to be amended accordingly.

- 4.1B.5. By 5:00 PM on the last Business Day falling on or before 20 May in Year 1 of the Reserve Capacity Cycle, AEMO must publish the following information in the Constraints Library for the Reserve Capacity Cycle:
 - (a) the information provided by each Network Operator under clause 4.1B.4; and

(b) the Preliminary RCM Constraint Equations.

The Reserve Capacity Expression of Interest

4.2. The Reserve Capacity Expression of Interest Process

- 4.2.1. The purpose of the Reserve Capacity Expression of Interest is to provide AEMO with an indication from existing and potential new Market Participants of the amount of new generation and new Demand Side Management capacity they are willing to offer to make available as Reserve Capacity.
- 4.2.1. The purpose of the Reserve Capacity Expression of Interest is for existing and new Market Participants to notify AEMO of the amount of new generation and Demand Side Management capacity they intend to make available as Reserve Capacity in the Capacity Year to which the Expression of Interest relates. To avoid doubt, a Market Participant must submit an Expression of Interest as a condition of being eligible to seek certification of Reserve Capacity for any new capacity in the Reserve Capacity Cycle to which the Expression of Interest relates.

Explanatory Note

Clauses 4.2.3(a) and 4.2.4(a) are amended to require AEMO to publish the Request for Expression of Interest on the WEM Website.

- 4.2.3. The Request for Expressions of Interest is to be made available:
 - (a) on a web-site the WEM Website;
 - (b) to any person on application to AEMO.
- 4.2.4. By the date and time specified in clause 4.1.4, AEMO must have advertised the Request for Expressions of Interest, including how to obtain the Request for Expression of Interest:
 - (a) on a web-site the WEM Website; and
 - (b) in local and national media which, in the opinion of AEMO, is likely to be seen by potential suppliers of Reserve Capacity.
- 4.2.5. At its discretion, AEMO may continue to advertise and promote the Request for Expression of Interest until the deadline for submissions of Expression of Interest specified in clause 4.2.6.
- 4.2.6. Expressions of Interests must be provided to AEMO by the time and date specified in clause 4.1.5 and must contain the information described in clause 4.4.1.

Explanatory Note

Clause 4.2.7 is proposed to be amended to refer to two new Facility types – storage and Small Aggregation (a facility which is aggregated across single or multiple connection points comprising Distributed Energy Resources).

- 4.2.7. By the date and time specified in clause 4.1.6, AEMO must publish the following information:
 - (a) the number of Expression of Interests Interest received;
 - (b) based on the Expression of Interests, 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:
 - 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;
 - applications for both Access Proposals and Environmental Approvals have been made and one or both are being processed;
 - 3. no Access Proposal has been applied for or some or all Environmental Approvals have not been applied for;
 - (c) based on the Expression of Interests, the additional Reserve Capacity potentially available categorised as:
 - i. <u>a generation system</u>capacity associated with Intermittent Generators;
 - ii. <u>a connection point (load)</u> capacity associated with non-Intermittent Generators; or
 - iii. <u>a storage system</u>capacity associated with Demand Side Management; and
 - (ca) if the Facility is a generation system, the technologies proposed for the generation system;
 - (cb) whether more than one technology is proposed for the Facility or location;
 - (cc) the class of the Facility and, where applicable, any Facility sub-type;
 - (d) based on the Expression of Interests, the additional Reserve Capacity potentially available categorised based on fuel type and back-up fuel options;
 - (e) AEMO's estimate of the existing capacity eligible to be assigned Certified Reserve Capacity in the SWIS; and

(f) the preliminary Reserve Capacity Requirement for the Reserve Capacity Cycle to which the Expression of Interest relates that was included in the Request for Expression of Interest.

4.3. Information to be Included in Requests for Expression of Interest

Explanatory Note

Clauses 4.3.1(c)(iii), 4.3.1(i)(v), 4.3.1(i)(vi), 4.3.1(i)(vii) and 4.3.1(i)(viii) are proposed to be deleted as a consequence of the Reserve Capacity Auction being deleted.

Clause 4.3.1(i)(ix) is proposed to be amended to improving the formatting of the clause.

- 4.3.1. A Request for Expression of Interest for a Reserve Capacity Cycle must include the following information:
 - (a) a request for a response by interested parties not later than the relevant time specified in clause 4.1.5;
 - (b) the preliminary Reserve Capacity Requirement for the Reserve Capacity Cycle determined in accordance with section 4.6;
 - (c) for each of the three previous Reserve Capacity Cycles (if applicable):
 - i. the Reserve Capacity Requirement determined in accordance with clause 4.6.1;
 - ii. the Availability Curve referred to in clause 4.5.10(e) applicable to that Reserve Capacity Cycle;
 - iii. [Blank]the Reserve Capacity Auction Requirement for any Reserve Capacity Auction held;
 - iv. the number of Capacity Credits acquired by AEMO;
 - v. the Benchmark Reserve Capacity Price;
 - vi. the Reserve Capacity Price; and
 - vii. each Facility Monthly Reserve Capacity Price that applied to a Facility;
 - (d) the number of Capacity Credits which AEMO expects to be traded bilaterally in accordance with clause 4.14.1(c);
 - (e) the amount of capacity expected to be required from new Facilities, where this figure is based on the difference between the preliminary Reserve Capacity Requirement for the Reserve Capacity Cycle as determined in accordance with clause 4.6.3 and the latest information available to AEMO as to the aggregate available capacity for the SWIS during the period to which the Reserve Capacity Requirement relates;
 - (f) the then current Benchmark Reserve Capacity Price;
 - (g) a brief summary of the eligibility requirements for Reserve Capacity to be certified under section 4.11;

- (h) information on how to obtain an electronic version of the WEM Rules from a web-site;
- (i) the following information on timetables and processing times for the Reserve Capacity Cycle:
 - the date and time from which the lodgement of applications for certification of Reserve Capacity will be allowed;
 - ii. the date and time by which applications for certification of Reserve Capacity must be lodged;
 - iii. the date and time that applicants for Certified Reserve Capacity will be notified of the Certified Reserve Capacity assigned;
 - iv. the date and time by which a Market Participant which holds Certified Reserve Capacity must notify AEMO in accordance with clause 4.14.1 as to how its Reserve Capacity will be dealt with; and
 - v. the date and time by which AEMO will-announce whether the

 Reserve Capacity Auction will be cancelled publish the Preliminary

 RCM Constraint Equations;
 - vi. the date and time from which the lodgement of Reserve Capacity

 Offer submissions will be allowed;
 - vii. the last date and time at which lodgements of Reserve Capacity

 Offer will be allowed;
 - viii. the date and time the Reserve Capacity Auction results will be published; and
 - ix. the last date and time by which:
 - 1. [Blank]
 - Market Participants can inform AEMO of the Facilities which will provide Capacity Credits;
- (j) the information required to be included in an Expression of Interest and the format in which that information is to be presented:
- (k) the closing date and time for submission of Expressions of Interest;
- (I) who to contact with questions and responses to the Expression of Interest, including that person's contact details; and
- (m) the information specified in clause 4.4A.2 in respect of any Facility where the expected closure date of the Facility has not yet occurred.

Clause 4.4.1(b) is proposed to be amended to refer to two new Facility types – storage and Small Aggregation (a facility which is aggregated across single or multiple connection points comprising Distributed Energy Resources).

Clause 4.4.1(d)(vi) is proposed to be added to require an Expression of Interest to specify whether the Facility will be nominated to be classified as a Network Augmentation Funding Facility.

4.4. Information to be Included in Expression of Interests

- 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 is:
 - i. a generation systeman Intermittent Generator;
 - iA. <u>a connection point (load)a non-Intermittent Generator not serving</u> <u>Intermittent Load; or</u>
 - ii. <u>a storage system.a non-Intermittent Generator serving Intermittent</u>

 Load: or
 - (ba) if the Facility is a generation system, the technologies proposed for the generation system;
 - (bb) whether more than one technology is proposed for the Facility or location;
 - (bc) the class of the Facility and, where applicable, any Facility sub-type.
 - iii. a form of Demand Side Management;
 - (c) the maximum Reserve Capacity anticipated to be available from each Facility;
 - (cA) [Blank] for non-Intermittent Generators serving Intermittent Load, the maximum capacity anticipated to be required to serve the Intermittent Load;
 - (d) for each Facility:
 - 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; and
 - v. the hours during a typical week when the Facility will not be available to be dispatched due to staffing restrictions or other factors.

- v. the hours during a typical week when the Facility will not be available to be dispatched due to staffing restrictions or other factors-; and
- vi. whether the Facility is to be nominated to be classified as a Network Augmentation Funding Facility.

4.4A. Notification of Facility Ceasing Operation

- 4.4A.1. Where a Facility, that is a generating system which has a rated capacity that equals or exceeds 10 MW, is to cease operation permanently, the Market Participant to whom that Facility is registered must:
 - (a) notify AEMO of the expected closure date of the Facility in accordance with this section 4.4A; and
 - (b) subject to clause 4.4A.5, specify an expected closure date of not less than three years from the date the notice is given to AEMO.

Explanatory Note

New proposed clause 4.4A.2(f) requires AEMO to publish the NAQ assigned to a Facility where the Market Participant for that Facility has given AEMO a notice under clause 4.4A.1 of its intent that the Facility is to cease operation permanently.

Where a Market Participant subsequently withdraws a notice under clause 4.4A.6, under clause 4.15.12, the NAQ for the Facility will not be reinstated, and the Facility will be treated as a "new" facility in the priority order in Appendix 3.

- 4.4A.2. AEMO must within five Business Days after receiving a notice under clause 4.4A.1, publish the following information on the WEM Website:
 - (a) the name of the Market Participant that provided the notice;
 - (b) the name of the Facility specified in the notice;
 - (bA) the Transmission Node Identifier for the Facility;
 - (bB) the location for the Facility;
 - (c) the Capacity Credits, in MW, assigned to the Facility at the time of the notice and for any subsequent Reserve Capacity Cycle;
 - (d) the Standing Data nameplate capacity of the Facility, expressed in MW;and
 - (e) the expected closure date of the Facility; and
 - (f) where the Facility specified in the notice has been assigned a Network

 Access Quantity for the Reserve Capacity Cycle in which expected closure
 date of the Facility falls, the Network Access Quantity assigned to the
 Facility for that Reserve Capacity Cycle and for any subsequent Reserve
 Capacity Cycle.

- 4.4A.3. A Market Participant must, as soon as practicable, notify AEMO of any changes to the expected closure date of a Facility by amending the notice given under clause 4.4A.1.
- 4.4A.4. AEMO must within five Business Days after receiving notification under clause 4.4A.3, publish the revised expected closure date of the Facility on the WEM Website.
- 4.4A.5. A notice under clause 4.4A.1, as may be amended in accordance with clause 4.4A.3, may specify an expected closure date of less than three years where:
 - (a) the Market Participant becomes insolvent within the meaning of clause 9.23.2;
 - (b) the Facility specified in the notice has suffered an unexpected catastrophic event: or
 - (c) the Market Participant forms the view, in good faith, that the Facility specified in the notice is now no longer commercially viable due to reasons beyond its control that were not reasonably foreseeable,

and as a result the Facility is to cease operation permanently.

- 4.4A.6. A Market Participant may, by notice in writing to AEMO, withdraw a notice given under clause 4.4A.1 if the withdrawal is made in good faith.
- 4.4A.7. AEMO must within five Business Days after receiving a notice under clause 4.4A.6, publish notification of the withdrawal of a notice under clause 4.4A.1 on the WEM Website.

The Long Term SWIS Capacity Requirements

- 4.5. Long Term Projected Assessment of System Adequacy
- 4.5.1. The Long Term PASA must be performed annually by AEMO and must address each of the years in the Long Term PASA Study Horizon.

Explanatory Note

Clause 4.5.2 is proposed to be amended in line with the new registration taxonomy.

Clause 4.28.10 has been removed (with reasoning set out at that clause).

- 4.5.2. The Long Term PASA must take into account:
 - (a) demand growth scenarios, including peak and annual energy requirements;
 - (b) expected Demand Side Management capabilities and taking into account clause 4.28.10;
 - (c) generation capacity expected to be available, including details of any Early Certified Reserve Capacity, seasonal capacities, Ancillary Service

- <u>Essential System Service</u> capabilities, long duration outages and, for Non-Scheduled <u>Generators</u> <u>Facilities</u>, <u>Semi-Scheduled Facilities</u> and <u>Electric</u> <u>Storage Resources</u>, production profiles;
- expected transmission network capabilities allowing for expansion plans, losses and constraints; and
- (e) the capacity described in clause 4.5.2A.
- 4.5.2A. AEMO must determine an estimate of the Reserve Capacity required to cover the forecast cumulative needs of Intermittent Loads such that:
 - this Reserve Capacity estimate is in addition to the Reserve Capacity required to satisfy the Planning Criterion in the situation where there were no Intermittent Loads; and
 - (b) this Reserve Capacity estimate must be set by AEMO to equal the sum over all expected Intermittent Loads of their forecast maximum possible Intermittent Load levels multiplied by:
 - i. the ratio of:
 - 1. the Reserve Capacity Target for the relevant Capacity Year as described in clause 4.5.10(b)(i); and
 - 2. the expected peak demand for the relevant Capacity Year as described in clause 4.5.10(b)(ii);
 - ii. minus one.
- 4.5.3. AEMO must notify Rule Participants of the information that it requires from them in the areas described in clause 4.5.2, in respect of each year of the Long Term PASA Study Horizon, no later than 1 April of Year 1 of the relevant Reserve Capacity Cycle.

Clause 4.5.3A is proposed to be amended to remove the references to Intermittent Loads that are not yet registered.

- 4.5.3A. The information requested by AEMO under clause 4.5.3 must include a request for Market Customers to provide the following information pertaining to Intermittent Loads and Loads that are expected to be registered and operating as Intermittent Loads during the second Capacity Year commencing during the Long Term PASA Study Horizon:
 - (a) the amount of capacity required to serve that Load in the event of a failure of on-site generation where this amount of capacity cannot exceed the greater of:

i. either:

- for an existing Intermittent Load, the maximum allowed level
 of Intermittent Load specified in Standing Data for that
 Intermittent Load at the time of providing the data; or
- for an Intermittent Load that is yet to be registered with AEMO, zero; and
- ii. the Contractual Maximum Demand associated with that Intermittent
 Load to apply during the Capacity Year to which the nomination
 relates. The Market Customer must provide evidence to AEMO of
 this Contractual Maximum Demand level unless AEMO has
 previously been provided with that evidence; and
- (b) for each Intermittent Load that is yet to be registered with AEMO:
 - i. the location of the Load;
 - ii. evidence that the Load can be expected to satisfy the requirements to be registered as an Intermittent Load during the second Capacity Year within the Long Term PASA Study Horizon; and
 - iii. the expected firm MW capacity and location of any generation system to serve that Intermittent Load in accordance with clause 2.30B.2(a) that is to be located at a different connection point to the Intermittent Load.
- 4.5.3A. The information requested by AEMO under clause 4.5.3 must include a request for Market Participants to provide to AEMO, for Intermittent Loads and Loads that are operating as Intermittent Loads during the second Capacity Year commencing during the Long Term PASA Study Horizon, the amount of capacity required to serve the Load in the event of a failure of on-site generation where this amount of capacity cannot exceed the greater of:
 - (a) the maximum allowed level of Intermittent Load specified in Standing Data for that Intermittent Load at the time of providing the data; and
 - (b) the Contractual Maximum Demand associated with that Intermittent Load to apply during the Capacity Year to which the nomination relates. The Market Participant must provide evidence to AEMO of this Contractual Maximum Demand level unless AEMO has previously been provided with that evidence.
- 4.5.4. Rule Participants must provide the data requested by AEMO in accordance with clause 4.5.3 within 15 Business Days from the date of that request.
- 4.5.5. AEMO may request from persons who are not Rule Participants information in the areas described in clause 4.5.2 in respect of each year of the Long Term PASA Study Horizon.
- 4.5.6. AEMO must review the information provided to it in accordance with clause 4.5.4 and as a result of a request under clause 4.5.5, and where necessary, seek clarifications.

- 4.5.7. AEMO must treat all information provided to it in accordance with clauses 4.5.4, 4.5.5 and 4.5.6 as confidential except where the provider has granted permission for its release or as otherwise provided under these WEM Rules. However, AEMO may release any such information as part of an unidentifiable component of an aggregate number in a Statement of Opportunities Report.
- 4.5.8. Where information provided to AEMO in accordance with clauses 4.5.4, 4.5.5 and 4.5.6 is not adequate or is insufficient for the purpose for which it is required, AEMO may make its own estimate and use that estimate in place of information provided in accordance with clauses 4.5.4, 4.5.5 and 4.5.6.

Clause 4.5.9(b) is proposed to be amended to require AEMO to take into account the maximum transfer capability of the Network to meet demand.

- 4.5.9. The Planning Criterion to be used by AEMO in undertaking a Long Term PASA study is that there should be sufficient available capacity in each Capacity Year during the Long Term PASA Study Horizon to:
 - (a) meet the forecast peak demand (including transmission losses and allowing for Intermittent Loads) supplied through the SWIS plus a reserve margin equal to the greater of:
 - i. 7.6% of the forecast peak demand (including transmission losses and allowing for Intermittent Loads); and
 - ii. the maximum capacity, measured at 41°C, of the largest generating unit;

while maintaining the Minimum Frequency Keeping Capacity for normal frequency control SWIS frequency in accordance with the Normal Operating Frequency Band and the Normal Operating Frequency Excursion Band. The forecast peak demand should be calculated to a probability level that the forecast would not be expected to be exceeded in more than one year out of ten; and

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

Explanatory Note

Clause 4.5.10(d) is proposed to be amended for consistency with the drafting style of the WEM Rules.

- 4.5.10. AEMO must use the information assembled to:
 - (a) assess the extent to which the anticipated installed <u>capacity</u> of the energy <u>producing systemsgeneration capacity</u> 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.

- (b) forecast the Reserve Capacity Target and corresponding expected peak demand for each Capacity Year during the Long Term PASA Study Horizon, where:
 - i. the Reserve Capacity Target for a Capacity Year is the capacity required to meet the Planning Criterion in that year under the scenario described in clause 4.5.10(a)(iv); and
 - ii. the expected peak demand in that year is the peak demand under the scenario described in clause 4.5.10(a)(iv);
- identify and assess any potential capacity shortfalls isolated to a subregion of the SWIS resulting from expected restrictions on transmission capability or other factors;
- (d) identify any potential transmission, generation, <u>storage</u> or demand side capacity augmentation options to alleviate capacity shortfalls identified in <u>clause_clauses</u> 4.5.10(a) and <u>(c) 4.5.10(c)</u>; and
- (e) develop a two dimensional duration curve of the forecast minimum capacity requirements over the Capacity Year ("Availability Curve") for each of the second and third Capacity Years of the Long Term PASA Study Horizon. The forecast minimum capacity requirement for each Trading Interval in the Capacity Year must be determined as the sum of:
 - the forecast demand (including transmission losses and allowing for Intermittent Loads) for that Trading Interval under the scenario described in clause 4.5.10(a)(iv); and
 - ii. the difference between the Reserve Capacity Target for the Capacity Year and the maximum of the quantities determined under clause 4.5.10(e)(i) for the Trading Intervals in the Capacity Year.
- 4.5.11. AEMO must publish the Statement of Opportunities Report for a Reserve Capacity Cycle by the date specified in clause 4.1.8.

- 4.5.12. For the second and third Capacity Years of the Long Term PASA Study Horizon, AEMO must determine the following information:
 - (a) [Blank]
 - (b) the minimum capacity required to be provided by Availability Class 1 capacity if Power System Security and Power System Reliability is to be maintained. This minimum capacity is to be set at a level such that if:
 - i all Availability Class 2 capacity (excluding Interruptible Load used to provide Spinning Reserve to the extent that it is anticipated to provide Certified Reserve Capacity), were activated during the Capacity Year so as to minimise the peak demand during that Capacity Year; and
 - the Planning Criterion and the criteria for evaluating Outage Plans set out in clause 3.18.11 were to be applied to the load scenario defined by clause 4.5.12(b)(i), then

it would be possible to satisfy the Planning Criterion and the criteria for evaluating Outage Plans set out in clause 3.18.11, as applied in clause 4.5.12(b)(ii), using, to the extent that the capacity is anticipated to provide Certified Reserve Capacity, the anticipated installed Availability Class 1 capacity, the anticipated Interruptible Load capacity available as Spinning Reserve and, to the extent that further Availability Class 1 capacity would be required, an appropriate mix of Availability Class 1 capacity to make up that shortfall; and

(c) the capacity associated with Availability Class 2, where this is equal to the Reserve Capacity Target for the Capacity Year less the minimum capacity required to be provided by Availability Class 1 capacity under clause 4.5.12(b).

Explanatory Note

New proposed clauses 4.5.13(eA) and 4.5.13(eB) are proposed to be added to require AEMO to include in the ESOO information regarding certain aspects of network congestion to assist smaller Market Participants to understand the effect of such network congestion.

- 4.5.13. The Statement of Opportunities Report must include:
 - (a) the input information assembled by AEMO in performing the Long Term PASA study including, for each Capacity Year of the Long Term PASA Study Horizon:
 - i. the demand growth scenarios used;
 - ii. the generation capacities of each generation Registered Facility;
 - iii. the generation capacities of each committed generation project;
 - iv. the generation capacities of each probable generation project;
 - v. the Demand Side Management capability and availability;

- vA. the amount of Reserve Capacity forecast to be required to serve the aggregate Intermittent Load;
- vi. the assumptions about transmission network capacity, losses and network and security constraints that impact on study results; and
- vii. a summary of the methodology used in determining the values and assumptions specified in (i) to (vi), including methodological changes relative to previous Statement of Opportunities Reports;
- (b) the Reserve Capacity Target for each Capacity Year of the Long Term PASA Study Horizon;
- (c) the amount by which the installed generation capacity plus the Demand Side Management available exceeds or falls short of the Reserve Capacity Target for each Capacity Year and each demand growth scenario considered in the study;
- (d) the extent to which localised supply restrictions will exist while satisfying the Reserve Capacity Target for each Capacity Year and each demand growth scenario considered in the study;
- (e) a statement of potential generation, demand side and transmission options that would alleviate capacity shortfalls relative to the Reserve Capacity Target and to capacity requirements in sub-regions of the SWIS;
- (eA) information used by AEMO to apportion peak demand under clause

 4.5.10(a)(iv) across Transmission Nodes reflecting information provided under clause 4.1B.4;
- (eB) for each Capacity Year of the Long Term PASA Horizon:
 - any planned changes (other than augmentations covered by clause 4.5.13(eB)(ii)) that are expected to impact network limits or constraints;
 - ii. any planned augmentations to the SWIS, including augmentations
 to be paid by an applicant seeking access, or increased access, to
 the transmission system that is publicly available information and of
 which AEMO is aware; and
 - iii. any network limitations identified during the immediately preceding Reserve Capacity Cycle;
- (f) the Availability Curve for the second and third Capacity Years of the Long Term PASA Study Horizon;
- (g) the quantities determined under clause 4.5.12 for the second and third Capacity Years of the Long Term PASA Study Horizon;
- (h) the Expected DSM Dispatch Quantity for each Capacity Year in the Long Term PASA Study Horizon;
- (i) the DSM Reserve Capacity Price for the Capacity Year commencing on the next 1 October after the Statement of Opportunities Report is published;

- (j) an estimate of the DSM Reserve Capacity Price for each Capacity Year in the Long Term PASA Study Horizon; and
- (k) the DSM Activation Price for the Capacity Year commencing on the next 1 October after the Statement of Opportunities Report is published; and
- (I) the Electric Storage Resource Obligation Intervals.
- 4.5.14. AEMO must document the procedure it follows in conducting the Long Term PASA, and which the Economic Regulation Authority must follow in conducting reviews under clause 4.5.15, in a WEM Procedure.
- 4.5.14A. AEMO must, for each Capacity Year, calculate the Expected DSM Dispatch Quantity and the DSM Activation Price, in accordance with clauses 4.5.14B, 4.5.14C, 4.5.14D, 4.5.14E and 4.5.14F.
- 4.5.14B. AEMO must document in a WEM Procedure the procedure it follows in calculating:
 - (a) the Expected DSM Dispatch Quantity; and
 - (b) the DSM Activation Price.
- 4.5.14C. The WEM Procedure under clause 4.5.14B(a) is to provide for the Expected DSM Dispatch Quantity for a Capacity Year to be calculated by—
 - estimating the amount of Unserved Energy which would be expected to occur in the Capacity Year if no Demand Side Programmes were dispatched; and
 - (b) estimating the amount of Unserved Energy which would be expected to occur in the Capacity Year if each Demand Side Programme to which DSM Capacity Credits are (or are forecast to be) assigned, were dispatched for 200 hours; and
 - (c) determining the difference between the estimates in clauses 4.5.14C(a) and (b); and
 - (d) dividing the difference in clause 4.5.14C(c) by the total of all DSM Capacity
 Credits assigned (or forecast to be assigned) to Demand Side
 Programmes for the Capacity Year.
- 4.5.14D. The WEM Procedure under clause 4.5.14B(b) is to provide for the DSM Activation Price to be calculated—
 - in a manner consistent with the way in which AEMO estimates the value of customer reliability under the National Electricity Rules; but
 - (b) using data suitable for Western Australia.
- 4.5.14E. Until AEMO first publishes a WEM Procedure under clause 4.5.14B(a), it must calculate the Expected DSM Dispatch Quantity for Capacity Year by dividing—
 - (a) the relevant value in the third column of the following table; by

(b) the total of all DSM Capacity Credits assigned to all Demand Side Programmes as at 1 October of Year 3 of the relevant Reserve Capacity Cycle—

EXPECTED DSM DISPATCH TABLE

Reserve Capacity Cycle	Capacity Year	Total Unserved Energy deemed to be avoided by dispatch of Facilities with DSM Capacity Credits (MWh)
2015	2017	6.1
2016	2018	9.1
2017	2019	13.7
From 2018	2020	22.2

- 4.5.14F. Until AEMO first publishes a WEM Procedure under clause 4.5.14B(b), the DSM Activation Price is \$33,460/MWh.
- 4.5.15. From time to time, and at least once in every five year period starting from Energy Market Commencement, the Economic Regulation Authority must conduct a review of the Planning Criterion and the process in the WEM Procedure specified in clause 4.5.14 by which AEMO forecasts SWIS peak demand. This review must include:
 - (a) a review of the technical analysis; and
 - (b) a cost-benefit study on the effects on stakeholders of a variety of levels of generation adequacy.
- 4.5.16. In conducting a review under clause 4.5.15, the Economic Regulation Authority must invite submissions in accordance with the WEM Procedure specified in clause 4.5.14 on the performance of the Planning Criterion and the process by which AEMO forecasts SWIS peak demand from Rule Participants and take any submissions into account in the review.
- 4.5.17. In accordance with the WEM Procedure specified in clause 4.5.14, the Economic Regulation Authority must make available a draft of the report described in clause 4.5.18 to Rule Participants for comment and invite submissions on the draft report.
- 4.5.18. After concluding the review described in clause 4.5.15, the Economic Regulation Authority must publish a final report containing:
 - (a) issues identified by the Economic Regulation Authority;
 - (b) assumptions made by the Economic Regulation Authority in undertaking the review;

- (c) submissions received by the Economic Regulation Authority from Rule Participants in accordance with clause 4.5.16;
- (d) the Economic Regulation Authority's responses to the issues raised in those submissions;
- (e) the results of the technical and cost-benefit studies;
- (f) the submissions on the draft report received by the Economic Regulation Authority from Rule Participants in accordance with clause 4.5.17;
- (g) the Economic Regulation Authority's responses to the issues raised in those submissions; and
- (h) any recommended changes to the Planning Criterion.
- 4.5.19. Where the Economic Regulation Authority finds that a change to the process by which AEMO forecasts SWIS peak demand would be beneficial in light of the Wholesale Market Objectives, it must:
 - (a) make a Rule Change Proposal to implement the change; and/or
 - (b) make a Procedure Change Proposal to implement the change.
- 4.5.20. If the Economic Regulation Authority contracts with a third party to conduct the analysis required under this clause 4.5, then:
 - (a) the Economic Regulation Authority must ensure that the third party is familiar with the methodology employed in conducting the analysis required under this clause 4.5 in previous years; and
 - (b) the Economic Regulation Authority must approve any variations in the process to be used by that third party where variations may only be accepted if not inconsistent with the requirements specified in the WEM Rules or a WEM Procedure.

This section 4.5A contains the proposed provisions for the implementation of the overall regulatory framework for future Whole of System Plans.

4.5A. Whole of System Plan

- 4.5A.1. The Coordinator must prepare and publish a Whole of System Plan in accordance with these WEM Rules.
- 4.5A.2. The Coordinator must first prepare and publish a Whole of System Plan by no later than 30 September 2025 and at intervals of not more than 5 years thereafter.
- 4.5A.3. If, after the publication of a Whole of System Plan, new information becomes available that, in the Coordinator's opinion, may materially change one or more of the outcomes specified in the current Whole of System Plan, the Coordinator may prepare and publish an update to the current Whole of System Plan.

- 4.5A.4. A Whole of System Plan remains in effect until it is replaced in whole or in part by:
 - (a) a subsequent Whole of System Plan; or
 - (b) an update to the Whole of System Plan prepared and published in accordance with clause 4.5A.3.

4.5A.5. The purpose of a Whole of System Plan is to:

- (a) plan for the efficient development of the SWIS to meet the power system needs of the SWIS including with respect to Power System Security and Power System Reliability for a planning horizon of at least 20 years;
- (b) assist in the transition to a lower-emissions power system by guiding the
 efficient integration of renewable generation and identifying opportunities
 for new technologies, such as energy storage;
- (c) identify requirements for network investment and inform the regulatory test for network projects;
- (d) inform industry's decisions regarding efficient power system investment opportunities in the SWIS; and
- (e) inform policy makers on the future needs of the power system.

4.5A.6. A Whole of System Plan must:

- (a) identify options for the development of the SWIS to maintain Power System

 Security and Power System Reliability at the lowest sustainable cost

 across demand growth scenarios, including peak and annual energy
 requirements;
- (b) test alternative scenarios through the use of modelling and sensitivities, including the assessment of the impact on the power system and its various components across the different scenarios;
- (c) Identify investment options that would minimise costs to consumers; and
- (d) test alternative network investment options and identify optimal network investment options.
- 4.5A.7. When preparing a Whole of System Plan, the Coordinator must develop an approach to:
 - (a) the scenarios modelled;
 - (b) the modelling methodology to apply; and
 - (c) the method for selecting optimal network investment options.
- 4.5A.8. The Coordinator must publish the Coordinator's approach to the matters referred to in clause 4.5A.7, and guidance on the information and assistance to be provided in accordance with clause 4.5A.11.

- 4.5A.9. The Coordinator may from time to time amend the Coordinator's approach to the matters referred to in clause 4.5A.7 provided that the Coordinator publishes any such amendment.
- 4.5A.10. The Coordinator must collaborate with AEMO and Western Power in the preparation of the Whole of System Plan.
- 4.5A.11. AEMO, Western Power and other Rule Participants must at the Coordinator's request provide information and assistance, which in the Coordinator's opinion is necessary or desirable to enable the effective preparation of the Whole of System Plan.
- 4.5A.12. In preparing the Whole of System Plan, the Coordinator may, in addition to the matters referred to in this section 4.5A, consider any other matters and information the Coordinator considers relevant.
- 4.5A.13. Before publishing the final Whole of System Plan, the Coordinator must publish a draft Whole of System Plan and invite Rule Participants and other interested persons, including proponents of non-network options, to make submissions on the draft Whole of System Plan by a specified date (to be no earlier than 20 Business Days after the draft Whole of System Plan is published).
- 4.5A.14. A draft Whole of System Plan must:
 - (a) identify a range of scenarios;
 - (b) for each scenario, identify development options and potential projects;
 - (c) describe how each scenario performs under any reasonable sensitivities;
 - (d) assess the impact of each scenario on the power system and its various components;
 - (e) include the results of the assessment for each scenario, together with an explanatory statement regarding the results;
 - (f) include relevant information about development opportunities across both the transmission and the distribution systems;
 - identify any priority projects Western Power is able to progress in accordance with the relevant provisions of the Electricity Network Access Code; and
 - (h) provide an initial assessment, developed in consultation with the Network Operator, of whether non-network options are reasonably likely to meet a relevant identified network need.
- 4.5A.15. The Coordinator must provide a copy of a Whole of System Plan to the Minister before publishing it in accordance with clause 4.5A.16.
- 4.5A.16. The Coordinator must publish a final Whole of System Plan including:
 - (a) all relevant matters referred to in clauses 4.5A.6 and 4.5A.14;

- (b) a summary of any submissions received on the draft Whole of System Plan and the Coordinator's response to them; and
- (c) any other matters the Coordinator considers relevant to the Whole of System Plan.

4.6. Reserve Capacity Requirements

- 4.6.1. The Reserve Capacity Requirement for a Reserve Capacity Cycle is the Reserve Capacity Target for the Capacity Year commencing on 1 October of Year 3 of the Reserve Capacity Cycle as reported in the Statement of Opportunities Report for that Reserve Capacity Cycle.
- 4.6.2. The expected peak demand corresponding to the Reserve Capacity Requirement is the forecasted value determined in accordance with clause 4.5.10(b)(ii) for the Capacity Year commencing on 1 October of Year 3 of the Reserve Capacity Cycle.

Explanatory Note

Clause 4.6.3 is proposed to be amended to remove redundant references to previous Reserve Capacity Cycles.

- 4.6.3. The preliminary Reserve Capacity Requirement for a Reserve Capacity Cycle to be included in the relevant Request for Expression of Interest is the Reserve Capacity Target for the Capacity Year commencing on 1 October of Year 3 of the Reserve Capacity Cycle as reported in the Statement of Opportunities Report for the preceding Reserve Capacity Cycle.
 - (a) for the first Reserve Capacity Cycle is 3,862 MW; and
 - (b) for subsequent Reserve Capacity Cycles, the Reserve Capacity Target for the Capacity Year commencing on 1 October of Year 3 of the Reserve Capacity Cycle as reported in the Statement of Opportunities Report for the preceding Reserve Capacity Cycle.

Certification of Reserve Capacity

4.7. The Reserve Capacity Information Pack

- 4.7.1. [Blank]
- 4.7.2. By the time specified in clause 4.1.10, AEMO must publish the Reserve Capacity Information Pack for a Reserve Capacity Cycle on the WEM Website.

Explanatory Note

Clause 4.7.3(b) is proposed to be amended as a consequence of the Reserve Capacity Auction being deleted, and to correct a small typographical error at the start of clause 4.7.3(c)(i) (i.e. extra space).

- 4.7.3. The Reserve Capacity Information Pack for a Reserve Capacity Cycle must include the following information:
 - (a) the Reserve Capacity Requirement for the Reserve Capacity Cycle, as determined in accordance with clause 4.6.1;
 - (b) an explicit description of the Availability Curve to be used in restricting the amount of Reserve Capacity only available for a limited number of hours per year that can be traded bilaterally in accordance with clause 4.14.9, or scheduled in the Reserve Capacity Auction in accordance with clause 4.19.1; and
 - (c) instructions as to how to obtain from the WEM Website a copy of:
 - i. -the Request for Expression of Interest; and
 - ii. the report described in clause 4.2.7,

for the Reserve Capacity Cycle.

4.8. Who Can Apply for Certification of Reserve Capacity

Explanatory Note

Clause 4.8.2 is proposed to be amended to remove the redundant reference to the first Reserve Capacity Cycle and to replace it with a new clause stating that the submission of an Expression of Interest for a new Facility is to be a pre-condition to making an application for certification of Reserve Capacity for the new Facility.

The Expression of Interest process is to be mandatory for new facilities so that the Network Operator and AEMO have information about new facilities in time to develop RCM Limit Advice and RCM Constraint Equations in accordance with new proposed section 4.1B.

- 4.8.1. Subject to clause 4.8.2, a Market Participant may apply for certification of the amount of Reserve Capacity which can be provided by a Facility if:
 - (a) the Facility is a Registered Facility other than a Network; or
 - (b) the Facility is not a Registered Facility but the Market Participant intends to have the Facility registered as a Registered Facility other than a Network by the commencement date of the Reserve Capacity Obligations for the relevant Reserve Capacity Cycle as specified in clause 4.1.26.
- 4.8.2. For the first Reserve Capacity Cycle, Western Power may not apply for certification of Reserve Capacity for its generation systems, with the Certified Reserve Capacity and associated Reserve Capacity Obligations for those Facilities instead being assigned and set in accordance with clauses 4.11.7 and 4.12.5.
- 4.8.2 A Market Participant for a Facility, or an upgrade of a Facility, that has not been assigned Capacity Credits in a previous Reserve Capacity Cycle is not eligible to submit an application for certified Reserve Capacity for the Facility, or an upgrade of the Facility, under clause 4.8.1 for a Reserve Capacity Cycle unless the Market

Participant submitted an Expression of Interest for the Facility, or an upgrade of the Facility, under clause 4.2.6 in respect of that Reserve Capacity Cycle.

4.9. Process for Applying for Certification of Reserve Capacity

- 4.9.1. Applications for certification of Reserve Capacity:
 - (a) for the current Reserve Capacity Cycle may be lodged with AEMO from the date and time specified in clause 4.1.7 and until the time specified in clause 4.1.11; and
 - (b) for a future Reserve Capacity Cycle may be lodged with AEMO at any time prior to the date and time specified in clause 4.1.7 for the Reserve Capacity Cycle to which the application relates.
- 4.9.2. Only the Market Participant which has registered a Facility, or which intends to register a Facility may apply for certification of Reserve Capacity in respect of that Facility.
- 4.9.3. A Market Participant applying for certification of Reserve Capacity must provide to AEMO:
 - (a) the data specified in clause 4.10.1, in the format specified in the WEM Procedure referred to in clause 4.9.10;
 - (b) in the case of <u>an</u> application for certification of Reserve Capacity for an Intermittent Generator <u>a Non-Scheduled Facility</u> (other than one that only comprises an Electric Storage Resource) and a Semi-Scheduled Facility that is yet to enter service, the report described in clause 4.10.3; and
 - (c) in the case of an application for conditional certification for a future
 Reserve Capacity Cycle, or subsequent applications for Early Certified
 Reserve Capacity for a Facility for the same Reserve Capacity Cycle, an
 Application Fee to cover the cost of processing the application.
- 4.9.4. Applications for certification of Reserve Capacity must be made in the form prescribed by AEMO.

Explanatory Note

Clause 4.9.5(d) is proposed to be amended for consistency with the drafting style of the WEM Rules.

- 4.9.5. If AEMO assigns Certified Reserve Capacity to a Facility for a future Reserve Capacity Cycle under section 4.11 ("Conditional Certified Reserve Capacity"):
 - (a) the Conditional Certified Reserve Capacity is conditional upon the information included in the application for Certified Reserve Capacity remaining correct as at the date and time specified in clause 4.1.11 for that future Reserve Capacity Cycle;

- (b) the Market Participant holding the Conditional Certified Reserve Capacity must, in accordance with clauses 4.9.1 and 4.9.3, re-lodge an application for Certified Reserve Capacity with AEMO between the date and time specified in clause 4.1.7 and the time specified in clause 4.1.11 for that future Reserve Capacity Cycle;
- (c) if AEMO is satisfied that the application re-lodged in accordance with clause 4.9.5(b) is consistent with the information upon which the Conditional Certified Reserve Capacity was assigned and is correct, then AEMO must confirm:
 - i. the Certified Reserve Capacity;
 - ii. [Blank]the Reserve Capacity Obligation Quantity; and
 - iii. the Reserve Capacity Security or DSM Reserve Capacity Security levels,

that were previously conditionally assigned, set or determined by AEMO, subject to the Certified Reserve Capacity for an Intermittent Generator being assigned in accordance with clause 4.11.2(b); and

- (d) if the application re-lodged in accordance with <u>paragraph (b) clause</u> <u>4.9.5(b)</u> is found by AEMO to be inaccurate or is not consistent with the information upon which the Conditional Certified Reserve Capacity was assigned, then AEMO must process the application without regard for the Conditional Certified Reserve Capacity.
- 4.9.6. AEMO must notify an applicant for certification of Reserve Capacity of receipt of the application within one Business Day of receipt.
- 4.9.7. If a Market Participant fails to receive notification of receipt from AEMO in accordance with clause 4.9.6, then it must contact AEMO and arrange for resubmission of the information prior to the time and date specified in clause 4.1.11.
- 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, and the initial Reserve Capacity Obligation Quantity set for, 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, and the initial Reserve Capacity Obligation Quantity set for, each Facility covered by that application within 90 days of AEMO receiving the application.
- 4.9.9. AEMO must decide whether or not to assign Certified Reserve Capacity to a Facility in respect of a Reserve Capacity Cycle, and if so, the quantity to be assigned. If AEMO decides to assign Certified Reserve Capacity to a Facility in respect of a Reserve Capacity Cycle, AEMO must advise the applicant:

- (a) of the amount of Certified Reserve Capacity assigned to the Facility in respect of the Reserve Capacity Cycle, as determined in accordance with section 4.11 or clause 4.9.5(c) (as applicable);
- (b) [Blank] of the initial Reserve Capacity Obligations Quantity set for the Facility, as determined in accordance with section 4.12 or clause 4.9.5(c) (as applicable);
- (c) of any Reserve Capacity Security or DSM Reserve Capacity Security required as a condition of a Market Participant holding the Certified Reserve Capacity, as determined in accordance with clauses 4.13.2, 4.13A.1, 4.13A.4 or 4.9.5(c) (as applicable);
- in the case of Conditional Certified Reserve Capacity, that the certification is subject to the conditions in clauses 4.9.5(a) and 4.9.5(b);
- (e) upon the request of the applicant, of the calculations upon which AEMO's determinations are based; and
- (f) whether AEMO accepted or rejected a proposed alternative value to be used in the calculation of the Required Level for a Facility for which a Market Participant nominated to use the methodology described in clause 4.11.2(b) in its application for certification, as determined in accordance with clause 4.11.2A, if applicable.
- 4.9.9A. AEMO must publish, by the date and time specified in clause 4.1.15A, the level of Certified Reserve Capacity assigned to each Facility.

AEMO must document the processes it will follow when assessing the capacity of an Electric Storage Resource to account for degradation of the Electric Storage Resource.

- 4.9.10. AEMO must document in a WEM Procedure the procedure that:
 - (a) Market Participants must follow when applying for Certified Reserve Capacity; and
 - (b) AEMO must follow when processing applications for Certified Reserve Capacity, including how Certified Reserve Capacity is assigned and Reserve Capacity Obligation Quantities are set.
 - (b) AEMO must follow when processing applications for Certified Reserve

 Capacity, including:
 - how Certified Reserve Capacity is assigned;
 - ii. how Reserve Capacity Obligation Quantities are set; and
 - iii. how AEMO will account for any degradation of an Electric Storage

 Resource, based on:

- the performance standards and specifications for the Electric Storage Resource provided by the relevant manufacturer; and
- the performance of the Electric Storage Resource in the current Capacity Year, where available.

4.10. Information Required for the Certification of Reserve Capacity

Explanatory Note

Clauses 4.10.1(bA)(iii) and 4.10.1(bA)(iv) are proposed to be amended and deleted, respectively, to reflect the proposed deletion of the current regime for Constrained Access Facilities.

Clause 4.10.1(f) is proposed to be amended to:

- delete the reference to three separate blocks of Reserve Capacity with respect to Interruptible Loads and Demand Side Programmes; and
- add a new subclause (viii)) which requires a Market Participant to provide the relevant Transmission Node Identifier (TNI) in its application for certification of Reserve Capacity.
- 4.10.1. Each Market Participant must ensure that information submitted to AEMO with an application for certification of Reserve Capacity pertains to the Reserve Capacity Cycle to which the certification relates, and is supported by documented evidence and includes, 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:
 - 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);
 - iii. where the Facility is not a Constrained Access Facility, evidence of the level of unconstrained network access associated with the Arrangement for Access or Access Proposal referred to in clause 4.10.1(bA)(i)the Declared Sent Out Capacity for the Facility at the relevant connection point; and
 - iv. [Blank] where relevant, whether the Facility is a Constrained Access Facility; and
 - v. [Blank]details of any constraints that may apply;

- (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:
 - when all approvals will be finalised or, in the case of Interruptible Loads and 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 Interruptible Loads and 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) a description and a configuration of the main components of the Facility including the nameplate capacity, expressed in MW;
- (e) for a-generation system other than an Intermittent Generator Scheduled Facility:
 - i. the capacity of the Facility and the temperature dependence of that capacity;
 - ii. the maximum sent out capacity, net of Intermittent Loads, embedded and Parasitic Loads, that can be guaranteed to be available for supply to the relevant Network from the Facility when it is operated normally at an ambient temperature of 41°C;
 - iii. the maximum sent out capacity, net of Intermittent Loads, embedded and Parasitic Loads, beyond the capacity described in clause 4.10.1(e)(ii), that can be made available for supply to the

- relevant Network from the Facility at an ambient temperature of 41°C and any restrictions on the availability of that capacity, including limitations on duration;
- iv. at the option of the applicant, the method to be used to measure the ambient temperature at the site of the Facility for the purpose of defining the Reserve Capacity Obligation Quantity, where the method specified may be either:
 - 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
 - a daily maximum temperature measured at the site of the generator by the SCADA system operated by AEMO or the relevant Network Operator (as applicable).

(Where no method is specified, a temperature of 41°C will be assumed);

- v. details of primary and any alternative fuels, including:
 - 1. where the Facility has primary and alternative fuels:
 - the process for changing from one fuel to another;
 and
 - ii. the fuel or fuels which the Facility is to use in respect of the application for Certified Reserve Capacity; and
 - details acceptable to AEMO together with supporting evidence of both firm and any non-firm fuel supplies and the factors that determine restrictions on fuel availability that could prevent the Facility operating at its full capacity for Peak Trading Intervals on Business Days;
- vi. the expected forced and unforced outage rate based on manufacturer data; and
- vii. for Facilities that have operated for at least 12 months, the forced and unforced outage rate of the Facility;
- (f) for Interruptible Loads and Demand Side Programmes:
 - i. [Blank]the Reserve Capacity that the Market Participant expects to make available from each of up to three blocks of capacity;
 - ii. the maximum number of hours that the Interruptible Load or Demand Side Programme will be available to provide Reserve Capacity during a Capacity Year, which must be at least 200 hours;

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

- 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 7.6.1C(e) 7.4.39 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
- viii. the single Transmission Node Identifier for the Facility;
- (fA) for a Scheduled Facility containing only an Electric Storage Resource:
 - the nameplate capacity and maximum Charge Level capability of the Electric Storage Resource and the temperature dependence of that capacity;
 - ii. the maximum sent out capacity, net of embedded and Parasitic

 Loads, that can be guaranteed to be available for supply to the

 relevant Network from the Facility when it is operated normally at an
 ambient temperature of 41°C;
 - the sent-out capacity, net of Parasitic Loads that can be guaranteed to be available for supply across the Electric Storage Resource

 Obligation Duration, to the relevant Network from the Electric

 Storage Resource when it is operated normally at an ambient temperature of 41°C for each year of the expected life of the Electric Storage Resource, which must be supported by manufacturer data;
 - iv. manufacturer capacity and power rating data of the Electric Storage

 Resource for each year of its expected remaining life; and
 - v. the expected forced and unforced outage rate of the Electric
 Storage Resource taking into account the Electric Storage
 Resource Obligations Duration based on manufacturer data;
- (fB) in addition to any other requirements in this clause 4.10.1 for a Scheduled Facility, for a Scheduled Facility containing an Electric Storage Resource:
 - the nameplate capacity and maximum Charge level capability of the <u>Electric Storage Resource and the temperature dependence of that</u> capacity;
 - ii. the maximum sent out capacity, net of embedded and Parasitic

 Loads associated with the Electric Storage Resource, that can be
 guaranteed to be available for supply to the relevant Network from

- the Facility when it is operated normally at an ambient temperature of 41°C;
- the sent-out capacity, net of Parasitic Loads that can be guaranteed to be available for supply across the Electric Storage Resource
 Obligation Duration, to the relevant Network from the Electric
 Storage Resource when it is operated normally at an ambient temperature of 41°C for each year of the expected life of the Electric Storage Resource, supported by manufacturer data;
- iv. manufacturer capacity and power rating data for the Electric
 Storage Resource for each year of its expected remaining life; and
- v. the expected forced and unforced outage rate of the Electric
 Storage Resource taking into account the Electric Storage
 Resource Obligations Duration based on manufacturer data;
- (fC) in addition to any other requirements in this clause 4.10.1 for a Semi-Scheduled Facility, for a Semi-Scheduled facility containing an Electric Storage Resource;
 - the nameplate capacity and maximum Charge level capability of the <u>Electric Storage Resource and the temperature dependence of that</u> <u>capacity;</u>
 - ii. the maximum sent out capacity, net of embedded and Parasitic

 Loads, that can be guaranteed to be available for supply to the

 relevant Network from the Facility when it is operated normally at an
 ambient temperature of 41°C;
 - the sent-out capacity, net of Parasitic Loads that can be guaranteed to be available for supply across the Electric Storage Resource

 Obligation Duration, to the relevant Network from the Electric Storage Resource when it is operated normally at an ambient temperature of 41°C for each year of the expected life of the Electric Storage Resource, supported by manufacturer data;
 - iv. manufacturer data capacity and power rating 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 only containing an Electric Storage Resource, including a Small Aggregation comprising aggregated Electric Storage Resources:
 - the location of the single Transmission Node Identifier behind which the aggregated Electric Storage Resources will be connected;

- ii. the nameplate capacity and maximum charge level of each Electric Storage Resource;
- to be available for supply across the Electric Storage Resource
 Obligation Duration, to the relevant Network from each Electric
 Storage Resource when it is operated normally at an ambient
 temperature of 41°C for each year of the expected life of the
 Electric Storage Resource, supported by manufacturer data; and
- iv. evidence that demonstrates the Electric Storage Resources are
 expected to discharge during the Electric Storage Resource
 Obligation Intervals.
- (g) for all Facilities:
 - 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;

Clause 4.10.1(i) is proposed to be amended to clarify that Market Participants can only nominate for AEMO to use the Relevant Level Methodology for determining the quantity of Certified Reserve Capacity for Non-Scheduled Facilities and Semi-Scheduled Facilities, excluding any storage component of the Facility.

- (i) <u>subject to clause 4.10.2</u>, whether the applicant wishes to nominate the use of the methodology described in clause 4.11.2(b), in place of the methodology described in clause 4.11.1(a), in assigning the Certified Reserve Capacity or Conditional Certified Reserve Capacity to apply to a <u>Scheduled Generator</u>, <u>Semi-Scheduled Facility</u> (except in respect of any <u>Electric Storage Resource component of the Facility</u>) or a Non-Scheduled <u>Generator Facility</u>;
- (j) whether the Facility will be subject to a Network Control Service Contract;
- (k) where an applicant nominates to use the methodology described in clause 4.11.2(b) and the Facility or relevant part of the Facility is already in full operation under the configuration for which certification is being sought (as outlined in clause 4.10.1(dA)), the date on which the Facility or part of the Facility being nominated to use the methodology described in clause 4.11.2(b) became fully operational under this configuration, unless this date has already been provided to AEMO in a previous application for certification of Reserve Capacity;—and

Explanatory Note

Clause 4.10.1(I) is proposed to be amended to remove the reference to the 'Balancing Facility Requirements', and replace it with a reference to the Market Participant being required to provide evidence of how its Facility will be able to receive, confirm and respond to Dispatch Instructions in accordance with the WEM Procedures: Communications and Control Systems, and Dispatch.

The amendment to clause 4.10.1(I) is contained in the Tranche 2 Amending Rules.

- (I) for a Balancing Facility, evidence of the extent to which the Facility will meet the applicable criteria of the Balancing Facility Requirements.;
- (I) evidence of the extent to which the Facility will be able to receive, confirm, and implement Dispatch Instructions from AEMO in accordance with the WEM Procedures referred to in clauses 2.35.4 and 7.6.18; and

Explanatory Note

Where an applicant seeking certification of Reserve Capacity has nominated, in the Expression of Interest for the relevant Reserve Capacity Cycle, for the Facility (or a part of it) to be classified as a Network Augmentation Funding Facility for the purposes of the priority order in respect to the determination of a Network Access Quantity to the Facility under section 4.15, the applicant must provide the supporting information specified in clause 4.10A.5.

(m) subject to clauses 4.10A.2 and 4.10A.3, where an applicant has nominated the Facility, or part of the Facility where the application for certified Reserve Capacity relates to a Facility that is re-entering service after an upgrade, to be classified as a Network Augmentation Funding Facility under clause 4.4.1(d)(vi), the information specified in clause 4.10A.5.

Explanatory Note

Clause 4.10.2 is proposed to be added to clarify the types of Facilities eligible to be nominated by a Market Participant for AEMO to use the Relevant Level Methodology for determining the quantity of Certified Reserve Capacity for the Facility.

- 4.10.2. [Blank] The types of Facilities eligible to be nominated by a Market Participant under clause 4.10.11(i) for use of the methodology described in clause 4.11.2(b), for the purpose of assigning Certified Reserve Capacity or Conditional Certified Reserve Capacity to the Facility are:
 - (a) a Semi-Scheduled Facility, except in respect of any Electric Storage
 Resource component of the Facility; and
 - (b) a Non-Scheduled Facility comprising only an Electric Storage Resource that has not been in operation for the full period of performance assessment identified in step 1(a) of the Relevant Level Methodology.
- 4.10.3. An application for certification of Reserve Capacity that includes a nomination to use the methodology described in clause 4.11.2(b) for a Facility that, in respect of the Facility or the part of the Facility nominated to use the methodology described in clause 4.11.2(b):

- (a) is yet to enter service;
- (b) is to re-enter service after significant maintenance;
- (c) is to re-enter service after having been upgraded; or
- (d) has not operated with the configuration outlined in clause 4.10.1(dA) for the full period of performance assessment identified in step 1(a) of the Relevant Level Methodology,

must include a report prepared by an expert accredited by AEMO in accordance with clause 4.11.6. AEMO will use the report to assign Certified Reserve Capacity for the Facility or the part of the Facility nominated to use the methodology described in clause 4.11.2(b) and to determine the Required Level for that Facility.

- 4.10.3A. A report provided under clause 4.10.3 must include:
 - (a) for each Trading Interval during the period identified in step 1(a) of the Relevant Level Methodology, a reasonable estimate of the expected energy that would have been sent out by the Facility or the part of the Facility nominated to use the methodology described in clause 4.11.2(b) had it been in operation with the configuration proposed under clause 4.10.1(dA) in the relevant application for certification of Reserve Capacity;
 - (b) a value, expressed in MW as a sent out value, which equals the 5 percent probability of exceedance of expected generation output for the Facility for all the Trading Intervals that occurred within the last three years up to, and including, the last Hot Season, where this value is to be used in the calculation of the Required Level in clause 4.11.3B:
 - (c) a proposed alternative value to that specified in clause 4.10.3A(b), expressed in MW as a sent out value, to apply for the purposes of the Required Level, if in the opinion of the expert the value provided under clause 4.10.3A(b) would not be a reasonable representation of the Facility's 5 percent probability of exceedance of expected generation output during its first year of operation; and
 - (d) the reasons for any proposed alternative value provided under clause 4.10.3A(c).
- 4.10.4 If a Market Participant becomes aware of any changes to the details it provided to AEMO in accordance with this clause 4.10 for a Facility yet to commence operation or a Facility that is undergoing significant maintenance, then the Market Participant must advise AEMO of the revised details for the Facility as soon as practicable.

Explanatory Note

Section 4.10A is proposed to be deleted to reflect the proposed deletion of the regime for Constrained Access Facilities.

4.10A. Determination of Constrained Access Entitlement

- 4.10A.1. Subject to clause 4.10A.2, where a Market Participant provides information under clause 4.10.1(bA), or the relevant Network Operator confirms under clause 4.11.5, that a Facility is a Constrained Access Facility, AEMO must request the relevant Network Operator to determine the Constrained Access Entitlement for the Facility.
- 4.10A.2. Where there is any inconsistency between the information provided by a Market Participant under clause 4.10.1(bA) and the confirmation provided by the Network Operator under clause 4.11.5, the requirement for AEMO to request the Network Operator to determine the Constrained Access Entitlement for the relevant Facility under clause 4.10A.1 will be based on the confirmation provided by the Network Operator.
- 4.10A.3. Within 10 Business Days after receiving a request from AEMO under clause
 4.10A.1 or after receiving from AEMO any information requested under clause
 4.10A.6(a), the Network Operator must determine the Constrained Access
 Entitlement for the relevant Facility for the relevant Capacity Year in accordance with Appendix 11.
- 4.10A.4. The Network Operator must notify AEMO of any determination required under clause 4.10A.3 within 2 Business Days after making the determination.
- 4.10A.5. The Network Operator's determination under clause 4.10A.3 must be consistent with the Wholesale Market Objectives.
- 4.10A.6. Where the Network Operator requires information from AEMO to determine the Constrained Access Entitlement for a Constrained Access Facility—
 - (a) AEMO must, where the information is reasonably available to it and within 2 Business Days of a request from the Network Operator, provide the Network Operator with any information requested by the Network Operator irrespective of the confidentiality status of that information under these Market Rules;
 - (b) AEMO must inform the Network Operator of the confidentiality status of the information;
 - (c) the Network Operator must ensure that it maintains the confidentiality of the information in accordance with the confidentiality status informed by AEMO; and
 - (d) the Network Operator must ensure that the information is used only for the purpose for which it was provided.

Explanatory Note

Market Participants who fund the cost of augmenting the shared network will be assigned a Network Access Quantity in priority to other new entrants.

New replacement section 4.10A sets out the process for a Facility to be classified as a

Network Augmentation Funding Facility and the priority such Facilities will be afforded for the purpose of AEMO determining Network Access Quantities for Facilities in accordance with section 4.15.

The process includes:

- the Market Participant must nominate to be classified as a Network Augmentation Funding Facility in the Expression of Interest for the Reserve Capacity Cycle for which it is seeking certification of Reserve Capacity for the Facility;
- the Market Participant must provide evidence of its commitment to fund the augmentation and that the augmentation will be completed and in-service before the start of the Capacity Year to which the application for certified Reserve Capacity relates:
- the funding must increase the capacity of the shared network and not solely comprise the Market Participant's contribution for connection assets;
- AEMO will validate the information provided by the Market Participant with the relevant Network Operator and determine whether the Facility will be classified as a Network Augmentation Funding Facility;
- where the Facility is classified as a Network Augmentation Funding Facility, it will take priority over certain other new entrants for the purposes of AEMO assignment Network Access Quantities to Facilities; and
- AEMO will develop or update Constraint Equations based on Limit Advice provided by the relevant Network Operator in respect of the augmentation for use in the Network Access Quantity Model.

A Network Augmentation Funding Facility will only be assigned an NAQ taking into account the additional network capacity as a result of the augmentation works paid by the Market Participant in respect the facility if the NAQ does not negatively impact on the NAQ determined for existing facilities higher up in the priority order as set out in Appendix 3.

4.10A. Network Augmentation Funding Facility

Explanatory Note

New proposed clause 4.10A.1 clarifies that network augmentation funding may be in respect to part of a Facility.

4.10A.1. A reference to a Facility in this section 4.10A includes part of a Facility that is reentering service after an upgrade and which the Market Participant has nominated to be classified as a Network Augmentation Funding Facility under clause 4.10.1(m).

Explanatory Note

New proposed clause 4.10A.2 sets out the criteria for a Facility be eligible to be classified as a Network Augmentation Funding Facility.

4.10A.2. For the purposes of clause 4.10.1(m), a Facility may only be nominated to be classified as a Network Augmentation Funding Facility in respect of a Reserve Capacity Cycle if:

- (a) the Facility is an energy producing system;
- (b) the Market Participant for the Facility has committed to funding Network
 Augmentation Works; and
- (c) the Network Augmentation Works are expected to be in-service (which includes having completed all required commissioning tests) by 1 October of Year 3 of the Reserve Capacity Cycle to which the application for certified Reserve Capacity for the Facility relates.

Except for applications for Early Certified Reserve Capacity, new proposed clause 4.10A.3 prohibits a Market Participant from seeking to have a Facility classified as a Network Augmentation Funding Facility in more than one Reserve Capacity Cycle in respect to the same Network Augmentation Works.

Where a Market Participant applies for Early Certified Reserve Capacity for a Facility that it nominates to be classified as a Network Augmentation Funding Facility, the Facility will be treated as a Network Augmentation Funding Facility in the Reserve Capacity Cycle in which the Early Certified Reserve Capacity for the Facility is assessed and in the Reserve Capacity Cycle for the Capacity Year in which the Market Participant is seeking Capacity Credits for the Facility.

- 4.10A.3. Subject to clause 4.10A.3A, a Market Participant may only nominate a Facility to be classified as a Network Augmentation Funding Facility in the Reserve Capacity Cycle for which:
 - (a) the Market Participant first seeks Certified Reserve Capacity for the Facility associated with the Network Augmentation Works; and
 - (b) the Network Augmentation Works are expected to be in-service for the Capacity Year for that Reserve Capacity Cycle.
- 4.10A.3A. A Facility that is classified as a Network Augmentation Funding Facility in accordance with this section 4.10A, will only be classified as a Network Augmentation Facility for a single Reserve Capacity Cycle with respect to the relevant Network Augmentation Works, except where the Facility was assigned Early Certified Reserve Capacity in accordance with section 4.28C, in which case the Facility will be treated as a Network Augmentation Funding Facility:
 - (a) in the Reserve Capacity Cycle in which the Early Certified Reserve
 Capacity for the Facility was assessed; and
 - (b) in the Reserve Capacity Cycle for the Capacity Year in which the Market Participant is seeking Capacity Credits for the Facility.

Explanatory Note

New proposed clause 4.10A.4 sets out when a Facility will be classified as a Network Augmentation Funding Facility.

- 4.10A.4. A Facility will be classified as a Network Augmentation Funding Facility, in respect of the Reserve Capacity Cycle to which the application for Certified Reserve Capacity for the Facility submitted under clause 4.9.9 relates, where (Network Augmentation Funding Facility):
 - (a) the Market Participant has nominated that the Facility be classified as a

 Network Augmentation Funding Facility in its application for certification of

 Reserve Capacity in respect of the Facility under clause 4.9.1;
 - (b) AEMO has notified the relevant Market Participant under clause 4.10A.8(b)
 that it has classified the Facility as a Network Augmentation Funding
 Facility; and
 - (c) AEMO has assigned Certified Reserve Capacity to the Facility under clause 4.9.9.

New proposed clause 4.10A.5 sets out the information a Market Participant must provide to AEMO in support of nomination that its Facility be classified as a Network Augmentation Facility.

The information must be provided to AEMO by 24 June of Year 1 of the Reserve Capacity Cycle, being the latest date specified in clause 4.1.11 that AEMO will accept applications for Certified Reserve Capacity under clause 4.9.1.

- 4.10A.5. Where a Market Participant has nominated that its Facility be classified as a

 Network Augmentation Funding Facility under clause 4.10.1(m), without limiting
 any other information the Market Participant may be required to provide to AEMO
 under clause 4.10.1, the Market Participant must provide the following information
 to AEMO by the date and time specified in clause 4.1.11:
 - (a) evidence that the Market Participant has committed to funding the Network Augmentation Works associated with the relevant Facility;
 - (b) evidence confirming that the Network Augmentation Works are expected to be in-service by 1 October of Year 3 of the Reserve Capacity Cycle to which the application for Certified Reserve Capacity relates; and
 - (c) any other information specified in the WEM Procedure referred to in clause 4.10A.10.

Explanatory Note

New proposed clauses 4.10A.6, 4.10A.7, 4.10A.8 and 4.10A.9 set out the process for AEMO to validate the information provided by a Market Participant under clause 4.10A.4 by verifying it with the relevant Network Operator and notifying the Market Participant whether or not the Facility is classified as a Network Augmentation Funding Facility.

4.10A.6. Within 5 Business Days of receiving the information provided by a Market

Participant in accordance with clause 4.10A.5, AEMO must validate the information by requesting the relevant Network Operator to verify the information.

- 4.10A.7. Within ten Business Days of receiving a request from AEMO under clause 4.10A.6, the Network Operator must notify AEMO:
 - (a) that it verifies the information specified in the request; or
 - (b) that it does not agree with the information specified in the request and the reasons for its decision.
- 4.10A.8. Where the Network Operator verifies the information specified in a request in accordance with clause 4.10A.7(a), AEMO must:
 - (a) classify the Facility to which the information relates as a Network Augmentation Funding Facility; and
 - (b) notify the Market Participant that the Facility to which the information relates is classified as a Network Augmentation Funding Facility at the same time AEMO notifies the Market Participant of the Certified Reserve Capacity for the Facility under clause 4.1.12.
- 4.10A.9. Where the Network Operator does not agree with the information specified in a request in accordance with clause 4.10A.7(b), AEMO must, within one Business Day of receiving the notification from the Network Operator:
 - (a) notify the Market Participant that the Facility to which the information relates will not be classified as a Network Augmentation Funding Facility; and
 - (b) provide the Market Participant with the reasons provided by the Network Operator.

New proposed clause 4.10A.10 requires AEMO to document in a WEM Procedure any further information to be provided by a Market Participant for the purposes of nominating that its Facility be classified as a Network Augmentation Funding Facility.

4.10A.10. AEMO must document in a WEM Procedure the information required to be provided by a Market Participant under clause 4.10A.5 in support of its nomination that a facility be classified as a Network Augmentation Funding Facility.

Explanatory Note

Clauses 4.11.1(bA) and (g) are proposed to be amended as a consequence of the deletion of the Constrained Access Entitlement regime in Appendix 11 and to re-format the remaining content of each clause.

The policy position with respect to any amendments relating to Facilities subject to Network Control Service Contracts is still under consideration. In the meantime, the reformatting of the remaining content in clause 4.11.1(g) is a placeholder only.

Clause 4.11.1(j) is proposed to be amended to make it clear that the Certified Reserve Capacity for a DSP must only be in respect of Associated Loads at the same TNI.

4.11. Setting Certified Reserve Capacity

- 4.11.1. Subject to <u>clause clauses 4.11.7 and</u> 4.11.12, AEMO must apply the following principles in assigning a quantity of Certified Reserve Capacity to a Facility for the Reserve Capacity Cycle for which an application for Certified Reserve Capacity has been submitted in accordance with <u>section-clause</u> 4.10:
 - (a) subject to clause 4.11.2, the Certified Reserve Capacity for a Scheduled GeneratorFacility comprising only generation systems for a Reserve Capacity Cycle must not exceed AEMO's reasonable expectation of the amount of capacity likely to be available, after netting off capacity required to serve Intermittent Loads, embedded loads and Parasitic Loads, for Peak Trading Intervals on Business Days-in-the-period from:
 - i. the start of December for Reserve Capacity Cycles up to and including 2009; or
 - ii. the Trading Day starting on 1 October for Reserve Capacity Cycles from 2010 onwards,
 - in Year 3 of the Reserve Capacity Cycle to the end of July in Year 4 of the Reserve Capacity Cycle, assuming an ambient temperature of 41°C;
 - (b) where the Facility is a generation system (other than an Intermittent Generator) for a Scheduled Facility comprising only generation systems, the Certified Reserve Capacity must not exceed the sum of the capacities specified in clauses 4.10.1(e)(ii) and 4.10.1(e)(iii);
 - (bA) where the Facility is an energy producing generation system, the Certified Reserve Capacity must not exceed—the Declared Sent Out Capacity for the Facility notified to AEMO under clause 4.10.1(bA)(iii);
 - i. where that Facility is a Constrained Access Facility, the Constrained Access Entitlement as at the date and time specified in clause 4.1.12(b); or
 - ii. otherwise, the level of unconstrained network access as referred to in clause 4.10.1(bA)(iii);
 - (bB) where two or more generation Facilities share a Declared Sent Out Capacity, the total quantity of Certified Reserve Capacity assigned to those Facilities must not exceed the Declared Sent Out Capacity;

Explanatory Note

New proposed clauses 4.11.1(bC), (bD) and (bE) clarify the basis on which the Certified Reserve Capacity will be deleted for Facilities comprising only of, or containing, an Electric Storage Resource

(bC) for a Scheduled Facility containing an Electric Storage Resource or Semi-Scheduled Facility containing an Electric Storage Resource, the total quantity of Certified Reserve Capacity determined for the Electric Storage Resource must be determined by AEMO in accordance with clause 4.11.2;

- (bD) for a Non-Scheduled Facility containing only an Electric Storage Resource, including Small Aggregation of aggregated Electric Storage Resources, the total quantity of Certified Reserve Capacity must be:
 - i. determined in accordance with the Relevant Level Methodology; or
 - ii. if the Electric Storage Resource has not been in operation for the full period of performance assessment identified in step 1(a) of the Relevant Level Methodology, determined in accordance with clause 4.11.2;
- (bE) for a Non-Scheduled Facility, excluding Non-Scheduled Facilities under clause 4.11.1(bD), the total quantity of Certified Reserve Capacity assigned to the Facility must be determined in accordance with the Relevant Level Methodology;
- (c) AEMO must not assign Certified Reserve Capacity to a Facility for a Reserve Capacity Cycle if:
 - i. [Blank] for Reserve Capacity Cycles up to and including 2009 that Facility is not operational or is not scheduled to commence operation for the first time so as to meet its Reserve Capacity Obligations by 30 November of Year 3 of that Reserve Capacity Cycle;
 - ii. for Reserve Capacity Cycles from 2010 onwards that the Facility is not operational or is not scheduled to commence operation for the first time so as to meet its Reserve Capacity Obligations by 1 October of Year 3 of that Reserve Capacity Cycle;
 - thatthe Facility will cease operation permanently, and hence cease to meet Reserve Capacity Obligations, from a time earlier than 1
 August of Year 4 of that Reserve Capacity Cycle;
 - iv. thatthe Facility already has Capacity Credits assigned to it under clause 4.28C for the Reserve Capacity Cycle;
 - v. [Blank]that Facility is an Interruptible Load and, based on applications accepted under clauses 2.29.5D and 2.29.5K (as applicable), the Facility will be associated with a Demand Side Programme for any period when Reserve Capacity Obligations would apply for the Facility for the Reserve Capacity Cycle; or
 - vi. thatthe Facility is a Demand Side Programme and it has submitted under clause 4.10.1(f)(v) a minimum notice period for dispatch under clause 7.6.1C(e) of more than two hours.
- (d) [Blank]
- (e) [Blank]
- (f) AEMO must not assign Certified Reserve Capacity to a Facility that is not expected to be a Registered Facility by the time its Reserve Capacity Obligations for the Reserve Capacity Cycle would take effect;

- (g) [Blank]in respect of a Facility that will be subject to a Network Control Service Contract, AEMO must not assign Certified Reserve Capacity in excess of
 - i. where that Facility is a Constrained Access Facility, the Constrained Access Entitlement as at the date and time specified in clause 4.1.12(b); or
 - ii. otherwise, the capacity that AEMO believes that Facility can usefully contribute given its location and any network constraints that are likely to occur;
- (h) subject to clauses 4.11.1B and 4.11.1C, AEMO may decide not to assign any Certified Reserve Capacity to a Facility, or to assign a lesser quantity of Certified Reserve Capacity to a Facility than it would otherwise assign in accordance with this clause 4.11.1, if—
 - the Facility has been in Commercial Operation for at least 36 months and has had a Forced Outage rate or a combined Planned Outage rate and Forced Outage rate greater than the applicable percentage specified in the table in clause 4.11.1D, over the preceding 36 months; or
 - ii. the Facility has been in Commercial Operation for less than 36 months, or is yet to commence Commercial Operation, and AEMO has cause to believe that over the first 36 months of Commercial Operation the Facility is likely to have a Forced Outage rate or a combined Planned Outage rate and Forced Outage rate greater than the applicable percentage specified in the table in clause 4.11.1D,

where the Planned Outage rate and the Forced Outage rate for a Facility for a period are calculated in accordance with the WEM Procedure specified in clause 3.21.12;

- (i) the Certified Reserve Capacity assigned to a Facility is to be expressed to a precision of 0.001 MW;
- (j) the Certified Reserve Capacity for a Demand Side Programme for a Reserve Capacity Cycle <u>must only consist of Associated Loads at the</u> <u>same Transmission Node, and must not exceed either of the following limits—limits:</u>
 - 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.
- 4.11.1A. AEMO must publish the reasons for a decision made under clause 4.11.1(h) on the WEM Website to the extent those reasons do not contain any confidential information.
- 4.11.1B. In making a decision under clause 4.11.1(h) or 4.11.1(j), and without limiting the ways in which AEMO may inform itself in either case, AEMO may—
 - (a) seek such additional information from the Market Participant that AEMO considers is relevant to the exercise of its discretion;
 - (b) use information provided in reports related to the Facility submitted by
 - i. the Market Participant specified under clause 4.27.3; and
 - ii. any other person under clause 4.27.6; and
 - (c) consult with any person AEMO considers suitably qualified to provide an opinion or information on issues relevant to the exercise of AEMO's discretion.
- 4.11.1C. In making a decision under clause 4.11.1(h), AEMO—
 - (a) must be satisfied that its decision under clause 4.11.1(h) would not, on balance, be contrary to the Wholesale Market Objectives;
 - (b) may—
 - i. consider the extent to which the Reserve Capacity that can be provided by the Facility is necessary to meet the Reserve Capacity Target;
 - ii. consider whether the Reserve Capacity provided by the Facility is of material importance to the SWIS, having regard to—
 - 1. the size of the Facility;
 - 2. the operational characteristics of the Facility;
 - the extent to which the Facility contributes to the Power System Security or Power System Reliability through fuel diversity or location; and
 - 4. the demonstrated reliability of the Facility;

- iii. assess the effectiveness of strategies undertaken by the applicant in the previous three years to reduce outages, and consider the likelihood that strategies proposed by the applicant to maximise the availability of the Facility in the relevant Capacity Cycle will be effective;
- iv. consider whether a decision to not assign Certified Reserve
 Capacity to the Facility is likely to result in a material decrease in competition in at least one market;
- v. consider any positive or negative impacts on the long term price of electricity supplied to consumers that might arise if Certified Reserve Capacity was not assigned to the Facility; and
- vi. consider any other matter AEMO determines to be relevant.
- 4.11.1D. The relevant outage criteria to apply under clause 4.11.1(h) in a particular Capacity Year is set out in the following table—

OUTAGE RATE LIMIT TABLE

For AEMO decisions related to the Capacity Cycle	Forced Outage rate greater than	Combined Planned Outage rate and Forced Outage rate greater than
Prior to 2015	15%	30%
2015	14%	28%
2016	13%	26%
2017	12%	24%
2018	11%	22%
2019 onwards	10%	20%

Explanatory Note

Outage values are to be are to be aggregated to Trading Intervals for the purposes of calculations involving outage quantities.

- 4.11.1DA.The quantity of any Outage in respect of a Dispatch Interval for a Facility must, for the purposes of any calculations involving an Outage quantity, be aggregated to the Trading Interval in which the Dispatch Interval falls.
- 4.11.1E. The Economic Regulation Authority, in consultation with AEMO, must undertake a review, to be completed by 31 December 2020, of the operation of clause 4.11.1(h) in which it must consider the appropriate thresholds under

clause 4.11.1D for Capacity Years from and including the 2022 Capacity Year. The review must include, at a minimum, an assessment of—

- (a) the availability performance of the generation sector in the Wholesale Electricity Market compared with analogous generating plants in other markets;
- (b) the number of Facilities in the SWIS to which the criteria in clause 4.11.1(h) have applied in each of the previous five Capacity Years; and
- (c) the impact on the Wholesale Electricity Market of decisions made by AEMO under clause 4.11.1(h) in the previous five Capacity Years.
- 4.11.1F. If the Economic Regulation Authority recommends a rule change resulting from the review in clause 4.11.1E, the Economic Regulation Authority must submit a Rule Change Proposal to implement the change.
- 4.11.2. Where an applicant submits an application for Certified Reserve Capacity, in accordance with clause 4.10, and nominates under clause 4.10.1(i) to have AEMO use the methodology described in clause 4.11.2(b) to apply to a Scheduled Generator Facility or a Non-Scheduled Generator Facility, AEMO:
 - (a) [Blank]may reject the nomination if AEMO reasonably believes that the capacity of the Facility has permanently declined, or is anticipated to permanently decline prior to or during the Reserve Capacity Cycle to which the Certified Reserve Capacity relates;
 - (aA) [Blank]if it rejects a nomination under clause 4.11.2(a), must process the application as if the application had nominated to use the methodology described in clause 4.11.1(a) rather than the methodology described in clause 4.11.2(b); and
 - (b) subject to clause 4.11.12, if it has not rejected the nomination under clause 4.11.2(a), must assign a quantity of Certified Reserve Capacity to the relevant Facility for the Reserve Capacity Cycle equal to the Relevant Level as determined in accordance with the Relevant Level Methodology, but subject to clauses 4.11.1(b), 4.11.1(bA), 4.11.1(bB), 4.11.1(c), 4.11.1(f), 4.11.1(g), 4.11.1(h) and 4.11.1(i).
- 4.11.2A. Where an applicant nominates under clause 4.10.3A(c) to have AEMO use an alternative value to that specified in clause 4.10.3A(b) AEMO:
 - (a) may reject the proposed alternative value if it does not consider the reasons provided in accordance with clause 4.10.3A(d) provide sufficient evidence that an alternative value is required; and
 - (b) must use the alternative value in the calculation of the Required Level if it does not reject the proposed alternative value under clause 4.11.2A(a).

Explanatory Note

Clause 4.11.3 will specify additional information to be provided to AEMO for Facilities

comprising only of, or containing, an Electric Storage Resource.

- 4.11.3. Where an application for Certified Reserve Capacity is supported by information required to be provided under:
 - (a) clause 4.10.1(fA);
 - (b) clause 4.10.1(fB);
 - (c) clause 4.10.1(fC); or
 - (d) 4.10.1(fD), but only where clause 4.11.1(bD)(ii) applies,

AEMO must determine the maximum output, in MW, assuming an ambient temperature of 41°C, using the Linear Derating Method that each Electric Storage Resource can sustain over the Electric Storage Resource Obligation Duration, based on the information provided in the application for Certified Reserve Capacity and the observed performance of the Electric Storage Resource in accordance with clause 4.25.1.[Blank]

Explanatory Note

Clause 4.11.3A will require AEMO to determine, publish, and document the methodology and processes it will use to determine Electric Storage Resource Obligation Intervals.

A Market Participant for an Electric Storage Resource or a Facility containing an Electric Storage Resource will have Reserve Capacity Obligations in respect of the Electric Storage Resource in each Electric Storage Resource Obligation Interval.

A new proposed transitional provision requires AEMO to document the WEM Procedure prior to the date the window for applications for certification of Reserve Capacity, for the first Reserve Capacity Cycle to which these Amending Rules apply, opens under clause 4.1.7.

4.11.3A. AEMO must:

- (a) determine and, by the date and time specified in clause 4.1.8, publish on the WEM Website (which may be published in the Statement of Opportunities) the Trading Intervals in each Trading Day that are Electric Storage Resource Obligation Intervals;
- (b) keep up to date the Trading Intervals in each Trading Day that are Electric Storage Resource Obligation Intervals;
- (c) only amend the Electric Storage Resource Obligations Intervals as permitted under these WEM Rules; and
- (d) document the following in a WEM Procedure:
 - the processes to be followed by AEMO for determining the Trading
 Intervals that will be classified as Electric Storage Resource
 Obligation Intervals in a Trading Day;
 - ii. the processes to be followed by AEMO for publishing and maintaining up to date the Electric Storage Resource Obligation Intervals on the WEM Website; and

iii. the circumstances specified in these WEM Rules, if any, that allow AEMO to amend the Electric Storage Resource Obligation Intervals.[Blank]

Explanatory Note

Clause 4.11.3B is proposed to be amended to specify the Required Level for Facilities containing an Electric Storage Resource.

- 4.11.3B. The Required Level (which for an upgraded Facility is calculated for the Facility as a whole):
 - (a) for Facilities assigned Certified Reserve Capacity under clause 4.11.1(a), is calculated by AEMO using the Capacity Credits assigned to the Facility and temperature dependence information submitted to AEMO under clause 4.10.1(e)(i) or provided in Standing Data (where available) and converted to a sent out basis to 41°C;
 - (b) for Facilities assigned Certified Reserve Capacity under clause 4.11.2(b), is either:
 - the value, expressed in MW as a sent out value, that equals the five percent probability of exceedance of expected generation output for the Facility, submitted to AEMO in the report described in clause 4.10.3A(b);or
 - ii. the proposed alternative value, expressed in MW as a sent out value, provided in the report described in clause 4.10.3A(c), where AEMO has accepted the proposed alternative value under clause 4.11.2A; and
 - (c) for Demand Side Programmes, is calculated by AEMO using the Facility's Relevant Demand minus the Capacity Credits assigned to the Facility-;
 - (d) for a Scheduled Facility containing an Electric Storage Resource or Semi-Scheduled Facility containing an Electric Storage Resource for which Certified Reserve Capacity has been assigned under clause 4.11.1(bC), is the Capacity Credits assigned to the Scheduled Facility or Semi-Scheduled Facility and converted to a sent out basis to 41°C;
 - (e) for a Non-Scheduled Facility only containing an Electric Storage Resource for which Certified Reserve Capacity has been assigned under clause 4.11.1(bD), is the Capacity Credits assigned to the Non-Scheduled Facility; and
 - (f) for a Non-Scheduled Facility containing an Electric Storage Resource for which Certified Reserve Capacity has been assigned under clause 4.11.1(bE), is the Capacity Credits assigned to the Non-Scheduled Facility.
- 4.11.3C. For each three year period, beginning with the period commencing on 1 January 2015, the Economic Regulation Authority must, by 1 April of the first year of that

period, conduct a review of the Relevant Level Methodology. In conducting the review, the Economic Regulation Authority must:

- (a) examine the effectiveness of the Relevant Level Methodology in meeting the Wholesale Market Objectives; and
- (b) determine the values of the parameters K and U in step 17 of the Relevant Level Methodology to be applied for each of the three Reserve Capacity Cycles commencing in the period,

and the Economic Regulation Authority may examine any other matters that the Economic Regulation Authority considers to be relevant.

- 4.11.3D. In conducting a review under clause 4.11.3C, the Economic Regulation Authority must publish a draft report and invite submissions from Rule Participants and any other stakeholders the Economic Regulation Authority considers should be consulted.
- 4.11.3E. At the conclusion of a review under clause 4.11.3C, the Economic Regulation Authority must publish a final report containing:
 - (a) details of the Economic Regulation Authority's review of the Relevant Level Methodology;
 - (b) a summary of the submissions received during the consultation period;
 - (c) the Economic Regulation Authority's response to any issues raised in those submissions:
 - (d) the values of the parameters K and U determined under clause 4.11.3C; and
 - (e) any recommended amendments to the Relevant Level Methodology which the Economic Regulation Authority intends to progress as a Rule Change Proposal.
- 4.11.4. Subject to clause 4.11.12, when assigning Certified Reserve Capacity to an Interruptible Load or a Demand Side Programme, AEMO must assign an Availability Class to apply to that Certified Reserve Capacity as follows:
 - (a) Availability Class 1 where 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.
- 4.11.5. In assigning Certified Reserve Capacity to a Facility, AEMO may:
 - (a) require Network Operators to confirm that the data and information related to clause 4.10.1(bA)-or clause 4.10A provided to AEMO by or on behalf of an applicant for Certified Reserve Capacity is complete, accurate and up to date; and

- (b) request that a Network Operator provide AEMO within a reasonable timeframe with any other information held by the Network Operator that the Network Operator reasonably considers is relevant to the application,
- and Network Operators must use their best endeavours to cooperate with such requests and provide the information requested within the timeframe specified by AEMO in the request.
- 4.11.6. AEMO must accredit not less than two independent experts at any time to prepare reports on the estimated Reserve Capacity of Intermittent Generators that are yet to commence operation, at the expense of the applicant. AEMO:
 - (a) must publish the contact details of these accredited independent experts on the WEM Website;
 - (b) must ensure that any expert it accredits is familiar with the meaning of the value to be estimated; and
 - (c) can remove accreditation of an expert at any time, but must allow the expert to complete any work in progress as an accredited expert at the time accreditation is removed.

Clauses 4.11.7, 4.11.8 and 4.11.9 are proposed to be deleted as the provisions are now redundant.

- 4.11.7. [Blank] Subject to clause 4.11.9, for the first Reserve Capacity Cycle, the Certified Reserve Capacity assigned to all Western Power generation systems is 3,224 MW. This amount is not to be allocated to individual generation systems, but is instead to be associated with Western Power's portfolio of Scheduled Generators and Non-Scheduled Generators.
- 4.11.8. [Blank] Western Power must notify AEMO of the quantity of Certified Reserve Capacity it considers it has available for the period from the Trading Day commencing on 1 November 2007 and until the Trading Day ending on 1 August 2008 ("relevant period") by the date and time specified in clause 4.1.11, including supporting evidence, where that quantity:
 - (a) must only include capacity provided by Facilities that are committed to be available during the relevant period; and
 - (b) must include any capacity that Western Power has procured under contracts with third parties that give Western Power the right to dispatch the capacity during the relevant period.
- 4.11.9. [Blank] AEMO must review the information provided by Western Power in accordance with clause 4.11.8 and if AEMO, taking into account the information provided by Western Power under clause 4.11.8, considers that the capacity available to Western Power during the relevant period will be different to the

- Certified Reserve Capacity assigned to Western Power's generation systems under clause 4.11.7, then AEMO may review that value.
- 4.11.10. Upon the receipt of advice provided in accordance with clause 4.10.4 for a Facility that has already been assigned Capacity Credits for the relevant Capacity Year, AEMO must review the information provided and decide whether it is necessary for AEMO to reassess the assignment of Certified Reserve Capacity to the Facility.
- 4.11.10A. Where AEMO decides under clause 4.11.10 that it is necessary for AEMO to reassess the assignment of Certified Reserve Capacity to a Facility because the level assigned may have been too high, AEMO must—
 - (a) if information provided to AEMO under clause 4.10.4 would have resulted in AEMO assigning a lower, non-zero level of Certified Reserve Capacity to the Facility—
 - reduce the Capacity Credits assigned to that Facility accordingly;
 and
 - ii. advise the Market Participant within 90 days of receiving the submission under clause 4.10.4; or
 - (b) otherwise, do nothing.
- 4.11.11. Where AEMO reassesses the amount of Certified Reserve Capacity assigned to a Facility under clauses 4.11.10 and 4.11.10A based on information provided to AEMO under clause 4.10.4 the Market Participant will pay a Reassessment Fee to cover the cost of processing the reassessment.

Clause 4.11.12 is proposed to be amended to remove the reference to the 'Balancing Facility Requirements', and replace it with a reference to the Market Participant being required to provide evidence of how its Facility will be able to receive, confirm and respond to Dispatch Instructions in accordance with the WEM Procedures: Communications and Control Systems, and Dispatch.

The amendments to clause 4.11.12 are contained in the Tranche 2 Amending Rules.

- 4.11.12. AEMO must not assign Certified Reserve Capacity to a Balancing Facility with a rated capacity equal to or greater than 10MW unless AEMO is satisfied the Facility is likely to be able to meet the Balancing Facility Requirements.
- 4.11.12. AEMO must not assign Certified Reserve Capacity to a Facility with a rated capacity equal to or greater than 10 MW unless AEMO is satisfied the Facility is likely to be able to receive, confirm, and implement Dispatch Instructions from AEMO in accordance with the WEM Procedures referred to in clauses 2.35.4 and 7.6.18.

Explanatory Note

Clause 4.12.1(a)(i) is to be amended as the function of Interruptible Loads is changing so that it will not be meaningful for Market Participants to hold Capacity Credits in respect of an Interruptible Load (they can still hold Capacity Credits for that function via a Demand Side Programme).

Clause 4.12.1(a)(iv) is to be deleted as the 'Remaining Available Capacity' referred to in new clause 4.12.1(a)(vi) includes the effects of any Outages affecting, or likely to affect, the Facility in the Trading Interval.

Projected Essential System Services quantities (currently Ancillary Service quantities) will no longer be deducted from Reserve Capacity Obligation Quantities (**RCOQ**). All of a Market Participant's non-Demand Side Programme RCOQ must be offered into STEM, regardless of whether the Registered Facility may be dispatched for Essential System Service. Accordingly, the paragraph after clause 4.12.1(a)(iv) is proposed to be amended accordingly (in new subclauses (v) and (vi)).

Clause 4.12.1(c) is amended to refer to 'Dispatch Interval' instead of 'Trading Interval'.

The amendments to clauses 4.12.1(a)(ii) to (vi) and 4.12.1(c) are contained in the Tranche 2 Amending Rules (except that we have reflected the Administrative Amendments in the base clause).

4.12. Setting Reserve Capacity Obligations

- 4.12.1. The Reserve Capacity Obligations for each Market Participant holding Capacity Credits are as follows:
 - (a) a Market Participant must ensure that for each Trading Interval:
 - the 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 reverse any adjustments made to account for losses to the reference node a sent out quantity; plus
 - the MW quantity calculated by doubling the total MWh quantity covered by STEM Offers which were not scheduled and the STEM Bids which were scheduled in the relevant STEM Auction determined by AEMO for that Market Participant under section 6.9 for that Trading Interval, corrected for loss factor adjustments so as to reverse any adjustments made to account for losses to the reference node 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, [Blank]

is not less than greater than or equal to the sum over all Registered Facilities registered to that Market Participant of the lesser of:

- v. The Reserve Capacity Obligation Quantity for that Trading Interval as at the Bilateral Submission Cutoff for the Trading Day including that Trading Interval; and
- vi. the average across all Dispatch Intervals in that Trading Interval of
 the lowest Remaining Available Capacity for energy under any
 Forced Outage or Outage Plan which has not been rejected or
 subject to an Outage Recall Direction, as at the Bilateral
 Submission Cutoff for the Trading Day including that Trading
 Interval.
- v. the total Reserve Capacity Obligation Quantity for that Trading Interval for all Facilities registered to that Market Participant,
- vi. 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 <u>Registered</u> Facility applicable to a <u>Trading Dispatch</u> Interval, up to the Reserve Capacity Obligation Quantity for the <u>Registered</u> Facility for that <u>Trading Dispatch</u> Interval, available for dispatch by AEMO in accordance with Chapter 7.

New clause 4.12.1A clarifies that the RCOQ for each Dispatch Interval is equal to the RCOQ for the Trading Interval in which those Dispatch Intervals fall. The Reserve Capacity Mechanism workstream will decide whether to change the RCOQ from per Trading Interval to per Dispatch Interval.

The amendments to clause 4.12.1A are contained in the Tranche 2 Amending Rules.

- 4.12.1A. Without limiting clause 4.12.1, the Reserve Capacity Obligation Quantity for a
 Registered Facility in a Dispatch Interval is equal to the Reserve Capacity
 Obligation Quantity for the Registered Facility for the Trading Interval in which the
 Dispatch Interval falls.
- 4.12.2. A Market Participant holding Capacity Credits must also comply with the following obligations:
 - (a) the Market Participant must comply with the Outage planning obligations specified in sections 3.18, 3.19, 3.20 and 3.21;
 - (b) the Market Participant must submit to tests of availability of capacity and inspections conducted in accordance with section 4.25; and
 - (c) the Market Participant must comply with Reserve Capacity performance monitoring obligations in accordance with section 4.27.

4.12.3. AEMO must use the <u>amount of Capacity Credits assigned under section 4.20</u> information described in clauses 4.10.1 and 4.25.12 to set the Reserve Capacity Obligation Quantity to apply to a Facility in each Trading Interval. The Reserve Capacity Obligation Quantity to apply to a Facility may differ between Trading Intervals.

Explanatory Note

Clause 4.12.4(d) is proposed to be amended to clarify that the RCOQ is zero for all Non-Scheduled Facilities, including those containing a storage component.

- 4.12.4. Subject to clause 4.12.5, where AEMO establishes the initial Reserve Capacity Obligation Quantity to apply for a Facility for a Trading Interval:
 - (a) the Reserve Capacity Obligation Quantity must not exceed the Certified

 Reserve Capacity amount of Capacity Credits assigned under section 4.20

 held by the Market Participant for the Facility;
 - (aA) for generation systems that are Intermittent Generators Semi-Scheduled Facilities the Reserve Capacity Obligation Quantity is zero;
 - (aB) for Semi-Scheduled Facilities containing Electric Storage Resource the
 Electric Storage Resource Obligation Quantity during the Electric Storage
 Resource Obligation Duration Intervals, otherwise zero;
 - (b) for generation systems other than Intermittent Generatorsa Scheduled Facility, except where otherwise precluded by this clause 4.12.4, the Reserve Capacity Obligation Quantity:
 - i. must not be less than the amount specified in clause 4.10.1(e)(ii) of Capacity Credits assigned under section 4.20 except on Trading Days when the maximum daily temperature at the site of the generator exceeds 41°C, in which case the Reserve Capacity Obligation Quantity must not be less than the amount specified in clause 4.10.1(e)(ii) adjusted to an ambient temperature of 45°C;
 - ii. may exceed the amount in clause 4.12.4(b)(i) by an amount up to the amount specified in clause 4.10.1(e)(iii) of Capacity Credits assigned under section 4.20, adjusted to an ambient temperature of 45°C on Trading Days when the maximum daily temperature at the site of the generator exceeds 41°C, for not more than the maximum duration specified in accordance with clause 4.10.1(e)(iii); and
 - iii. must account for staffing and other restrictions on the ability of the Facility to provide energy upon request; and
 - (bA) for Scheduled Facilities containing Electric Storage Resource the total

 Capacity Credits adjusted to an ambient temperature of 41°C assigned to
 the Facility during the Electric Storage Obligation Duration Intervals,
 otherwise the total Capacity Credits less the Electric Storage Resource
 Obligation Quantity;

- (c) for Interruptible Loads and Demand Side Programmes, except where otherwise precluded by this clause 4.12.4, the Reserve Capacity Obligation Quantity:
 - i. will equal zero once the capacity has been dispatched under clause 7.6.1C(d) or 7.6.1C(e) for the number of hours per year that are specified under clause 4.10.1(f)(ii);
 - ii. will equal zero for the remainder of a Trading Day in which the capacity has been dispatched under clause 7.6.1C(d) or 7.6.1C(e) for the number of hours per day that are specified under clause 4.10.1(f)(iii);
 - iii. [Blank]
 - iv. must account for staffing and other restrictions on the ability of the Facility to curtail energy upon request; and
 - v. will equal zero for Trading Intervals which fall outside of the periods specified in clause 4.10.1(f)(vi)-; and
- (d) for Non-Scheduled Facilities, including Non-Scheduled Facilities containing an Electric Storage Resource, the Reserve Capacity Obligation Quantity is zero.

New proposed clause 4.12.4A clarifies the circumstances in which the RCOQ for s storage component of a Facility will be reduced to zero where the Facility is directed to provide an Essential System Service in accordance with clause 7.7.5 (i.e. where AEMO has issued a Low Reserve Condition Declaration relating to an actual or projected shortfall in Essential System Service).

- 4.12.4A. Where AEMO issues a direction under clause 7.7.5 in respect of a Facility containing an Electric Storage Resource:
 - (a) if the direction requires the Facility to operate at a value higher than its

 Reserve Capacity Obligation Quantity or the quantity specified in the RealTime Market Offer for the Facility, as applicable, in the Trading Interval in
 which the Dispatch Interval to which the direction relates falls; then
 - (b) the Reserve Capacity Obligation Quantity for the Electric Storage
 Resource component of the Facility must be reduced to zero for all subsequent Trading Intervals in that Trading Day.
- 4.12.5. [Blank] For the first Reserve Capacity Cycle, the initial Reserve Capacity Obligation Quantity for Western Power's generation systems is to equal the Certified Reserve Capacity for Western Power's generation systems, modified such that if the maximum ambient temperature at the site of Western Power's generation systems exceeds 41°C on a Trading Day, as measured by Western Power's SCADA system, then Western Power's Reserve Capacity Obligation Quantity for that

Trading Day is to be reduced by the difference between that generation system's rated capacity at 41°C and its rated capacity at 45°C.

Explanatory Note

Clause 4.12.6(a) is a consequential amendment resulting from the proposed deletion of section 4.28B.4 (Treatment of New Small Generators).

Clause 4.12.6(b) is a consequential amendment resulting from the proposed removal of Consequential Outages.

- 4.12.6. Subject to clause 4.12.7, any initial Reserve Capacity Obligation Quantity set in accordance with clause 4.12.4, 4.12.5, 4.28B.4, or 4.28C.11 is to be reduced once the Reserve Capacity Obligations take effect, as follows:
 - (a) if the aggregate MW equivalent to the quantity of Capacity Credits (as modified from time to time under the WEM Rules) for a Facility is less than the <u>Capacity Credits assigned under section 4.20 Certified Reserve</u> <u>Capacity for that Facility at any time</u> (for example as a result of the application of clause 4.20.1, clause 4.20.14, clause 4.25.4 or clause 4.25.6), then AEMO must reduce the Reserve Capacity Obligation Quantity to reflect the amount by which the aggregate Capacity Credits fall short of the <u>Capacity Credits assigned under section 4.20 Certified Reserve</u> <u>Capacity</u>;
 - (b) during Trading Intervals where there is a Consequential Outage or a Planned Outage in respect of a Facility in the schedule maintained by AEMO in accordance with clause 7.3.4, AEMO must reduce the Reserve Capacity Obligation Quantity for that Facility and that Trading Interval, after taking into account adjustments in accordance with clause 4.12.6(a), to reflect the amount of capacity unavailable due to that outage; and
 - (c) if the generating system, being a generating system referred to in clause 3.21A.2(a), is subject to a Commissioning Test Plan approved by AEMO during a Trading Interval, then AEMO must reduce the Reserve Capacity Obligation Quantity for that Facility to zero during that Trading Interval.
- 4.12.7. If a Facility assigned Certified Reserve Capacity is not a Registered Facility for any time period during which its Reserve Capacity Obligations apply, then the Market Participant which holds the Capacity Credits provided by that Facility will be deemed to have failed to satisfy its Reserve Capacity Obligations during that time period.²

4.13. Reserve Capacity Security³

4.13.1. Where AEMO assigns Certified Reserve Capacity to a Facility (which, for the purposes of this section 4.13, excludes a Demand Side Programme) that is yet to

² See clause 4.26.1 in relation to the refund payable where a Market Participant holding Capacity Credits associated with a Facility fails to comply with its Reserve Capacity Obligations.

³ See section 4.13A in relation to Reserve Capacity Security for Demand Side Programmes.

enter service (or re-enter service after significant maintenance or having been upgraded), the relevant Market Participant must ensure that AEMO holds the benefit of a Reserve Capacity Security that is:

- (a) in the form specified in clause 4.13.5; and
- (b) an amount determined under clause 4.13.2(a) by the date and time specified in clause 4.1.13.
- 4.13.1A For the purposes of this clause 4.13, where an existing Facility is undergoing significant maintenance or being upgraded the requirement to provide Reserve Capacity Security applies only to the part of the Facility either undergoing significant maintenance or being upgraded.
- 4.13.1B. The obligation under clause 4.13.1 to provide Reserve Capacity Security does not apply where the Market Participant has provided Reserve Capacity Security in relation to the same Facility for a previous Reserve Capacity Cycle, unless:
 - (a) the Facility is an existing Facility undergoing significant maintenance or being upgraded; or
 - (b) AEMO cancelled the Capacity Credits assigned to the Facility for that previous Reserve Capacity Cycle in accordance with clause 4.20.14.
- 4.13.1C For the purposes of this clause 4.13, a Facility includes part of a Facility, any upgrade or significant maintenance to an existing Facility, unless otherwise stated.
- 4.13.2. For the purposes of this section 4.13 the amount of Reserve Capacity Security is:
 - (a) at the time and date referred to in section 4.1.13, 25 percent of the Benchmark Reserve Capacity Price included in the Request for Expressions of Interest issued for the relevant Reserve Capacity Cycle, expressed in \$/MW per year, multiplied by an amount equal to:
 - i. the Certified Reserve Capacity assigned to the Facility; less
 - ii. the total of any Certified Reserve Capacity amount specified in accordance with section 4.14.1(d) or referred to in section 4.14.7(c)(ii); and
 - (b) at the time and date referred to in section 4.1.21, 25 percent of the Benchmark Reserve Capacity Price included in the Request for Expressions of Interest issued for the relevant Reserve Capacity Cycle, expressed in \$/MW per year, multiplied by an amount equal to the total number of Capacity Credits assigned to the Facility under section 4.20.5A.
- 4.13.2A A Market Participant may apply to AEMO for a recalculation of the amount of Reserve Capacity Security required to be held for a Facility using the formula in clause 4.13.2(b) after the time and date referred to in clause 4.1.21.
- 4.13.2B Within 10 Business Days after receipt of a request from a Market Participant under clause 4.13.2A AEMO must recalculate the amount of Reserve Capacity Security

required to be held by a Facility using the formula in clause 4.13.2(b). If the amount recalculated by AEMO under clause 4.13.2(b) is less than that originally calculated under clause 4.13.2(a) then AEMO must:

- (a) notify the Market Participant of the result of the calculation;
- (b) offer the Market Participant the opportunity to replace the Reserve Capacity Security in accordance with clause 4.13.2C, and
- (c) if the Market Participant provides a replacement Reserve Capacity Security in accordance with clause 4.13.2C, return any excess Reserve Capacity Security.
- 4.13.2C Where under clause 4.13.2B AEMO notifies a Market Participant that excess Reserve Capacity Security is currently held, then a Market Participant may replace the existing Reserve Capacity Security with replacement Reserve Capacity Security which must:
 - (a) be in the form specified in clause 4.13.5;
 - (b) be an amount not less than the amount required under clause 4.13.2(b); and
 - (c) become effective before AEMO returns any excess Reserve Capacity Security.
- 4.13.3. Where a Market Participant's existing Reserve Capacity Security is due to expire or cease to have effect for any other reason and after that expiration the Market Participant will continue to have an obligation to ensure AEMO holds the benefit of a Reserve Capacity Security under clause 4.13.1, then that Market Participant must ensure that AEMO holds the benefit of replacement Reserve Capacity Security that is:
 - (a) in the form specified in clause 4.13.5;
 - (b) an amount not less than the amount required under clause 4.13.2; and
 - (c) effective when the existing Reserve Capacity Security expires or otherwise ceases to have effect.
- 4.13.4. Where a Market Participant's Reserve Capacity Security is affected by any of the circumstances specified in the WEM Procedure referred to in clause 4.13.8 that may require replacement Reserve Capacity Security, then the Market Participant must ensure that AEMO holds the benefit of replacement Reserve Capacity Security that is:
 - (a) in the form specified in clause 4.13.5;
 - (b) an amount not less than the level required under clause 4.13.2; and
 - (c) effective before the end of the next Business Day or within any longer period approved in writing by AEMO after the Market Participant first becomes aware of the relevant change in circumstance (whether by reason of the Market Participant's own knowledge or a notification by AEMO).

- 4.13.5. The Reserve Capacity Security for a Market Participant must be:
 - (a) an obligation in writing that:
 - i. is from a Security Provider;
 - ii. is a guarantee or bank undertaking in a form prescribed by AEMO;
 - iii. is duly executed by the Security Provider and delivered unconditionally to AEMO;
 - iv. constitutes valid and binding unsubordinated obligations of the Security Provider to pay to AEMO amounts in accordance with its terms which relate to the relevant Market Participant's obligations under the WEM Rules to pay compensation under clause 4.13.11; and
 - v. permits drawings or claims by AEMO up to a stated amount; or
 - (b) if AEMO in its discretion considers it an acceptable alternative in the circumstances to the obligation under clause 4.13.5(a), a Security Deposit.
- 4.13.6. Where Reserve Capacity Security is provided as a Security Deposit in accordance with clause 4.13.5(b), it will accrue interest daily at the AEMO Deposit Rate, and AEMO must pay the Market Participant the interest accumulated at the end of each calendar month less any liabilities and expenses incurred by AEMO, including bank fees and charges.
- 4.13.7. [Blank]
- 4.13.8. AEMO must develop a WEM Procedure dealing with:
 - (a) determining Reserve Capacity Security;
 - (b) assessing persons against the Acceptable Credit Criteria;
 - (c) Reserve Capacity Security arrangements, including:
 - i. the form of acceptable guarantees and bank undertakings;
 - ii. where and how it will hold Security Deposits and how the costs and fees of holding Security Deposits will be met;
 - iiA. the circumstances that may require Reserve Capacity Security to be replaced for the purposes of clause 4.13.4; and
 - iii. the application of monies drawn from Reserve Capacity Security in respect of amounts payable by the relevant Market Participant to AEMO under clause 4.13.11A; and
 - (d) other matters relating to section 4.13.

Clause 4.13.9(b) is proposed to be amended as a consequence of the Reserve Capacity Auction being deleted.

- 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(a)(i) or clause 4.1.13(b)(i), as applicable, 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).÷
 - (a) clause 4.1.13(a)(i) or clause 4.1.13(b)(i), as applicable, in the case of a Facility with Certified Reserve Capacity specified to be traded bilaterally in accordance with clause 4.14.1(c) or a Facility subject to a Network Control Service Contract; or
 - (b) clause 4.1.13(a)(ii) or clause 4.1.13(b)(ii), as applicable, in the case of a Facility with Certified Reserve Capacity specified to be offered into the Reserve Capacity Auction in accordance with clause 4.14.1(a) and where none of the Facility's Certified Reserve Capacity is specified to be traded bilaterally in accordance with clause 4.14.1(c),

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 Market Rules (including for the purposes of setting the Reserve Capacity Obligation Quantity).

- 4.13.10 If a Market Participant that provides Reserve Capacity Security in respect of a Facility:
 - (a) either:
 - operates the Facility at a level which is at least equivalent to its Required Level, adjusted to 90 percent of the level of Capacity Credits specified in clause 4.20.5A, in at least two Trading Intervals before the end of the relevant Capacity Year; or
 - ii. provides AEMO with a report under clause 4.13.10C, which specifies that the Facility can operate at a level which is at least equivalent to its Required Level, adjusted to 90 percent of the level of Capacity Credits specified in clause 4.20.5A; and
 - (b) is considered by AEMO to be in Commercial Operation, then AEMO will return the Reserve Capacity Security to the Market Participant as soon as practicable after the end of the relevant Capacity Year and in any event by 30 November of the Year 4 of the relevant Reserve Capacity Cycle.
- 4.13.10A A Market Participant may request AEMO to determine that a Facility is in Commercial Operation for the purposes of Chapter 4 of these WEM Rules.
- 4.13.10B. On receipt of a request made under clause 4.13.10A AEMO must determine, within 20 Business Days, whether the Facility is in Commercial Operation. In making each such determination AEMO:
 - (a) must have regard to the following, if applicable:

- i. whether the Facility has completed an approved Commissioning Test under clause 3.21A and subsequently produced energy for at least two Trading Intervals; and
- any formal advice received from the Market Participant that it has completed an approved Commissioning Test under clause 3.21A and is commercially operational; and
- (b) may have regard to any additional information AEMO considers relevant.
- 4.13.10C For a Facility certified under clause 4.11.2(b), a Market Participant may provide AEMO with a report, in accordance with a WEM Procedure, prepared by an independent expert accredited by AEMO, before the end of the relevant Capacity Year. The report must specify the independent expert's best estimate of the level to which the Facility can operate, expressed in MW as a sent out value, at the time the report is prepared.
- 4.13.11. If a Market Participant that provides a Reserve Capacity Security in respect of a Facility fails to operate that Facility in accordance with clauses 4.13.10(a) and (b) before the end of the relevant Capacity Year then the Market Participant must pay to AEMO, as compensation to the market, an amount equal to the Reserve Capacity Security amount for that Facility as soon as practicable after the end of the relevant Capacity Year and in any event by 30 November of Year 4 of the relevant Capacity Cycle.
- 4.13.11A The payment obligation under clause 4.13.11 may be satisfied by AEMO drawing upon the Reserve Capacity Security for the Facility, and applying the amount claimed (after meeting AEMO's costs associated with doing so) so as to:
 - (a) firstly, offset the cost of funding Supplementary Capacity Contracts for any capacity shortage stemming entirely or in part from the Facility not being available; and
 - (b) secondly, once all costs to which clause 4.13.11A(a) refers are covered, make a rebate payment to Market <u>CustomersParticipants</u> in proportion to their Individual Reserve Capacity Requirements during the Trading Month in accordance with Chapter 9.
- 4.13.12. If the Reserve Capacity Security drawn upon under clause 4.13 is a Security Deposit, then the Market Participant forfeits the amount of the Security Deposit.
- 4.13.13 A Market Participant may apply to AEMO for the release of any Reserve Capacity Security held by AEMO, at any time prior to the end of the relevant Capacity Year, if the Reserve Capacity Security relates to a Facility that:
 - (a) has operated at a level equivalent to its Required Level, adjusted to 100 percent of the level of Capacity Credits specified in clause 4.20.5A, in at least two Trading Intervals prior to the end of the relevant Capacity Year; and
 - (b) is considered by AEMO to be in Commercial Operation.

- 4.13.14 Where AEMO receives an application made under clause 4.13.13 or clause 4.28C.12 it must, within 10 Business Days:
 - (a) determine whether the need to maintain the Reserve Capacity Security has ceased;
 - (b) notify the Market Participant of its determination;
 - (c) if the Reserve Capacity Security is a Security Deposit that is no longer required to be held, return the Security Deposit (plus interest earned); and
 - (d) if the Reserve Capacity Security is not a Security Deposit and is no longer required to be held, notify the provider that AEMO relinquishes any rights to draw on the Reserve Capacity Security.

4.13A. DSM Reserve Capacity Security

- 4.13A.1. Where AEMO assigns Certified Reserve Capacity to a Demand Side Programme, the relevant Market Participant must ensure that AEMO holds the benefit of DSM Reserve Capacity Security that is:
 - (a) where:
 - i. clause 4.1.13 applies, for an amount determined under clause 4.13A.2(a) by the date and time referred to in clause 4.1.13; or
 - ii. clause 4.1.21 applies, for an amount determined under clause 4.13A.2(b) by the date and time referred to in clause 4.1.21; and
 - (b) in the form specified in clause 4.13A.6.
- 4.13A.2. For the purposes of this section 4.13A, the amount of DSM Reserve Capacity Security is:
 - (a) 25 percent of the Benchmark Reserve Capacity Price included in the Request for Expressions of Interest issued for the relevant Reserve Capacity Cycle, expressed in \$/MW per year, multiplied by an amount equal to:
 - the Certified Reserve Capacity assigned to the Demand Side Programme; less
 - ii. the total of any Certified Reserve Capacity amount specified in accordance with clause 4.14.1(d) or referred to in clause 4.14.7(c)(ii); or
 - (b) 25 percent of the Benchmark Reserve Capacity Price included in the Request for Expressions of Interest issued for the relevant Reserve Capacity Cycle, expressed in \$/MW per year, multiplied by an amount equal to the total number of Capacity Credits assigned to the Demand Side Programme under clause 4.20.5A.

4.13A.3. Where:

- (a) AEMO holds the benefit of a DSM Reserve Capacity Security in accordance with this section 4.13A in respect of a Demand Side Programme for a Reserve Capacity Cycle; and
- (b) AEMO assigns Certified Reserve Capacity to the same Demand Side Programme for a subsequent Reserve Capacity Cycle,

then the DSM Reserve Capacity Security for the previous Reserve Capacity Cycle will be deemed to satisfy the requirement in clause 4.13A.1 for AEMO to have the benefit of DSM Reserve Capacity Security for the subsequent Reserve Capacity Cycle if:

- (c) the amount of the DSM Reserve Capacity Security complies with clause 4.13A.4; and
- (d) the DSM Reserve Capacity Security remains in force at all relevant times for the purposes of this section 4.13A.
- 4.13A.4. Subject to clause 4.13A.5, where a Market Participant is required to ensure that AEMO holds the benefit of DSM Reserve Capacity Security for more than one Reserve Capacity Cycle, the total amount of the DSM Reserve Capacity Security for all of those Reserve Capacity Cycles in aggregate is the highest amount determined under clause 4.13A.1.
- 4.13A.5. The amount determined under clause 4.13A.4 does not include Reserve Capacity Cycles for which the Demand Side Programme does not have any Reserve Capacity Obligations.
- 4.13A.6. The DSM Reserve Capacity Security for a Demand Side Programme must be:
 - (a) an obligation in writing that:
 - i. is from a Security Provider;
 - ii. is a guarantee or bank undertaking in a form prescribed by AEMO;
 - iii. is duly executed by the Security Provider and delivered unconditionally to AEMO;
 - iv. constitutes valid and binding unsubordinated obligations of the Security Provider to pay to AEMO amounts in accordance with its terms which relate to the relevant Market Participant's obligations under the WEM Rules to pay compensation under this section 4.13A; and
 - v. permits drawings or claims by AEMO up to a stated amount; or
 - (b) if AEMO in its discretion considers it an acceptable alternative in the circumstances to the obligation under clause 4.13A.6(a), a Security Deposit.

- 4.13A.7. If, at any time, and for whatever reason, the amount of the DSM Reserve Capacity Security is less than the amount determined in accordance with clauses 4.13A.1 or 4.13A.4, as applicable, the Market Participant must immediately:
 - (a) in the case of a DSM Reserve Capacity Security in the form specified in clause 4.13A.6(a):
 - i. replace the DSM Reserve Capacity Security for the amount determined in accordance with clauses 4.13A.1 or 4.13A.4, as applicable; or
 - ii. provide a further DSM Reserve Capacity Security for the difference between the amount of the DSM Reserve Capacity Security and the amount determined in accordance with clauses 4.13A.1 or 4.13A.4, as applicable,
 - and, in both cases, the DSM Reserve Capacity Security must comply with clause 4.13A.6(a); or
 - (b) in the case of a Security Deposit, increase the amount of the Security Deposit to the amount determined in accordance with clauses 4.13A.1 or 4.13A.4, as applicable, and do all other things AEMO may require, including signing any deeds or other documents, to ensure AEMO has the benefit of the increase in the amount of the Security Deposit.
- 4.13A.8. In respect of a Reserve Capacity Cycle, after the time and date referred to in clause 4.1.23, a Market Participant may apply to AEMO for a recalculation of the amount of DSM Reserve Capacity Security required to be held for a Demand Side Programme under clauses 4.13A.1 or 4.13A.4, as applicable.
- 4.13A.9. Within ten Business Days after receipt of a request from a Market Participant under clause 4.13A.8, AEMO must recalculate the amount of DSM Reserve Capacity Security required to be held for a Demand Side Programme under clauses 4.13A.1 or 4.13A.4, as applicable. If the amount recalculated by AEMO under clauses 4.13A.1 or 4.13A.4, as applicable, is less than that previously calculated under clauses 4.13A.1 or 4.13A.4, as applicable, then AEMO must:
 - (a) notify the Market Participant of the result of the calculation;
 - (b) offer the Market Participant the opportunity to replace the DSM Reserve Capacity Security in accordance with clause 4.13A.10, and
 - (c) if the Market Participant provides a replacement DSM Reserve Capacity Security in accordance with clause 4.13A.10, return any excess DSM Reserve Capacity Security.
- 4.13A.10. Where under clause 4.13A.9 AEMO notifies a Market Participant that excess DSM Reserve Capacity Security is currently held, then a Market Participant may replace the existing DSM Reserve Capacity Security with replacement DSM Reserve Capacity Security which must:
 - (a) be in the form specified in clause 4.13A.6;

- (b) be an amount not less than the amount required under clauses 4.13A.1 or 4.13A.4, as applicable; and
- (c) become effective before AEMO returns any excess DSM Reserve Capacity Security.
- 4.13A.11. Where a Market Participant's existing DSM Reserve Capacity Security is due to expire or cease to have effect for any reason and after that expiration the Market Participant will continue to have an obligation to ensure AEMO holds the benefit of DSM Reserve Capacity Security under clause 4.13A.1, then the Market Participant must ensure that AEMO holds the benefit of replacement DSM Reserve Capacity Security that is:
 - (a) in the form specified in clause 4.13A.6;
 - (b) an amount not less than the amount required under clauses 4.13A.1 or 4.13A.4, as applicable; and
 - (c) effective when the existing DSM Reserve Capacity Security expires or otherwise ceases to have effect.
- 4.13A.12. Where a Market Participant's DSM Reserve Capacity Security is affected by any of the circumstances specified in the WEM Procedure referred to in clause 4.13A.23 that may require replacement DSM Reserve Capacity Security, then the Market Participant must ensure that AEMO holds the benefit of replacement DSM Reserve Capacity Security that is:
 - (a) in the form specified in clause 4.13A.6;
 - (b) an amount not less than the level required under clauses 4.13A.1 or 4.13A.4, as applicable; and
 - (c) effective before the end of the next Business Day or within any longer period approved in writing by AEMO after the Market Participant first becomes aware of the relevant change in circumstance (whether by reason of the Market Participant's own knowledge or a notification by AEMO).
- 4.13A.13. Where DSM Reserve Capacity Security is provided as a Security Deposit in accordance with clause 4.13A.6(b), it will accrue interest daily at the AEMO Deposit Rate, and AEMO must pay the Market Participant the interest accumulated at the end of each calendar month less any liabilities and expenses incurred by AEMO, including bank fees and charges.

Clause 4.13A.14(b) is proposed to be deleted as a consequence of the Reserve Capacity Auction being deleted.

4.13A.14. If a Market Participant does not comply with clause 4.13A.1 in full by the date and time specified in clause 4.1.13(b)(i) for the Reserve Capacity Cycle to which the certification relates, the Certified Reserve Capacity assigned to that Demand Side

<u>Programme will lapse for the purposes of these WEM Rules (including for the purposes of setting the Reserve Capacity Obligation Quantity).</u>

- (a) clause 4.1.13(b)(i), in the case of a Demand Side Programme with Certified Reserve Capacity specified to be traded bilaterally in accordance with clause 4.14.1(c) or a Demand Side Programme subject to a Network Control Service Contract; or
- (b) clause 4.1.13(b)(ii), in the case of a Demand Side Programme with Certified Reserve Capacity specified to be offered into the Reserve Capacity Auction in accordance with clause 4.14.1(a) and where none of the Demand Side Programme's Certified Reserve Capacity is specified to be traded bilaterally in accordance with clause 4.14.1(c),

for the Reserve Capacity Cycle to which the certification relates, the Certified Reserve Capacity assigned to that Demand Side Programme will lapse for the purposes of these Market Rules (including for the purposes of setting the Reserve Capacity Obligation Quantity).

4.13A.15. If a Market Participant that provides DSM Reserve Capacity Security in respect of a Demand Side Programme fails to reduce the consumption of the Associated Loads for that Demand Side Programme to a level which is at least equivalent to its Required Level, adjusted to 90 percent of the level of Capacity Credits specified in clause 4.20.5A, in at least two Trading Intervals before the end of the relevant Capacity Year, then the Market Participant must pay to AEMO, as compensation to the market, an amount equal to the DSM Reserve Capacity Security amount for that Demand Side Programme for that Capacity Year as soon as practicable after the end of the relevant Capacity Year and in any event by 30 November of Year 4 of the relevant Reserve Capacity Cycle.

Explanatory Note

Amendments made to clause 4.13A.16 for weekly settlement and for registration taxonomy.

- 4.13A.16. The payment obligation under clause 4.13A.15 may be satisfied by AEMO drawing upon the DSM Reserve Capacity Security for the Demand Side Programme, and applying the amount claimed (after meeting AEMO's costs associated with doing so) so as to:
 - (a) firstly, offset the cost of funding Supplementary Capacity Contracts for any capacity shortage stemming entirely or in part from the Demand Side Programme not being available; and
 - (b) secondly, once all costs to which clause 4.13A.16(a) refers are covered, make a rebate payment to Market <u>CustomersParticipants</u> in proportion to their Individual Reserve Capacity Requirements during the <u>relevant</u> Trading <u>Month-Day</u> in accordance with Chapter 9.

- 4.13A.17. If the DSM Reserve Capacity Security drawn upon under clause 4.13A.16 is a Security Deposit, then the Market Participant forfeits the amount of the Security Deposit for the applicable Capacity Year.
- 4.13A.18. A Market Participant may:
 - (a) where AEMO has the benefit of DSM Reserve Capacity Security in accordance with this section 4.13A, request that the DSM Reserve Capacity Security be released; or
 - (b) where the Market Participant is required to provide DSM Reserve Capacity Security in accordance with this section 4.13A, request that the requirement for DSM Reserve Capacity Security is waived.
- 4.13A.19. Where AEMO receives a request under clause 4.13A.18 it must, within ten Business Days:
 - having regard to the matters in clause 4.13A.20, determine whether AEMO will release the DSM Reserve Capacity Security or waive the requirement for DSM Reserve Capacity Security;
 - (b) notify the Market Participant of its determination;
 - (c) if the DSM Reserve Capacity Security is a Security Deposit that is to be released, return the Security Deposit (plus interest earned); and
 - (d) if the DSM Reserve Capacity Security is not a Security Deposit and is to be released, notify the Security Provider that AEMO relinquishes any rights to draw on the DSM Reserve Capacity Security.
- 4.13A.20. In making a determination under clause 4.13A.19, AEMO must have regard to the following matters:
 - (a) the size and type of the Loads associated with the Demand Side Programme;
 - (b) the historical performance of the Demand Side Programme, including the results of any Reserve Capacity Tests or Verification Tests; and
 - (c) any other matters AEMO considers relevant.
- 4.13A.21. If, at any time, AEMO is no longer satisfied that an assessment under clause 4.13A.20 would result in AEMO determining to release or waive the requirement for a Market Participant to provide AEMO with the benefit of DSM Reserve Capacity Security, AEMO must give notice to the Market Participant specifying:
 - (a) that the Market Participant must provide AEMO with the benefit of DSM Reserve Capacity Security;
 - (b) the reasons for its decision;
 - (c) the amount of the DSM Reserve Capacity Security as determined in accordance with clauses 4.13A.1 or 4.13A.4, as applicable; and

- (d) the date by which the Market Participant must provide AEMO with the benefit of DSM Reserve Capacity Security, which must not be before the date which is five Business Days after the date of the notice.
- 4.13A.22. Where a Market Participant receives a notice under clause 4.13A.21, the Market Participant must provide AEMO with the benefit of DSM Reserve Capacity Security for an amount and by the date specified in the notice.
- 4.13A.23. AEMO must document in aWEM Procedure the processes relating to:
 - (a) determining DSM Reserve Capacity Security;
 - (b) assessing persons against the Acceptable Credit Criteria;
 - (c) DSM Reserve Capacity Security arrangements, including:
 - i. the form of acceptable guarantees and bank undertakings;
 - ii. where and how it will hold Security Deposits and how the costs and fees of holding Security Deposits will be met;
 - iii. the circumstances that may require DSM Reserve Capacity Security to be replaced for the purposes of clause 4.13A.12; and
 - iv. the application of monies drawn from DSM Reserve Capacity Security in respect of amounts payable by the relevant Market Participant to AEMO under clause 4.13A.16; and
 - (d) requests under clause 4.13A.18, including:
 - how AEMO will make a determination on whether to accept or decline a request under clause 4.13A.19;
 - ii. the matters AEMO may take into account;
 - iii. the evidence a Market Participant will be required to provide in support of a request; and
 - iv. if AEMO declines a request, that AEMO will be required to provide reasons to the relevant Market Participant; and
 - (e) any other matters relating to this section 4.13A.
- 4.13A.24. If AEMO determines that a Market Participant no longer has any Reserve Capacity Obligations with respect to any Capacity Year for which the Market Participant was assigned Capacity Credits, AEMO must return any DSM Reserve Capacity Security to the Market Participant as soon as practicable after the end of the relevant Capacity Year and in any event by 30 November of Year 4 of the relevant Reserve Capacity Cycle.
- 4.13A.25. For the purposes of these WEM Rules, in determining whether a Demand Side Programme is in Commercial Operation, AEMO may have regard to any information AEMO considers relevant.

New proposed section 4.13B requires the Coordinator to undertake a periodic review to assess the continuing effectiveness of the approach for certification of Reserve Capacity for storage capacity.

- 4.13B. Coordinator Review of Effectiveness of Certification of Reserve

 Capacity for Electric Storage Resources
- 4.13B.1. The Coordinator must review the effectiveness of the approach for certification of Reserve Capacity for Electric Storage Resources in accordance with this section 4.13B.
- 4.13B.2. The Coordinator must complete a review under clause 4.13B.1:
 - (a) for the first review, within five years of the [commencement of this section 4.13B]; and
 - (b) for each subsequent review, at least one every five years from the completion of the preceding review under this section 4.13B.
- 4.13B.3. A review conducted under clause 4.13B.1 must examine:
 - (a) whether the methodology for rating the capacity of Electric Storage

 Resources for the purposes of setting Certified Reserve Capacity remains
 consistent with the Wholesale Market Objectives;
 - (b) whether the Electric Storage Resource Obligation Duration for Electric

 Storage Resources remains consistent with the Wholesale Market

 Objectives;
 - (c) whether the Electric Storage Resource Obligation Intervals for Electric

 Storage Resources remain consistent with the Wholesale Market

 Objectives; and
 - (d) whether the methodology and processes used by AEMO to determine the

 Electric Storage Resource Obligation Intervals, in which the Reserve
 Capacity Obligation Quantity for Electric Storage Resources applies,
 remain consistent with the Wholesale Market Objectives.
- 4.13B.4. In conducting a review under clause 4.13B.1, the Coordinator must publish a draft report and invite submissions, and publish all submissions received, from Rule Participants and any other interested stakeholders.
- 4.13B.5. In conducting a review under clause 4.13B.1, the Coordinator must publish a final report containing:
 - (a) the issues identified by the Coordinator;
 - (b) the assumptions made by the Coordinator in undertaking the review;
 - (c) the results of any technical studies;

- (d) a summary of any submissions on the draft report received by the

 Coordinator from Rule Participants and other interested stakeholders in accordance with clause 4.13B.4;
- (e) the Coordinator's responses to the issues raised in those submissions;
- (f) any recommendations of the Coordinator; and
- (g) any other matters the Coordinator considers relevant to the review.
- 4.13B.6. If the Coordinator recommends changes as a result of the report prepared under this section 4.13B, the Coordinator must either submit a Rule Change Proposal or, where the change relates to the WEM Procedure documented by AEMO under clause 4.11.3A, initiate a Procedure Change Proposal to implement those changes.

The headings before section 4.14 and for section 4.14 are proposed to be amended as a consequence of the Reserve Capacity Auction being deleted.

Commitment of Capacity to Auction or Bilateral Trade

4.14. Market Participant Auction and Bilateral Trade Declaration

Explanatory Note

Clause 4.14.1(a) is proposed to be deleted as a consequence of the Reserve Capacity Auction being deleted.

New proposed clause 4.14.1(e) requires Market Participants to specify in their bilateral trade declaration the minimum number of Capacity Credits to be assigned to a Facility for it to participate in the RCM. Where the Network Access Quantity for a Facility, as determined in accordance with Appendix 3, is below that threshold, a Network Access Quantity will not be determined for the Facility and, consequently, no Capacity Credits will be assigned to the Facility for the relevant Reserve Capacity Cycle.

- 4.14.1. Subject to clause 4.14.3, each Market Participant holding Certified Reserve Capacity for the current Reserve Capacity Cycle must, by the date and time specified in clause 4.1.14 provide the following information to AEMO for each Facility (expressed in MW to a precision of 0.001 MW):
 - (a) [Blank]subject to clause 4.14.1A, the total amount of Reserve Capacity the Market Participant intends to make available in a Reserve Capacity Auction if held for the current Reserve Capacity Cycle;
 - (b) [Blank]
 - (c) the total amount of Reserve Capacity the Market Participant intends will be traded bilaterally;-and
 - the total amount of Reserve Capacity that the Market Participant has decided will not now be made available to the market, and

(e) the Minimum Capacity Credits Quantity for the Facility,

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

Explanatory Note

Clause 4.14.1A is proposed to be deleted as a consequence of the Reserve Capacity Auction being deleted. New replacement clause 4.14.1A requires Market Participants with Facilities containing a storage component to separately nominate the amount of Certified Reserve Capacity assigned to the Facility that it intends to trade bilaterally for the storage component and the rest of the Facility.

- 4.14.1A. A Market Participant for a Facility containing an Electric Storage Resource, for which AEMO has assigned Certified Reserve Capacity to the Electric Storage Resource component of the Facility, must, when making a submission under clause 4.14.1 for the Facility, notify AEMO of the amount of Reserve Capacity the Market Participant intends to trade bilaterally for:
 - (a) the Electric Storage Resource component of the Facility; and
 - (b) the remaining part of the Facility.
- 4.14.1A. A Market Participant holding Certified Reserve Capacity associated with:
 - (a) a Transitional Facility in a Transitional Reserve Capacity Cycle; or
 - (b) a Fixed Price Facility in a Fixed Price Reserve Capacity Cycle for that Fixed Price Facility.

must not nominate any of that Certified Reserve Capacity under clause 4.14.1(a).

4.14.1B. A Market Participant holding Certified Reserve Capacity for the current Reserve Capacity Cycle may, by the date and time specified in clause 4.1.14, nominate to AEMO by notice in writing that the Facility be classified as a Fixed Price Facility.

Explanatory Note

Clause 4.14.1C(e) is a consequential amendment resulting from the proposed deletion of section 4.28B (Treatment of New Small Generators).

- 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 a generating an energy producing system;
 - (c) the Facility is not considered by AEMO to be in Commercial Operation;
 - (d) the Facility is not subject to a Network Control Service Contract (at the date Capacity Credits are first assigned to the Facility); and
 - (e) sections 4.28B or section 4.28C do does not apply to the Facility.

Clause 4.14.2 is proposed to be amended to remove redundant provisions relating to previous Reserve Capacity Cycles.

- 4.14.2. A Capacity Credit (and the Reserve Capacity associated with a Capacity Credit) is "traded bilaterally" for the purposes of these WEM Rules where:
 - (a) for a Reserve Capacity Cycle up to and including the 2018 Reserve Capacity Cycle:
 - i. the Market Participant holding the Capacity Credits has entered into an arrangement with another Market Participant under which the Capacity Credits will be allocated to the other Market Participant for settlement purposes to allow the other Market Participant to meet its Individual Reserve Capacity Requirement in accordance with sections 9.4 and 9.5; or
 - ii. the Market Participant holding the Capacity Credits allocates the Capacity Credits for settlement purposes to meet its own Individual Reserve Capacity Requirement in accordance with sections 9.4 and 9.5; and
 - (b) from the 2019 Reserve Capacity Cycle:
 - the Market Participant holding the Capacity Credits in respect of a Facility has entered into an arrangement with another Market Participant under which any of the Capacity Credits for that Facility will be allocated to the other Market Participant for settlement purposes to allow the other Market Participant to meet its Individual Reserve Capacity Requirement in accordance with sections 9.4 and 9.5; or
 - (b)ii. the Market Participant holding the Capacity Credits in respect of a Facility allocates any of the Capacity Credits for that Facility for settlement purposes to meet its own Individual Reserve Capacity Requirement in accordance with sections 9.4 and 9.5.
- 4.14.3. A Market Participant must not make a submission under clause 4.14.1 with respect to a Facility subject to a Network Control Service Contract.

Explanatory Note

Clauses 4.14.4 and 4.14.5 are proposed to be deleted. The deletion will occur at the start of the new market.

- 4.14.4. [Blank] The value specified by Synergy in accordance with clause 4.14.1(c) must be not less than:
 - (a) the lesser of:
 - i. the total Certified Reserve Capacity held by Synergy; and

- ii. Synergy's peak load, as determined in accordance with clause 4.14.5 multiplied by an amount equal to:
 - 1. the Reserve Capacity Requirement; divided by
 - the expected peak demand corresponding to the Reserve Capacity Requirement, as determined in accordance with clause 4.6.2; less
- (b) the Minimum Frequency Keeping Capacity.
- 4.14.5. [Blank] For the purpose of clause 4.14.4, Synergy's peak load is calculated by doubling the average of Synergy's supply quantities (expressed in MWh) specified in the Bilateral Submissions that applied during the 12 Peak SWIS Trading Intervals published under clause 4.1.23A for the previous Hot Season.
- 4.14.6. If two or more Facilities cannot simultaneously exist (for example, because more than one Market Participant is proposing to build a Facility that will be located at the same site,) then AEMO cannot accept a non-zero value provided in accordance with either or both of clause 4.14.1(c) in respect of more than one of these Facilities and must reject all but one Facility based on the following criteria:
 - (a) Facilities that are operational or are committed will be accepted ahead of other Facilities; then
 - (b) if more than one Facility remains, then Facilities that can demonstrate having secured financing will be accepted ahead of other Facilities; then
 - (c) if more than one Facility remains, then Facilities with the greatest quantity of Certified Reserve Capacity will be accepted ahead of Facilities with lower Certified Reserve Capacity; then
 - (d) if more than one Facility remains, then Facilities identified in Expressions of Interest will be accepted ahead of other Facilities; then
 - (e) if more than one Facility remains, then AEMO will accept one based on the order in which they applied for Certified Reserve Capacity, including applications for Conditional Certified Reserve Capacity.
- 4.14.7. AEMO must review the information provided by Market Participants in accordance with clause 4.14.1 to ensure that the information provided is consistent with the Certified Reserve Capacity of each Facility and the requirements of this clause 4.14, and:
 - if the information is not consistent, then AEMO must endeavour to resolve the discrepancy with the Market Participant within one Business Day of receipt;
 - (b) if the information is consistent, then AEMO must inform the Market Participant within one Business Day of receipt that the information is accepted; and

- (c) if AEMO cannot establish what a Market Participant's intentions are with respect to all or part of its Certified Reserve Capacity within the time allowed for resolving discrepancies by clause 4.14.7(a), then the relevant part of that Market Participant's:
 - i. [Blank]
 - ii. Certified Reserve Capacity will be treated as being unavailable to the market.

and AEMO must notify the Market Participant of this outcome within one Business Day of the deadline for resolving discrepancies specified in clause 4.14.7(a).

Explanatory Note

Clause 4.14.8 is proposed to be amended to make it clear that any Certified Reserve Capacity terminated under that clause for an existing Facility will not be reflected in the Certified Reserve Capacity quantity referred to in new proposed clause 4.1A.2, which specifies how the Initial Network Access Quantity for existing Facilities is to be determined.

- 4.14.8. If Certified Reserve Capacity is not to be made available to the market as a result of the acceptance by AEMO of information submitted by a Market Participant in accordance with clause 4.14.1(d), or because clause 4.14.7(c)(ii) applies, then all obligations associated with that part of the Certified Reserve Capacity held by the relevant Market Participant are to terminate from the time AEMO notifies the Market Participant that it accepts the information provided in accordance with clause 4.14.1 or the application of clause 4.14.7(c)(ii) (as applicable) and that part of the Certified Reserve Capacity ceases to be Certified Reserve Capacity for the purposes of these WEM Rules (including for the purposes of setting the Reserve Capacity Obligation Quantity and, where applicable, determining an Initial Network Access Quantity under clause 4.1A.1).
- 4.14.9. AEMO must notify each Market Participant that specified a non-zero amount under clause 4.14.1(c) by the date and time specified in clause 4.1.15 of the quantity of Certified Reserve Capacity held by the Market Participant in respect of each Facility that it can trade bilaterally, where this quantity must:
 - exclude Certified Reserve Capacity to which clause 4.14.8 relates.; and
 - (b) be determined using the methodology described in Appendix 3.

Explanatory Note

Clause 4.14.10 is proposed to be deleted as a consequence of the Reserve Capacity Auction being deleted.

4.14.10. [Blank]If:

(a) a Reserve Capacity Auction is not cancelled under section 4.15; and

(b) a Market Participant holding Certified Reserve Capacity for the relevant Reserve Capacity Cycle has specified a non-zero amount for a Facility under clause 4.14.1(a),

then that Market Participant must make a quantity of Certified Reserve Capacity available in the Reserve Capacity Auction, where the quantity of Certified Reserve Capacity for each of the Market Participant's Facilities is determined as follows:

- (c) if the Facility is subject to a Network Control Service Contract zero; and
- (d) if the Facility is not subject to a Network Contract Service Contract:
 - i. the quantity of Certified Reserve Capacity that AEMO has assigned to the Facility under section 4.11; less
 - ii. the quantity of Certified Reserve Capacity assigned to the Facility that will not be made available to the market for one of the reasons specified in clause 4.14.8; less
 - the quantity of Certified Reserve Capacity assigned to the Facility that AEMO has notified the Market Participant, under clause 4.14.9, can be traded bilaterally.

Explanatory Note

Clause 4.14.11 is proposed to be amended as a consequence of the Reserve Capacity Auction being deleted and to amend the reference from 'Rule Participants' to 'Market Participants' (for consistency with the other clauses in section 4.14).

4.14.11. AEMO must develop a WEM Procedure documenting the process AEMO and Rule Market Participants must follow for the bilateral trade declaration under this section 4.14 and Reserve Capacity Auction.

Explanatory Note

New proposed (replacement) section 4.15 sets out the new Network Access Quantity (**NAQ**) framework.

The NAQ:

- defines the network capacity, in MW, available to a Facility for the purpose of determining the Capacity Credits that can be assigned to the Facility up to the amount of its Certified Reserve Capacity; and
- establishes a preferential right to receive a Capacity Credit, which can only be reduced in specific circumstances.

The primary purpose of the NAQ is to protect a Facility's quantity of Capacity Credits from an unhedgeable risk of being inefficiently displaced by new entrant facilities connecting in constrained sections of the network, where that additional capacity is not needed for system reliability but is simply displacing an existing performing resource.

The NAQ protects the investment in Facilities that continue to participate in the RCM and meet all their performance obligations. A Facility that, for reasons related to its own poor performance, fails to provide its capacity to the RCM when required by the system surrenders its ability to retain the unreliable portion of its NAQ. A Facility that retires (or is mothballed or removed from service) must relinquish its NAQ.

The NAQ is determined in relation to network capacity and is based on the physical limits of the network. Hence, the NAQ serves as a cap on the amount of Capacity Credits that can be assigned in specific regions of the network. NAQ will be determined for a Facility up to the amount of network capacity that can accommodate the Facility's Certified Reserve Capacity at peak times or other periods of low reserve. This will ensure that the sum of NAQ determined for Facilities in specific network regions (and in aggregate for the network as a whole) does not exceed the transfer capability of the network.

Once NAQ is determined, new Facilities seeking to connect in a specific region of the network can only receive NAQ up to the residual capacity of the network in that region, after accounting for NAQ that has already been determined.

A Facility's NAQ can be reduced or increased due to 'organic' changes that are beyond the control of the Facility i.e. due to changes in demand, network configuration, or weather conditions for intermittent facilities. The policy position is to afford these facilities a priority for additional NAQ should conditions improve (ahead of other capacity). This is intended to be implemented in the new framework by tracking a 'Highest Network Access Quantity' value.

The NAQ has no role in dispatch or settlement of the energy or Essential System Services markets, which will operate under the new Security Constrained Economic Dispatch market model.

4.15. Network Access Quantity

Explanatory Note

New proposed clause 4.15.1 requires AEMO to determine NAQs for relevant Facilities.

A Facility's NAQ is a function of:

- the Facility's Certified Reserve Capacity; and
- the network capacity that is available to accommodate the Facility's Certified Reserve Capacity.

Therefore, once AEMO has verified the performance capability of the Facility (through the process of assigning Certified Reserve Capacity) AEMO will then conduct an assessment (through a network capacity modelling exercise) to determine how much of the Facility's certified output can be accommodated by the network.

The policy position with respect to any amendments relating to Facilities subject to Network Control Service Contracts is still under consideration and will be reflected in Appendix 3 in due course.

4.15.1. AEMO must determine Network Access Quantities and Indicative Network Access Quantities for Facilities in accordance with this section 4.15 and Appendix 3.

Explanatory Note

New proposed clause 4.15.2 provides that the NAQ for a Facility for a Reserve Capacity Cycle is determined in accordance with the processes in Appendix 3.

4.15.2. The Network Access Quantity for a Facility for a Reserve Capacity Cycle is the Final Network Access Quantity, if any, determined in accordance with the processes in Appendix 3 for that Reserve Capacity Cycle.

New proposed clauses 4.15.3, 4.15.4 and 4.15.5 set out how the NAQ is to be determined.

- 4.15.3. The assumptions that must be taken into account by the Network Access Quantity

 Model under 4.15.7, for the relevant Reserve Capacity Cycle are:
 - (a) assume that all major transmission network elements are in service, except those which are normally configured to be out of service under peak demand conditions as advised by the Network Operator;
 - (b) any other relevant information from Network Operators on the assumed status of the network under peak demand conditions; and
 - (c) assume peak demand is equal to the value determined under clause 4.5.10(a)(iv) and used in the calculation of the Reserve Capacity Requirement for the relevant Capacity Year.
- 4.15.4. Subject to clause 4.15.5, AEMO must develop, in accordance with the WEM

 Procedure referred to in clause 4.15.17, a range of generation dispatch scenarios
 that describe how Facilities could be dispatched at the time of the peak demand
 (as described in clause 4.15.3(c)).
- 4.15.5. The generation dispatch scenarios to be developed by AEMO pursuant to clause 4.15.4 must:
 - (a) include, in AEMO's sole discretion, variations in the output of Facilities dispatched to meet peak demand (as described in clause 4.15.3(c));
 - (b) include Facilities with Certified Reserve Capacity specified to be traded
 bilaterally in accordance with clause 4.14.1(c) for the current Reserve
 Capacity Cycle and Network Control Service Facilities;
 - (c) ensure the sum of generator dispatch in each scenario equals the peak demand (as described in clause 4.15.3(c)); and
 - (d) ensure a Facility is not dispatched to a level greater than the amount specified to be traded bilaterally under clause 4.14.1(c) for the Facility.

Explanatory Note

New proposed clauses 4.15.6 and 4.15.7 require AEMO to develop a NAQ Model for the purposes of determining NAQs for Facilities in accordance with this section 4.15 and Appendix 3.

- 4.15.6. AEMO must develop and maintain a Network Access Quantity Model in accordance with clause 4.15.7 and use the Network Access Quantity Model when undertaking the processes in Appendix 3 for each Reserve Capacity Cycle.
- 4.15.7. The Network Access Quantity Model required to be developed and maintained by AEMO under clause 4.15.6 must:
 - (a) apply the principles specified in clause 4.15.9;

- (b) be in accordance with the processes in Appendix 3;
- (c) take into account the matters specified in clause 4.15.8 and the assumptions specified in clause 4.15.3;
- (d) incorporate the generation dispatch scenarios to be developed by AEMO under clause 4.15.4;
- (e) comply with the WEM Procedure referred to in clause 4.15.17; and
- (f) be consistent with the Wholesale Market Objectives.

New proposed clauses 4.15.8 and 4.15.9 sets out the matters and principles AEMO must apply in developing the NAQ Model.

- 4.15.8. The matters that must be taken into account by the Network Access Quantity
 Model under clause 4.15.7, for the relevant Reserve Capacity Cycle, are:
 - (a) committed network funded augmentations of the SWIS that are expected to be in service for the Capacity Year to which the Reserve Capacity Cycle relates:
 - (b) the expected retirement of Facilities pursuant to a notice provided under clause 4.4A.1;
 - (c) planned Network changes; and
 - (d) any other matters specified in the WEM Procedure referred to in clause 4.15.17.
- 4.15.9. The principles that must be applied by the Network Access Quantity Model under clause 4.15.7 are:
 - (a) where a redispatch is required to avoid a constraint violating it is done so in a way that minimises the total change in output across all Facilities, subject to the NAQ rules as defined in Appendix 3;
 - (b) the Network Access Quantity for a Facility for a Reserve Capacity Cycle cannot exceed the quantity of Certified Reserve Capacity the Market Participant for the Facility nominated to trade bilaterally under clause 4.14.1(c) for the Reserve Capacity Cycle;
 - where multiple Facilities are competing for Network Access Quantity and the Network Access Quantity is insufficient for all of those Facilities to receive a value equal to the Certified Reserve Capacity that is specified to be traded bilaterally in accordance with clause 4.14.1(c), the available Network Access Quantity must be allocated in a manner that results in maximising the total Network Access Quantities determined for Facilities;
 - (d) the level of network access expected to be available to the Facility for at least 95% of the generation dispatch scenarios that could, applying the

- matters in clause 4.15.5, occur to meet the peak demand (as described in clause 4.15.3(c)) on the SWIS for the relevant Capacity Year; and
- (e) any Certified Reserve Capacity assigned to a Facility in accordance with clause 4.11.1(bD) or clause 4.11.1(bE) is to be treated as unconstrained for the purposes of determining Network Access Quantities for Facilities in accordance with this section 4.15.

New proposed clause 4.15.10 requires the NAQ for a Facility to be expressed to a precision of 0.001 MW.

4.15.10. The Network Access Quantity determined for a Facility is to be expressed to a precision of 0.001 MW.

Explanatory Note

New proposed clause 4.15.11 requires AEMO to notify Market Participants of the NAQ for their Facility.

4.15.11. AEMO must notify each Market Participant that specified a non-zero amount under clause 4.14.1(c) of the Network Access Quantity, if any, determined for its Facility under clause 4.15.2 by the date and time specified in clause 4.1.15.

Explanatory Note

New proposed clause 4.15.12 provides that any NAQ for a Facility that is retired (or is mothballed or removed from service) must also relinquish the NAQ for the Facility.

Where a section 4.4A.1 notice is given to AEMO, any subsequent application for Certified Reserve Capacity and a NAQ for the Facility for a Reserve Capacity Cycle will be assessed on the basis it is an application in respect of a new Facility.

The effective date the NAQ is relinquished is the expected closure date for the Facility specified in the section 4.4A.1 notice.

- 4.15.12. A Network Access Quantity for a Facility that is to cease operation permanently is:
 - (a) deemed to be relinquished by the Market Participant in respect to the

 Reserve Capacity Cycle in which the Facility is intended to cease operation permanently; and
 - (b) the relinquishment is effective from the expected closure date in the notice under section 4.4A.1 in respect to the Facility regardless of whether the notice is subsequently withdrawn under section 4.4A.6.

Explanatory Note

New proposed clauses 4.15.13 and 4.15.14 require AEMO to determine a Highest NAQ for each Facility for the purposes of the prioritisation order described in Appendix 3.

- 4.15.13. AEMO must determine and record a Highest Network Access Quantity for each Facility in accordance with clause 4.15.14.
- 4.15.14. The Highest Network Access Quantity for a Facility for a Reserve Capacity Cycle is the quantity determined by AEMO as being equal to:
 - (a) the Highest Network Access Quantity assigned to the Facility for the previous Reserve Capacity Cycle which may be increased or decreased for the current Reserve Capacity Cycle in accordance with clause 4.15.15; and
 - (b) where the Facility has not been assigned a Highest Network Access

 Quantity in a previous Reserve Capacity Cycle, the Network Access

 Quantity determined by applying the methodology described in Appendix 3 for the Capacity Year in respect of the current Reserve Capacity Cycle.

New proposed clause 4.15.15 describe when a Facility's Highest NAQ may be reduced or increased.

4.15.15. Where, for a Reserve Capacity Cycle:

- (a) a Facility, other than a Semi-Scheduled Facility and a Non-Scheduled
 Facility, is assigned a quantity of Certified Reserve Capacity that is less
 than the Highest Network Access Quantity for the Facility for that Reserve
 Capacity Cycle, the Highest Network Access Quantity for the Facility is to
 be reduced to equal the quantity of Certified Reserve Capacity assigned to
 the Facility for that Reserve Capacity Cycle; and
- (b) the Network Access Quantity under clause 4.15.2 is higher than the Highest Network Access Quantity for the Facility, AEMO must increase the Highest Network Access Quantity for the Facility to an amount equal to the Network Access Quantity under clause 4.15.2.

Explanatory Note

New proposed clause 4.15.16 requires AEMO to publish information used in the NAQ Model and the NAQ determined for each Facility following the processes in Appendix 3.

New proposed (replacement) clause 4.1.16A(d) requires AEMO to publish the information by 5:00pm on the last Business Day falling on or before 30 September in Year 1 of the relevant Reserve Capacity Cycle.

- 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.

Explanatory Note

New proposed clause 4.15.17 requires AEMO to document various processes with respect

4.15.17. AEMO must document in a WEM Procedure:

- (a) the processes, methodologies, inputs, parameters and assumptions to be applied in the Network Access Quantity Model for modelling the prioritisation and determination of Network Access Quantities to Facilities under Appendix 3;
- (b) the processes to be followed by AEMO in determining the generation dispatch scenarios under clause 4.15.5;
- (c) the processes AEMO must follow when determining Network Access

 Quantities for a Reserve Capacity Cycle, including how Network Access

 Quantities are determined for Facilities;
- (d) the processes to be followed by AEMO for publishing the information under clause 4.15.16;
- (e) without limiting any other provision of these WEM Rules, information that a

 Market Participant or Network Operator must provide to AEMO, for the
 purposes of running the Network Access Quantity Model and determining
 Network Access Quantities to Facilities under Appendix 3; and
- (f) any other matters that AEMO reasonably deems relevant to performing its functions under this section 4.15.

Explanatory Note

Section 4.15 is proposed to be deleted as a consequence of the Reserve Capacity Auction being deleted, and the heading for this part of the WEM Rules amended accordingly.

Reserve Capacity Auctions The Benchmark Reserve Capacity Price

4.15. Confirmation or Cancellation of Reserve Capacity Auctions

- 4.15.1. If the information provided under sections 4.14 and 4.28C indicates that no Certified Reserve Capacity is to be made available in the Reserve Capacity Auction for a Reserve Capacity Cycle, or, based on the information received under section 4.14, AEMO considers that the Reserve Capacity Requirement for the Reserve Capacity Cycle will be met without an auction, then, by the date and time specified in clause 4.1.16, AEMO must publish a notice specifying for that Reserve Capacity Cycle:
 - (a) that the Reserve Capacity Auction has been cancelled;
 - (b) the Reserve Capacity Requirement;
 - (c) the total amount of Certified Reserve Capacity;
 - (cA) the Capacity Credits assigned, by Facility, under section 4.28C; and

- (d) the total amount of Certified Reserve Capacity that would have been made available in the Reserve Capacity Auction had one been held.
- 4.15.2. If the Reserve Capacity Auction for a Reserve Capacity Cycle is not cancelled in accordance with clause 4.15.1, then, by the date and time specified in clause 4.1.16, AEMO must publish a notice specifying:
 - (a) that the Reserve Capacity Auction will be held;
 - (b) the Reserve Capacity Auction Requirement, where this equals the
 - i. Reserve Capacity Requirement; less
 - ii. the total amount of Certified Reserve Capacity which AEMO has notified Market Participants can be traded bilaterally under clause 4.14.9; less
 - iii. the amount of Capacity Credits assigned under section 4.28C for the relevant Reserve Capacity Cycle; less
 - iv. the total amount of Certified Reserve Capacity assigned to Facilities that are subject to a Network Control Service Contract; and
 - (c) the amount of Reserve Capacity required to be procured via the auction from each Availability Class.

Section 4.16 is proposed to be deleted to remove the redundant reference to the first Reserve Capacity Cycle.

4.16. The Benchmark Reserve Capacity Price

- 4.16.1. For all Reserve Capacity Cycles, AEMO must publish a Benchmark Reserve Capacity Price as determined in accordance with this section 4.16 prior to the time specified in section 4.1.4.
- 4.16.2. [Blank] The Benchmark Reserve Capacity Price to apply for the first Reserve Capacity Cycle is \$150,000 per MW per year.
- 4.16.3 The Economic Regulation Authority must develop a WEM Procedure documenting: the methodology AEMO must use and the process AEMO must follow in determining the Benchmark Reserve Capacity Price, and—
 - (a) the AEMO and Rule Participants must follow that documented WEM Procedure when conducting any review and consultations in accordance with that WEM Procedure and clause 4.16.6; and
 - (b) AEMO must follow that documented WEM Procedure to annually review the value of the Benchmark Reserve Capacity Price in accordance with this section 4.16 and in accordance with the timing requirements specified in section 4.1.19.

- 4.16.4. [Blank]
- 4.16.5. AEMO must propose a revised value for the Benchmark Reserve Capacity Price using the methodology described in the WEM Procedure referred to in clause 4.16.3.
- 4.16.6. AEMO must prepare a draft report describing how it has arrived at a proposed revised value for the Benchmark Reserve Capacity Price under clause 4.16.5. AEMO must publish the report on the WEM Website and advertise the report in newspapers widely distributed in Western Australia and request submissions from all sectors of the Western Australia energy industry, including end-users.
- 4.16.7. After considering of the submissions on the draft report described in clause 4.16.6 AEMO must propose a final revised value for the Benchmark Reserve Capacity Price and publish that value and its final report, including submissions received on the draft report on the WEM Website.
- 4.16.8. A proposed revised value for the Benchmark Reserve Capacity Price becomes the Benchmark Reserve Capacity Price after AEMO has posted a notice on the WEM Website of the new value of the Benchmark Reserve Capacity Price with effect from the date and time specified in AEMO's notice.
- 4.16.9 At least once in every five year period, the Economic Regulation Authority must review the WEM Procedure referred to in clause 4.16.3 and must undertake a public consultation process in respect of the outcome of the review.
- 4.16.10. If the Economic Regulation Authority recommends changes as a result of the review in clause 4.16.9, the Economic Regulation Authority must either submit a Rule Change Proposal or initiate a Procedure Change Process, as the case may be, to implement those changes.

Section 4.17 is proposed to be deleted as a consequence of the Reserve Capacity Auction being deleted.

4.17. [Blank] Reserve Capacity Auction Submission Process

- 4.17.1. AEMO must prescribe a Reserve Capacity Auction form and post it on the Market Web Site.
- 4.17.2. A Market Participant submitting a Reserve Capacity Offer must submit the information specified in section 4.18, using the Reserve Capacity Auction form, to AEMO during the period specified in section 4.1.17.
- 4.17.3. Upon receipt of a Reserve Capacity Offer, AEMO must within one Business Day contact the Market Participant to confirm receipt, and whether it has accepted the offer as valid or rejected the offer as invalid, with reasons for rejection provided.

- 4.17.4. AEMO may reject a Reserve Capacity Offer if:
 - (a) the offer is inconsistent with the requirements of these Market Rules, including clause 4.14.10;
 - (b) the offer does not contain any of the information specified in section 4.18;
 - (c) the offer is not in the form required by clause 4.17.2.
- 4.17.5. A Market Participant that does not receive confirmation of receipt of a Reserve Capacity Offer within the time specified in clause 4.17.3 must contact AEMO to arrange for resubmission of the Reserve Capacity Offer.
- 4.17.6. A Market Participant may not revise or resubmit a Reserve Capacity Offer after AEMO has confirmed receipt of the Reserve Capacity Offer in accordance with clause 4.17.3.
- 4.17.7. Subject to clause 4.17.8, a Market Participant may only resubmit a Reserve Capacity Offer in the event that:
 - (a) AEMO fails to acknowledge receipt of a Reserve Capacity Offer; or
 - (b) AEMO rejects the Reserve Capacity Offer under clause 4.17.3.
- 4.17.8. AEMO may not accept a Reserve Capacity Offer submitted outside the interval specified in clause 4.1.17.
- 4.17.9. AEMO must document the Reserve Capacity Auction submission and clearing process in a Market Procedure.

Section 4.18 is proposed to be deleted as a consequence of the Reserve Capacity Auction being deleted.

4.18. [Blank] Reserve Capacity Offer Format

- 4.18.1. A Market Participant must ensure that its Reserve Capacity Offers include the following information:
 - (a) the identity of the Market Participant submitting the Reserve Capacity Offer;
 - (b) the identity of the Market Participant's Facility covered by the Reserve Capacity Offer;
 - (c) for Interruptible Loads and Demand Side Programmes, a single Price-Quantity Pair for each block of Certified Reserve Capacity associated with the Facility; and
 - (d) for every other Facility, a single Price-Quantity Pair for each Facility.
- 4.18.2. Each Reserve Capacity Price-Quantity Pair must comprise:

- (a) the identity of the Facility to which it relates;
- (b) an offer price in units of dollars per MW per year expressed to a precision of \$0.01/MW between:
 - i. zero and 110 percent of the Benchmark Reserve Capacity Price for a Reserve Capacity Cycle up to and including the 2018 Reserve Capacity Cycle; and
 - ii. zero and 130 percent of the Benchmark Reserve Capacity Price for a Reserve Capacity Cycle from the 2019 Reserve Capacity Cycle onwards;
- (c) a quantity in units of MW equal to the amount determined in accordance with clause 4.14.10 in respect of that Facility; and
- (d) if the Facility is an Interruptible Load or Demand Side Programme, the Availability Class of that Price-Quantity Pair, as specified by AEMO in assigning Certified Reserve Capacity to that Facility in accordance with section 4.11.

Section 4.19 is proposed to be deleted as a consequence of the Reserve Capacity Auction being deleted.

4.19. [Blank] Reserve Capacity Auction Clearing

- 4.19.1. AEMO, by the time and date specified in clause 4.1.18, must process the Reserve Capacity Offers applying the methodology set out in Appendix 3 and determine the Reserve Capacity Auction result in accordance with the objective set out in clause 4.19.2.
- 4.19.2. The objective of a Reserve Capacity Auction is to meet the Reserve Capacity Requirement for the Reserve Capacity Cycle, or, if it is not possible to meet the Reserve Capacity Requirement, then minimise the shortfall.
- 4.19.3. If Reserve Capacity Offers exist from two or more Facilities that cannot simultaneously be scheduled (for example, because more than one Market Participant is proposing to build a Facility that will be located at the same site), then AEMO must:
 - (a) not accept any Reserve Capacity Offer from any such Facility unless
 AEMO has either accepted a non-zero value for that Facility under clause
 4.14.6 or has not accepted a non-zero value for any Facility under clause
 4.14.6; and
 - (b) Subject to clause 4.19.3(a), apply the methodology set out in Appendix 3 for each permutation of such Facilities. The Reserve Capacity Auction result will be:

- i. if no result meets the Reserve Capacity Requirement, then the result that minimises the shortfall:
- ii. if one or more results meets the Reserve Capacity Requirement, then, of those results, the result which produces the least value for the sum over all Reserve Capacity Offers of the offer price multiplied by the quantity of capacity scheduled from that Reserve Capacity Offer.
- 4.19.4. A Reserve Capacity Auction result comprises a list of Reserve Capacity Offers scheduled and a Reserve Capacity Price.

4.19.5. AEMO must publish:

- (a) the Reserve Capacity Price included in the Reserve Capacity Auction results determined in accordance with clause 4.19.1; and
- (b) the quantity of Certified Reserve Capacity scheduled from each Facility registered by each Market Participant in the Reserve Capacity Auction results determined in accordance with clause 4.19.1.

by the time and date specified in clause 4.1.18.

Capacity Credits

4.20. Capacity Credits

Explanatory Note

Clauses 4.20.1 to 4.20.5 (inclusive) are proposed to be deleted as a consequence of the Reserve Capacity Auction being deleted.

- 4.20.1. [Blank]If AEMO holds a Reserve Capacity Auction in any year, each Market Participant that has a Reserve Capacity Offer scheduled under clause 4.19.4 must, by the date and time specified in clause 4.1.20, notify AEMO of:
 - (a) the total number of Capacity Credits that it will provide from each of its
 Facilities during the Capacity Year commencing on 1 October of Year 3 of
 the Reserve Capacity Cycle. The information provided must be consistent
 with the requirements of clause 4.20.1(c) and (e); and
 - (b) the number of those Capacity Credits the Market Participant anticipates will be acquired by AEMO. The information provided must be consistent with the requirements of clause 4.20.1(d) and (e);
 - (c) the total number of Capacity Credits provided by all the Market Participant's Facilities must be consistent with the sum of:
 - i. the quantity of Certified Reserve Capacity held by the Market
 Participant which AEMO has notified the Market Participant it can
 trade bilaterally under clause 4.14.9;

- ii. the quantity of Certified Reserve Capacity held by the Market
 Participant scheduled by AEMO in the Reserve Capacity Auction,
 as published in accordance with clause 4.19.5(b);
- iii. [Blank]
- iv. the quantity of Certified Reserve Capacity held by the Market
 Participant for Facilities subject to Network Control Service
 Contracts; and
- v. the quantity of Capacity Credits held by the Market Participant which was assigned under clause 4.28C.10;
- (d) the total number of Capacity Credits which the Market Participant anticipates will be acquired by AEMO from the Market Participant must be consistent with
 - i. the quantity of Certified Reserve Capacity held by that Market
 Participant and scheduled by AEMO in the Reserve Capacity
 Auction, as published in accordance with clause 4.19.5(b);
 - ii. [Blank]
 - iii. plus the quantity of Certified Reserve Capacity held by the Market Participant for Facilities to be subject to Network Control Service Contracts except where these are to be traded bilaterally as defined in clause 4.14.2.
- (e) Certified Reserve Capacity of one Facility granted approval to trade bilaterally under clause 4.14.9 or scheduled by AEMO in the Reserve Capacity Auction can be provided as Capacity Credits by another Facility registered by the Market Participant covered by a Reserve Capacity Offer submitted by the Market Participant for the auction, but which was not scheduled, provided that the Reserve Capacity is in the same Availability Class or an Availability Class with greater availability than the Availability Class of the Reserve Capacity provided by the original Facility.
- 4.20.2. [Blank] AEMO must consider each notice it receives under clause 4.20.1 and notify the relevant Market Participant whether it confirms or rejects the notification within one Business Day.
- 4.20.3. [Blank]AEMO may only reject a notice under clause 4.20.1 if the notice is inconsistent with these Market Rules.
- 4.20.4. [Blank]If AEMO rejects a notice under clause 4.20.1, then it must give the relevant Market Participant its reasons for doing so.
- 4.20.5. [Blank]If AEMO rejects a notice under clause 4.20.3, then the Market Participant must re-submit the notice as soon as practicable, incorporating any amendments suggested by AEMO, and clauses 4.20.2 to 4.20.4 also apply to the re-submitted notice.

Clauses 4.20.5A(a), 4.20.5A(b) and 4.20.5AA(d) are proposed to be amended as consequence of the Reserve Capacity Auction being deleted.

Clause 4.20.5A is further amended to require the recording of the Capacity Credits associated with each sub-component of the Facility.

4.20.5A. AEMO must:

- (a) assign a quantity of Capacity Credits to each Facility and record the Capacity Credits associated with each sub-component of the Facility, where relevant, where the quantity is determined in accordance with clause 4.20.5B for the relevant Facility; assign a quantity of Capacity Credits to each Facility, where the quantity is determined in accordance with clause 4.20.5B, clause 4.20.5C or clause 4.20.5D, as applicable to the relevant Facility;
- (aA) determine whether the Reserve Capacity Requirement has been met or exceeded with the Capacity Credits (excluding any Capacity Credits associated with any CC Uplift Quantities) assigned for Year 3:
 - to Facilities to which section 4.13 applies, for which no Reserve Capacity Security was required to be provided under section 4.13;
 - ii. to Demand Side Programmes determined by AEMO to be in Commercial Operation; and
- (b) publish AEMO's determination under clause 4.20.5A(aA) and, for each Facility assigned Capacity Credits under clause 4.20.5A(a), the quantity of Capacity Credits assigned and the Facility Class by the date and time specified in clause 4.1.16A.÷
 - if a Reserve Capacity Auction is cancelled under clause 4.15.1 by the date and time specified in clause 4.1.16; and
 - ii. if a Reserve Capacity Auction is not cancelled under clause 4.15.1

 by the date and time specified in clause 4.1.21A.
- 4.20.5AA. For each Reserve Capacity Cycle, where AEMO has assigned Capacity Credits to Facilities at any of the following prices, AEMO must publish a summary of the aggregate quantity of MW of Capacity Credits assigned to Facilities at each price for the Reserve Capacity Cycle:
 - (a) the Reserve Capacity Price;
 - (b) if the Reserve Capacity Cycle is also a Transitional Reserve Capacity Cycle, the Facility Monthly Reserve Capacity Price for a Transitional Facility determined in accordance with clause 4.29.1B multiplied by 12;
 - (c) if the Reserve Capacity Cycle is also a Fixed Price Reserve Capacity Cycle, the Facility Monthly Reserve Capacity Price for each Fixed Price

Facility that is a Fixed Price Facility for that Fixed Price Reserve Capacity Cycle determined in accordance with clause 4.29.1D multiplied by 12.; and

(d) [Blank]each Special Reserve Capacity Price.

Explanatory Note

Clause 4.20.5B is proposed to be amended as a consequence of the Reserve Capacity Auction being deleted, and to clarify the quantity of Capacity Credits assigned to a Facility.

- 4.20.5B. If a Market Participant did not have a Reserve Capacity Offer scheduled, then the quantity of Capacity Credits assigned to each of that Market Participant's Facilities is determined as follows:
 - (a) if the Facility is subject to a Network Control Service Contract the same quantity as the quantity of Certified Reserve Capacity assigned to that Facility under clause 4.9.9(a); and
 - (b) if the Market Participant specified a non-zero amount for the Facility under clauses 4.14.1(c) then the quantity of Capacity Credits is the quantity specified by AEMO for the Facility under clause 4.14.9.
- 4.20.5B. The quantity of Capacity Credits assigned to a Facility is equal to:
 - (a) for applicable Facilities, the Network Access Quantity determined for the Facility by AEMO in accordance with section 4.15 and the CC Uplift Quantity; and
 - (b) for all other Facilities, the Network Access Quantity determined for the Facility by AEMO in accordance with section 4.15.

Explanatory Note

Clause 4.20.5C is proposed to be deleted as a consequence of the Reserve Capacity Auction being deleted.

4.20.5C. [Blank]If:

- (a) a Reserve Capacity Auction is not cancelled under clause 4.15.1;
- (b) one or more of a Market Participant's Reserve Capacity Offers is scheduled under clause 4.19.4;
- (c) that Market Participant notifies AEMO of the information specified in clause 4.20.1 by the date and time specified in clause 4.1.20; and
- (d) AEMO accepts the notification under clause 4.20.2,

then the quantity of Capacity Credits assigned to each of that Market Participant's Facilities is the same as the quantity notified for the relevant Facility under clause 4.20.1(a).

Explanatory Note

Clause 4.20.5D is proposed to be deleted as a consequence of the Reserve Capacity Auction being deleted.

4.20.5D. [Blank]If:

- (a) a Reserve Capacity Auction is not cancelled under clause 4.15.1;
- (b) one or more of a Market Participant's Reserve Capacity Offers is scheduled under clause 4.19.4; and
- (c) the Market Participant does not notify AEMO of the information specified in clause 4.20.1 by the date and time specified in clause 4.1.20,

then AEMO must not assign any Capacity Credits to that Market Participant.

Explanatory Note

Clause 4.20.6 is proposed to be deleted as a the provision is now redundant (and clause 4.11.7 is also .

- 4.20.6. [Blank] For the purpose of this clause 4.20, Capacity Credits associated with Certified Reserve Capacity issued to Western Power in accordance with clause 4.11.7 are to be associated with the generation portfolio the capacity of which contributes to the Certified Reserve Capacity issued under clause 4.11.7 rather than to the individual Facilities comprising that portfolio.
- 4.20.7. Payments for Capacity Credits under these WEM Rules can only occur for the period between the time and date that the associated Reserve Capacity Obligations commence and the time and date that the associated Reserve Capacity Obligations cease.
- 4.20.8 If, by the date and time specified in clause 4.1.21B, AEMO becomes aware that no capacity associated with the Capacity Credits assigned to a new Facility that is yet to enter service will be made available to the market for an entire Capacity Year, it must issue a Notice of Intention to Cancel Capacity Credits to the Market Participant for that Facility for that Capacity Year.
- 4.20.9 A Notice of Intention to Cancel Capacity Credits issued to a Market Participant by AEMO, in accordance with clause 4.20.8, must include:
 - (a) the details of the Facility to which the Notice of Intention to Cancel Capacity Credits applies;
 - (b) details of the evidence considered by AEMO in determining that no capacity associated with the Capacity Credits assigned to the Facility will be made available to the market for the entire Capacity Year; and
 - (c) the Capacity Year for which the cancellation of Capacity Credits assigned to the Facility will apply.
- 4.20.10. Within 10 Business Days of being issued a Notice of Intention to Cancel Capacity Credits in accordance with clause 4.20.8, the Market Participant may make a

- submission to AEMO detailing any reasons it considers should be taken into account by AEMO in making a final determination to cancel the Capacity Credits assigned to the Facility for the Capacity Year.
- 4.20.11. Where AEMO has issued a Notice of Intention to Cancel Capacity Credits in accordance with clause 4.20.8, AEMO must, within 20 Business Days of issuing the Notice of Intention to Cancel Capacity Credits, decide whether it will cancel the Capacity Credits assigned to the Facility for the Capacity Year.
- 4.20.12. Where AEMO makes a decision to cancel the Capacity Credits assigned to a Facility for a Capacity Year in accordance with clause 4.20.11, it must notify the Market Participant of its decision within 5 Business Days, including:
 - (a) the details of the Facility;
 - (b) a response to all issues raised by the Market Participant in any submission made in accordance with clause 4.20.10;
 - (c) details of the evidence considered by AEMO in determining that no capacity associated with the Capacity Credits assigned to the Facility will be made available to the market for the entire Capacity Year; and
 - (d) the Capacity Year for which the cancellation of Capacity Credits assigned to the Facility will apply.
- 4.20.13. Within 10 Business Days of making a decision, in accordance with clause 4.20.11, to cancel the Capacity Credits assigned to a Facility AEMO must publish on the WEM Website the information specified in clauses 4.20.12(a), 4.20.12(c) and 4.20.12(d).
- 4.20.14. Where AEMO has made a decision to cancel the Capacity Credits assigned to a Facility in accordance with clause 4.20.11, AEMO must cancel the Capacity Credits assigned to the Facility for the Capacity Year specified in clause 4.20.12(d).
- 4.20.15. Where AEMO has made a decision not to cancel the Capacity Credits assigned to a Facility for a Capacity Year in accordance with clause 4.20.11, it must notify the Market Participant of its decision within 5 Business Days.

New proposed clause 4.20.16 requires a Market Participant to nominate the number of Capacity Credits to be associated with the Facility's storage component (not exceeding its level of Certified Reserve Capacity) where the Capacity Credits assigned to the Facility is less than the Facility's total Certified Reserve Capacity (including the storage component).

4.20.16. Where AEMO has assigned Capacity Credits to a Facility containing an Electric Storage Resource for a Capacity Year that is less than the total Certified Reserve Capacity for the Facility for that Capacity Year, the Market Participant must, by the last Business Day falling on or before 30 October of Year 1 of the Reserve Capacity Cycle, notify AEMO of the number of Capacity Credits that are to be

associated with the Electric Storage Resource for the Capacity Year, where the number must not exceed the Certified Reserve Capacity assigned to the Electric Storage Resource for that Capacity Year.

Explanatory Note

New proposed clause 4.20.17 sets out how AEMO is to set the number of Capacity Credits associated with the Electric Storage Resource component of a Facility for a Capacity Year.

- 4.20.17. Where AEMO has assigned Capacity Credits to a Facility containing an Electric

 Storage Resource for a Capacity Year, AEMO must set the number of Capacity

 Credits to be associated with the Electric Storage Resource for the Capacity Year
 as:
 - (a) the number of Capacity Credits the Market Participant nominated to trade bilaterally for the Electric Storage Resource under clause 4.14.1; or
 - (b) where clause 4.20.16 applies, the number of Capacity Credits notified to AEMO under that clause to be associated with the Electric Storage Resource.

Explanatory Note

Section 4.21 is proposed to be deleted as a consequence of the Reserve Capacity Auction being deleted.

4.21. [Blank] Special Price Arrangements

4.21.1.

- (a) AEMO is to grant Special Price Arrangements to a Market Participant in respect of any Capacity Credits acquired by AEMO as a result of a Reserve Capacity Auction where the offer price in the Reserve Capacity Offer for the Certified Reserve Capacity relating to those Capacity Credits exceeded the Reserve Capacity Auction Price.
- (b) The Special Reserve Capacity Price for Capacity Credits covered by the Special Price Arrangement is to equal the offer price in the Reserve Capacity Offer for the Certified Reserve Capacity relating to those Capacity Credits.
- (c) The level of coverage of the Special Price Arrangement is to equal the quantity of Capacity Credits associated with a Reserve Capacity Offer to which clause 4.21.1(a) relates (where if AEMO reduces the Capacity Credits associated with this Facility in any Trading Month then the average of the number of Capacity Credits of this Facility on each Trading Day during that Trading Month is to apply).
- (d) The term of a Special Price Arrangement is the period that the Reserve Capacity Obligations in respect of the Capacity Credits apply as specified in clause 4.1.26 and clause 4.1.30 for the Reserve Capacity Cycle relating to the Reserve Capacity Auction.

- 4.22. [Blank]
- 4.23. Capacity Credits and Force Majeure
- 4.23.1. There are no force majeure conditions associated with Capacity Credits.
- 4.23A. Capacity Credits and Facility Registration
- 4.23A.1. [Blank]
- 4.23A.2. [Blank]

Clauses 4.23A.3 and 4.23A.4 are proposed to be amended to include a requirement for Network Access Quantities to be dealt with when Facilities are aggregated or disaggregated.

- 4.23A.3. If at any time a Market Participant holds Capacity Credits with respect to a facility (the "primary facility") that must be registered as more than one Registered Facility, either as a result of Facility aggregation not being approved by AEMO or being revoked, then AEMO may re-allocate the Certified Reserve Capacity, Capacity Credits, Network Access Quantity and Reserve Capacity Obligation Quantities of the primary facility between the primary facility and the Registered Facilities subject to the conditions that:
 - (a) the Registered Facilities were documented in the original application for Certified Reserve Capacity:
 - i. as contributing to the capacity covered by those Capacity Credits;
 and
 - were represented in the same way in the Constraint Equations or
 Constraint Sets that were used to determine the total Network
 Access Quantity for the Registered Facilities;
 - (b) AEMO must not allocate more Certified Reserve Capacity, Network Access

 Quantity, Capacity Credits or Reserve Capacity Obligation Quantity to a

 Registered Facility than that Registered Facility can provide based on
 information provided in the original application for Certified Reserve
 Capacity for the primary facility;
 - (c) after the re-allocation the total Certified Reserve Capacity, the total

 Network Access Quantity, the total number of Capacity Credits and the
 total Reserve Capacity Obligation Quantities, respectively, of the primary
 facility and the Registered Facilities must equal the Certified Reserve
 Capacity, the Network Access Quantity, the number of Capacity Credits,
 and the Reserve Capacity Obligation Quantity immediately prior to the reallocation; and

- (d) AEMO must consult with the applicable Market Participant and give consideration to its preferences in the re-allocations to the extent allowed by clause clauses 4.23A.3(a), 4.23A.3(b) and 4.23A.3(c).
- 4.23A.4. If at any time a Market Participant holds Capacity Credits with respect to Registered Facilities, for which AEMO has approved aggregation as a single aggregated facility in accordance with clause 2.30.7, then AEMO may re-allocate the Certified Reserve Capacity, Network Access Quantity, Capacity Credits and Reserve Capacity Obligation Quantities of the Registered Facilities to the aggregated facility subject to the conditions that:
 - (a) the information submitted with the application for aggregation must demonstrate that the aggregated facility can at all times meet the sum of the full Reserve Capacity Obligation Quantities of the Registered Facilities;
 - (aA) each Registered Facility is represented in the same way in the Constraint Equations or Constraint Sets that were used to determine the Network Access Quantity for each Registered Facility;
 - (b) AEMO must allocate to the aggregated facility the Certified Reserve
 Capacity, Network Access Quantity, Capacity Credits and Reserve
 Capacity Obligation Quantity it can provide based on information provided
 in the original application for Certified Reserve Capacity for the Registered
 Facilities:
 - (c) after the re-allocation the Certified Reserve Capacity, Network Access

 Quantity, the number of Capacity Credits and the Reserve Capacity

 Obligation Quantities of the aggregated facility must equal the sum of the

 Certified Reserve Capacities, Network Access Quantity, the total number of

 Capacity Credits, and the sum of the Reserve Capacity Obligation

 Quantities immediately prior to the aggregation; and
 - (d) the <u>Network Access Quantity</u>, Capacity Credits and the Reserve Capacity Obligation Quantities of the aggregated facility must at all times be capable of being disaggregated in accordance with clause 4.23A.3.

Addressing Shortages of Reserve Capacity

4.24. Supplementary Reserve Capacity

Explanatory Note

Clause 4.24.1 is proposed to be amended as a consequence of the Reserve Capacity Auction being deleted.

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

and (b), and the Reserve Capacity Auction intended to secure Capacity Credits for that time has already occurred or been cancelled, then it must:

- (a) determine the expected start and end dates for the period of the shortfall;
- (b) determine the expected amount of the shortfall; and
- (c) seek to acquire supplementary capacity in accordance with clause 4.24.2.
- 4.24.2. If AEMO decides to seek to acquire supplementary capacity and:
 - (a) the expected start date of the shortfall is at least 12 weeks from the date AEMO becomes aware of the shortfall, then it must call for tenders from potential suppliers of supplementary capacity in an invitation to tender;
 - (b) clause 4.24.2(a) does not apply, then it must either:
 - i. call for tenders from potential suppliers of supplementary capacity in an invitation to tender; or
 - ii. negotiate directly with potential suppliers of supplementary capacity.
- 4.24.3. The only eligible sources of supplementary capacity are the following services ("Eligible Services"):
 - (a) load reduction, that is measures to reduce a consumer's consumption of electricity supplied through the SWIS, but excluding reductions associated with the operation of Registered Facilities (including registered Loads) and reductions provided by a Market <u>CustomerParticipant</u> with a Demand Side Programme that does not satisfy its Reserve Capacity Obligations for the current Reserve Capacity Cycle in accordance with clause 4.8.3(d) at the time AEMO seeks to acquire supplementary capacity;
 - (b) the generation of electricity by generation systems that are not Registered Facilities;
 - (c) the generation of electricity by generation systems, or load reductions provided by loads, that are Registered Facilities but only to extent that the electricity is generated, or the load reduction is provided, by capacity for which the relevant Market Participant, either:
 - i. does not hold Capacity Credits in the current Reserve Capacity Cycle; and
 - ii. has not held Capacity Credits in the current Reserve Capacity Cycle or a previous Reserve Capacity Cycle; and
 - iii. holds Capacity Credits in a subsequent Reserve Capacity Cycle,

or

iv. provides evidence satisfactory to AEMO, prior to a Supplementary Capacity Contract taking effect, that:

- 1. costs have been incurred to enable the provision of the capacity through the installation of physical equipment; and
- 2. the capacity is in addition to the sent out capacity of the generation system, or the maximum amount of load that can be curtailed, that existed prior to the installation of the physical equipment.
- 4.24.4. A person is not required to be a Rule Participant in order to submit a tender in response to a call for tenders under clause 4.24.2 or enter into a Supplementary Capacity Contract with AEMO. However, if a Rule Participant does enter into a Supplementary Capacity Contract with AEMO, then it must comply with that contract.
- 4.24.5. AEMO must not call for tenders for supplementary capacity earlier than six calendar months prior to the calendar month in which the shortfall period is expected to start.
- 4.24.6. If AEMO decides to call for tenders for supplementary capacity, then, no earlier than 30 Business Days and no later than 10 Business Days prior to the proposed closing date for submission of tenders, AEMO must advertise the call for tenders on the WEM Website and in major local and national newspapers. The advertisement must include:
 - (a) the date and time at which any person wishing to tender to supply Eligible Services must have completed and lodged with AEMO the form specified in clause 4.24.7:
 - (b) contact details for AEMO;
 - (c) the amount of capacity required;
 - (d) the number of hours over which the capacity is expected to be used;
 - (e) the time of the day where the capacity is expected to be required;
 - (f) the expected term of any Supplementary Capacity Contracts entered into as a result of the call for tenders:
 - (g) the maximum contract value per hour of availability for any Supplementary Capacity Contract that AEMO will accept;
 - (h) the location of copies of the standard Supplementary Capacity Contracts on the WEM Website; and
 - (i) the location on the WEM Website of the tender form to be used in applying to provide Eligible Services.

Clause 4.24.7 is proposed to be amended to require the tender form to include a requirement for an applicant to specify the location of the Eligible Service.

- 4.24.7. AEMO must prescribe the tender form to be used by those applying to provide Eligible Services. This form must require the specification of:
 - (a) the name and contact details of the applicant;
 - (b) the nature of the Eligible Service to be provided;
 - (c) the amount of the Eligible Service available;
 - (d) the maximum number of hours over the term of the Supplementary Capacity Contract that the Eligible Service will be available;
 - (e) the maximum number of hours on each day during the term of the Supplementary Capacity Contract that the Eligible Service will be available;
 - (f) the time of each day during the term of the Supplementary Capacity Contract that the Eligible Service will be available;
 - (g) any information required to complete the relevant standard form Supplementary Capacity Contract for the Eligible Service and the applicant, together with full details of any amendments to the standard form Supplementary Capacity Contract required by the applicant;
 - (h) the mechanism for activating the Eligible Service;
 - (i) the mechanisms available for measuring the Eligible Service provided; and
 - (j) the values of
 - the availability price for the Eligible Service expressed in dollars;
 and
 - the activation price for the Eligible Service, expressed in dollars per hour of activation, where this price must reflect direct or opportunity costs incurred.

where the activation price plus:

- iii. the availability price; divided by
- iv. the lesser of:
 - 1. the number of hours specified in the advertisement for the call for tenders under clause 4.24.6(d); and
 - 2. the number of hours specified for the Eligible Service in accordance with paragraph (d),

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

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

Explanatory Note

Clause 4.24.8 is proposed to be amended to require AEMO to ensure that providers of

supplementary capacity have adequate network access.

- 4.24.8. In determining the result of a call for tenders and entering into Supplementary Capacity Contracts:
 - (a) AEMO must only accept an offer for the provision of Eligible Services;
 - (b) AEMO must not accept an offer for the provision of an Eligible Service if AEMO is not satisfied that the Eligible Service will be available during times of system peak demand coinciding with the shortfall period;—and
 - (c) subject to the preceding paragraphs and clause 4.24.9, AEMO is to seek to enter into the lowest cost mix of Supplementary Capacity Contracts that:
 - i. will meet the requirement for supplementary capacity; or
 - ii. will, if it is not possible to meet requirement for supplementary capacity, minimise the remaining Reserve Capacity shortfall,

where the cost of each Supplementary Capacity Contract is to be defined to be the sum of:

- iii. the availability price; plus
- iv. the product of the activation price and the lesser of:
 - 1. the number of hours specified in the advertisement for the call for tenders under clause 4.24.6(d); and
 - 2. the number of hours specified for the Eligible Service in the relevant tender form in accordance with clause 4.24.7(d)-; and
- (d) AEMO must be reasonably satisfied that the provider of the Eligible Service has access to the network, where applicable.
- 4.24.9. AEMO is not under any obligation to accept any tender, or enter into a Supplementary Capacity Contract in respect of any tender, made in response to a call for tenders under clause 4.24.2.

Explanatory Note

Clause 4.24.10 is proposed to be amended to require AEMO to request the location of the potential Eligible Service from the potential supplier.

- 4.24.10. If AEMO negotiates directly with a potential supplier of Eligible Services in accordance with clause 4.24.2(b)(ii), then it must provide the following information to the potential supplier:
 - (a) the amount of capacity required;
 - (b) the relevant standard form Supplementary Capacity Contract; and
 - (c) details of the information to be provided by the potential supplier, including:
 - i. the amount of the Eligible Service available;

- ii. the mechanism for activating the Eligible Service;
- iii. the mechanisms available for measuring the Eligible Service provided;
- iv. the availability price for the Eligible Service expressed in dollars;
- v. the activation price for the Eligible Service, expressed in dollars per hour of activation, where this price must reflect direct or opportunity costs incurred; and
- vi. the location of the Eligible Service and any associated Transmission Node Identifier.
- 4.24.11. Subject to clause 4.24.3, AEMO may at its discretion enter into any negotiated Supplementary Capacity Contract, but must employ reasonable endeavours to minimise the cost of Eligible Services acquired in this manner.
- 4.24.12. AEMO must develop and maintain a standard form Supplementary Capacity Contract which accords with the requirements in clause 4.24.13.
- 4.24.13. A standard form Supplementary Capacity Contract will require the supplier of an Eligible Service to reduce net consumption, or to increase generation, on instruction from AEMO and must specify:
 - (a) that there are no force majeure conditions;
 - (b) the settlement process to be followed, including timing of payments;
 - (c) contract variation conditions;
 - (d) any conditions required to ensure that if a different person takes over the facility used to provide the Eligible Service, that the person taking over will be bound by the contract obligations (for example, by requiring the execution of a deed of assumption or novation);
 - (e) the financial consequences of failing to supply the Eligible Service in accordance with the contract, based on the arrangements which apply under clause 4.26 where a Market Participant holding Capacity Credits for a Facility fails to comply with its Reserve Capacity Obligations;
 - (f) [Blank]
 - (g) the technical standards and verification arrangements which facilities used to provide Eligible Services must comply with; and
 - (h) blank schedules specifying:
 - i. the term of the Supplementary Capacity Contract, where this term is not to exceed 12 weeks;
 - ii. the sources of the net consumption reduction or generation increase:

- iii. the amount of net consumption reduction or generation increase required;
- iv. the notification time to be given for activation;
- v. the method of notification of activation:
- vi. the minimum duration of any activation;
- vii. the maximum duration of any single activation;
- viii. any limits on the number of times AEMO can request activation;
- ix. the basis to be used for measuring the response;
- x. the availability price;
- xi. the activation price;
- xii. technical matters relating to the facility (including testing); and
- xiii. the fact that activation instructions will be given by AEMO.
- 4.24.14. Despite the existence of the standard form Supplementary Capacity Contract, AEMO may enter into Supplementary Capacity Contracts in any form it considers appropriate.
- 4.24.15. AEMO must recover the full cost it incurs in respect of Supplementary Capacity Contracts in accordance with clause 4.28 and Chapter 9.
- 4.24.16. [Blank]
- 4.24.17. [Blank]

Clause 4.29.3(e)(iii) has been moved to this clause 4.24.18 with conforming amendments.

- 4.24.18. AEMO must document in a WEM Procedure the procedures it follows in:
 - (a) acquiring Eligible Services;
 - (b) entering into Supplementary Capacity Contracts; and
 - (c) determining the maximum contract value per hour of availability for any Supplementary Capacity Contract; and
 - (d) determining how a payment in relation to a Supplementary Capacity

 Contract is to be made to the party identified in clause 4.29.3(e)(ii) if that party is not a Market Participant.
- 4.24.19. Following each call for tenders for supplementary capacity or otherwise acquiring Eligible Services, AEMO must review the Supplementary Reserve Capacity provisions of this section 4.24 of the WEM Rules with regard to the Wholesale Market Objectives and must undertake a public consultation process in respect of the outcome of the review.

Testing, Monitoring and Compliance

4.25. Reserve Capacity Testing

Explanatory Note

Clauses 4.25.1 and 4.25.2 are proposed to be amended to set out the requirements for Reserve Capacity testing of Facilities containing storage components.

- 4.25.1. AEMO must take steps to verify, in accordance with clause 4.25.2, that each Facility providing assigned Capacity Credits can:
 - (a) in the case of a generation system, during the term period the Reserve Capacity Obligations apply, operate at a level equivalent to its Required Level, adjusted to the level of Capacity Credits currently held, at least once during each of the following periods and such level of operation during those periods must be achieved on each type of fuel notified under clause 4.10.1(e)(v):
 - i. 1 October to 31 March; and
 - ii. 1 April to 30 September; and
 - (b) during the six months prior to the Reserve Capacity Obligations for the first Reserve Capacity Cycle taking effect, operate at its maximum Reserve Capacity Obligation Quantity at least once and, in the case of a generating system, such operation on each type of fuel available to that Facility notified under clause 4.10.1(e)(v). This clause 4.25.1(b) does not apply to facilities that are not commissioned prior to their Reserve Capacity Obligations coming into force; and
 - (c) in the case of a Demand Side Programme, during the term the Reserve Capacity Obligations apply, and during the period specified in clause 4.10.1(f)(vi), decrease its consumption to operate at a level equivalent to its Required Level, adjusted to the level of Capacity Credits currently held, at least once during the period between 1 October to 31 March-; and
 - (d) in the case of a Facility containing an Electric Storage Resource, excluding Facilities where the Certified Reserve Capacity associated with the Electric Storage Resource was assigned in accordance with clause 4.11.1(bD) or 4.11.1(bE), operate at the Required Level associated with the Electric Storage Resource, adjusted to the level of Capacity Credits currently associated with the Electric Storage Resource, during the Electric Storage Resource Obligation Intervals, at least once during each of the following periods:
 - i. 1 October to 31 March; and
 - ii. 1 April to 30 September.
- 4.25.2. AEMO may verify the matters specified in clause 4.25.1 by:

- (a) in the case of a generation system:
 - observing the Facility operate at a level equivalent to its Required Level, adjusted to the level of Capacity Credits currently held, at least once as part of normal market operations as determined from Meter Data Submissions; or
 - ii. testing, in accordance with clause 4.25.9, the Facility's ability to operate at a level equivalent to its Required Level, adjusted to the level of Capacity Credits currently held, for not less than two Trading Intervals and the Facility successfully passing that test; or
- (b) in the case of a Demand Side Programme:
 - observing the Facility operate at a level equivalent to its Required Level, adjusted to the level of Capacity Credits currently held, at least once in response to an activation of the Facility by the relevant Market <u>CustomerParticipant</u> as measured in metered consumption; or
 - ii. testing, in accordance with clause 4.25.9, the Facility's ability to reduce demand to a level equivalent to its Required Level, adjusted to the level of Capacity Credits currently held, for not less than one Trading Interval and the Facility successfully passing that test; or
- (c) [Blank]in the case of an Interruptible Load, testing, in accordance with clause 4.25.9, the Facility's ability to reduce demand to a level equivalent to its Required Level, adjusted to the level of Capacity Credits currently held, for not less than one Trading Interval and the Facility successfully passing that test.;
- (d) for a Scheduled Facility containing an Electric Storage Resource where the Certified Reserve Capacity associated with the Electric Storage Resource was assigned in accordance with clause 4.11.1(bC):
 - i. observing the Facility operate at a level equivalent to the Required
 Level associated with the Electric Storage Resource, adjusted to
 the level of Capacity Credits currently associated with the Electric
 Storage Resource, during the Electric Storage Resource Obligation
 Intervals at least once as part of normal market operations as
 determined from Meter Data Submissions;
 - ii. subject to clause 4.25.2A, testing, in accordance with clause 4.25.9,
 the Facility's ability to operate at a level equivalent to its Required
 Level adjusted for the level of Capacity Credits currently held during
 the Electric Storage Resource Obligation Duration at least once and
 the Facility successfully passing that test; or
- (e) for a Semi Scheduled Facility containing an Electric Storage Resource
 where the Certified Reserve Capacity associated with the Electric Storage
 Resource was assigned in accordance with clause 4.11.1(bC):

- i. observing the Facility operate at a level equivalent to the Required
 Level associated with the Electric Storage Resource, adjusted to
 the level of Capacity Credits currently associated with the Electric
 Storage Resource, during the Electric Storage Resource Obligation
 Intervals at least once as part of normal market operations as
 determined from Meter Data Submissions;
- ii. subject to clause 4.25.2A, testing, in accordance with clause 4.25.9, the ability of the Facility to operate at a level equivalent to its

 Required Level adjusted for the level of Capacity Credits currently held during the Electric Storage Resource Obligation Duration at least once and the Facility successfully passing that test.
- 4.25.2A. A Market Participant for a Scheduled Facility containing an Electric Storage
 Resource and a Semi-Scheduled Facility containing an Electric Storage Resource
 may provide AEMO with meter data, recorded by Electric Storage Resource
 Metering, by 31 January for the purposes of testing the Facility in accordance with
 clause 4.25.2.

4.25.2B. AEMO must only:

- (a) subject a Scheduled Facility containing an Electric Storage Resource for a test under clause 4.25.2(d)(ii); or
- (b) subject a Semi-Scheduled Facility containing an Electric Storage Resource for a test under clause 4.25.2(e)(ii),

if the Market Participant for the Scheduled Facility or Semi-Scheduled Facility, as applicable, has not provided meter data, recorded by Electric Storage Resource Metering, for that Facility to AEMO in accordance with and by the time specified in, clause 4.25.2A or AEMO has determined that the Facility has not met its Required Level on the basis of the meter data provided.

- 4.25.2C. The Market Participant for a Facility containing an Electric Storage Resource that is tested by AEMO in accordance with clauses 4.25.2 or 4.25.4, must provide meter data, recorded by Electric Storage Resource Metering, for the Reserve Capacity Test period, to AEMO within two Business Days of the Reserve Capacity Test.
- 4.25.3. AEMO must not subject a Facility to more Reserve Capacity Tests than it considers are required to satisfy the verification requirements of this clause section 4.25.

Explanatory Note

Clause 4.25.3A is proposed to be amended as a consequence of Consequential Outages being removed from the Outages framework, and to correct an existing drafting error with respect to the reference to 'Opportunistic Outage', which is not a term used in the current (or proposed) Outages frameworks.

- 4.25.3A. AEMO must not subject a Facility to a Reserve Capacity Test if:
 - (a) that Facility is undergoing a <u>Scheduled Planned</u> Outage or Opportunistic Outage <u>Maintenance</u> which has been approved in accordance with clause 3.19, or
 - (b) the relevant Market Participant has advised AEMO of a Forced Outage or Consequential Outage for that Facility in accordance with clause 3.21.4; or
 - (c) that Facility is undergoing a Commissioning Test approved in accordance with clause 3.21A.
- 4.25.3B. If a Demand Side Programme fails a Reserve Capacity Test under clause 4.25.2(b)(ii) and is issued a Dispatch Instruction by AEMO to decrease its consumption to a level equivalent to its Required Level, adjusted to the level of Capacity Credits currently held, for not less than one Trading Interval prior to a second Reserve Capacity Test being undertaken in accordance with clause 4.25.4, then the activation shall be deemed to be the second Reserve Capacity Test.

Clause 4.25.4 is proposed to be amended to set out AEMO's obligations regarding the reduction of Capacity Credits where a storage facility or the storage component of a facility fails a Reserve Capacity Test.

- 4.25.4. Subject to clause 4.25.3B, if a Facility fails a Reserve Capacity Test requested by AEMO under clause 4.25.2, AEMO must re-test that Facility in accordance with clause 4.25.2, not earlier than 14 days and not later than 28 days after the first Reserve Capacity Test. If the Facility fails this second Reserve Capacity Test, then AEMO must, from the second Trading Day following the Scheduling Day on which AEMO determines that the second Reserve Capacity Test was failed:
 - (a) if the Reserve Capacity Test related to a generation system, reduce the number of Capacity Credits held by the relevant Market Participant for that Facility to reflect the maximum capabilities achieved in either Reserve Capacity Test performed (after adjusting these results to the equivalent values at a temperature of 41°C and allowing for the capability provided by operation on different types of fuels); or
 - (b) if the Reserve Capacity Test related to a Demand Side Programme or Interruptible Load, reduce the number of Capacity Credits held by the relevant Market Participant for that Facility to the maximum level of reduction achieved in either of the two Reserve Capacity Tests-; or
 - (c) if the Reserve Capacity Test related to a Facility containing an Electric Storage Resource:
 - for a Facility only containing an Electric Storage Resource, reduce
 the number of Capacity Credits held by the relevant Market
 Participant for that Electric Storage Resource; or

- ii. for a Facility containing an Electric Storage Resource:
 - if the Electric Storage Resource component has failed the test, reduce the number of Capacity Credits to reflect the higher average performance achieved over the Electric Storage Resource Obligation Duration in either Reserve Capacity Test (after adjusting these results to performance at a temperature of 41°C); or
 - if the Electric Storage Resource component has met its
 Electric Storage Resource Obligation, reduce the Capacity
 Credits for the component of the Facility that is not the
 Electric Storage Resource.
- 4.25.4A A Market Participant may apply to AEMO for a reduction in the number of Capacity Credits the Market Participant holds for a Facility.
- 4.25.4B. In order for an application under clause 4.25.4A to be assessed by AEMO, it must:
 - (a) be in writing;
 - (b) relate to a Facility for which AEMO has notified the Market Participant, in accordance with clause 4.13.14, of its determination that the need to maintain the Reserve Capacity Security for that Facility has ceased;
 - (c) detail the reasons for the reduction in the number of Capacity Credits; and
 - (cA) where the Facility contains an Electric Storage Resource, specify whether the reduction in the number of Capacity Credits relates to:
 - i. the Electric Storage Resource;
 - ii. the Facility other than the Electric Storage Resource; or
 - iii. the Facility and the Electric Storage Resource, in which case,
 specify the reduction in the number of Capacity Credits for each of
 the Facility and the Electric Storage Resource; and
 - (d) indicate whether the application relates only to the current Capacity Year or includes subsequent Capacity Years.
- 4.25.4C. Upon receiving an application under clause 4.25.4A, AEMO must, subject to clause 4.25.4CA:
 - (a) assess the application and any supporting documentation;
 - (b) within 10 Business Days of receiving the application inform the Market Participant of its decision whether to reduce the Capacity Credits and the reasons for its decision; and
 - (c) if applicable and in AEMO's sole discretion, reduce the amount of Capacity Credits held by the Market Participant in respect of the Facility to which the application relates.

Amendments made to clause 4.25.4CA for weekly settlement.

- 4.25.4CA.AEMO must not approve an application received under clause 4.25.4A if the reduction of Capacity Credits for the relevant Facility would result in the number of Capacity Credits for the Facility allocated by the relevant Market Participant in Capacity Credit Allocations for a Trading Month-Day exceeding the number of Capacity Credits for the Facility held for that Trading Month-Day by the Market Participant that are able to be traded bilaterally under the WEM Rules.
- 4.25.4D A Market Participant may not apply to AEMO for an increase in the number of Capacity Credits for a Facility during a Capacity Year if the Facility has had its Capacity Credits reduced in accordance with clause 4.25.4C for any part of that Capacity Year.

Explanatory Note

Clause 4.25.4E is amended to clarify that the Capacity Credit Refund to be made by a Market Participant for a voluntary reduction in Capacity Credits associated with a Demand Side Programme is to be paid by the Market Participant that effected that reduction. This manages an uncertainty which arose in the circumstance where a Demand Side Programme is transferred and the transferee effects the voluntary reduction in Capacity Credits associated with that Demand Side Programme.

- 4.25.4E. Where the Capacity Credits associated with a Demand Side Programme are reduced in accordance with clauses 4.25.4C or 4.25.4I the Market Participant, that the Demand Side Programme is currently registered to, must pay a refund of an amount equal to all Reserve Capacity payments associated with the reduced Capacity Credits minus the prorated amount of all Capacity Cost Refunds already paid by the Market Participant for the relevant Capacity Year to AEMO calculated in accordance with the provisions of section 4.26. AEMO must distribute any refunds collected under this clause 4.25.4E to Market Participants in accordance with clause 4.26.6.
- 4.25.4F. A Market Participant may not offer a Demand Side Programme for Supplementary Capacity if the Demand Side Programme has had its Capacity Credits reduced in accordance with clause 4.25.4C for any part of that Capacity Year.
- 4.25.5. In the event that the number of Capacity Credits held by a Market Participant is reduced during a Capacity Year in accordance with clause 4.25.4, then that Market Participant may request once prior to the end of the Capacity Year that AEMO perform a single re-test to be conducted during the seven days following that request.

Explanatory Note

New proposed clause 4.25.5A requires a Market Participant to provide meter data to AEMO and specifies the time by when it is to be provided, where the Market Participant has

requested a re-test of a Facility containing a storage component.

- 4.25.5A. A Market Participant that requests a re-test under clause 4.25.5 in respect of a

 Facility containing an Electric Storage Resource, must provide meter data,
 recorded by Electric Storage Resource Metering, for the re-test period to AEMO
 within two Business Days of the re-test under clause 4.25.5.
- 4.25.6. If AEMO receives a request for a Reserve Capacity re-test in accordance with clause 4.25.5, then AEMO must conduct such a re-test, and AEMO must set the number of Capacity Credits held by the relevant Market Participant for that Facility to reflect the maximum capabilities achieved in the re-test (after adjusting these results to the equivalent values at a temperature of 41°C and allowing for the capability provided by operation on different types of fuel), but not to exceed the number of Capacity Credits originally confirmed by AEMO for that Facility under clause 4.20 in respect of the relevant Reserve Capacity Cycle.
- 4.25.7. [Blank] For a Facility containing an Electric Storage Resource, AEMO must set the level of Capacity Credits under clause 4.25.6 for the Facility or the Electric Storage Resource component of the Facility to which the increase in the re-test relates.

Explanatory Note

New proposed replacement clause 4.25.8 sets out the requirements with respect to the level of Capacity Credits for a Facility containing a storage component following a re-test of the Facility.

4.25.8. [Blank]Where AEMO receives a request from a Market Participant for a re-test under clause 4.25.5 in respect of a Facility containing an Electric Storage Resource, AEMO must, following the re-test, set the number of Capacity Credits held by the Market Participant for the Facility to reflect the average achieved over the Electric Storage Resource Obligation Duration in the re-test under clause 4.25.5, based on the meter data provided by the Market Participant in accordance with clause 4.25.5A (after adjusting the results to performance at a temperature of 41°C).

Explanatory Note

Clause 4.25.9(h) is proposed to be amended as a consequential amendment resulting from the removal of Operating Instructions.

The amendments to clauses 4.25.9(f) and (h) are set out in the Tranche 2 Amending Rules.

- 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(d), 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) in the case of an Interruptible Load or a Demand Side Programme, give at least as much notice as is specified under clause 4.10.1(f)(v) to allow for arrangements to be made for the Facility to be triggered;
- (e) [Blank]
- (f) maintain adequate records of the Reserve Capacity Test to allow independent verification of the test results, <u>including the level of Injection or Withdrawal required by the Reserve Capacity Test</u>; and
- (g) [Blank]
- (h) issue an Operating Instruction to increase the Facility's output or decrease its consumption to a level specified by, or referred to in, the Operating Instruction.
- (h) notify the Market Participant of the time that the test must be performed
 and the level of Injection or Withdrawal required by the Reserve Capacity
 Test.

4.25.10. [Blank]

- 4.25.11. Every three months AEMO must publish details of:
 - (a) Facilities that have undergone a Reserve Capacity Test during the preceding three months; and
 - (b) whether any of those Reserve Capacity Tests were delayed and the reasons for the delay.
- 4.25.12. AEMO may use the results of Reserve Capacity Tests in respect of a Facility in assigning Certified Reserve Capacity and setting Reserve Capacity Obligation Quantities for the Facility for subsequent Reserve Capacity Cycles.
- 4.25.13. [Blank]
- 4.25.14. AEMO must document the procedure to be followed in performing Reserve Capacity Tests in a WEM Procedure.

4.25A. Verification Test for a Demand Side Programme

- 4.25A.1. In each Capacity Year each Market CustomerParticipant must undertake a Verification Test during the period specified in clause 4.10.1(f)(vi) for each Demand Side Programme registered to the Market CustomerParticipant. Each test must be conducted in accordance with the WEM Procedure specified in clause 4.25.14 and be carried out:
 - (a) within 20 Business Days of registration, as notified by AEMO under clause 2.31.6, of the Demand Side Programme, if applicable; or
 - (b) between 1 October and 30 November.

- 4.25A.2. To undertake a Verification Test a Market <u>CustomerParticipant</u> must activate the Demand Side Programme and provide evidence satisfactory to AEMO of the Trading Intervals during which the Verification Test was conducted.
- 4.25A.3. A Demand Side Programme will be deemed to have failed the Verification Test unless a reduction in demand equal to at least 10% of the Capacity Credits, when measured against the Demand Side Programme's Relevant Demand determined under clause 4.26.2CA, is identified from the Demand Side Programme Load associated with that Demand Side Programme.
- 4.25A.4. Where a Demand Side Programme fails a Verification Test AEMO must reduce the Capacity Credits assigned to the Demand Side Programme to zero from the second Trading Day following the Scheduling Day on which AEMO determines that the Verification Test was failed under clause 4.25A.3.
- 4.25A.5. Where a Demand Side Programme fails a Verification Test the relevant Market Customer Participant may request that a second Verification Test be undertaken. If the Demand Side Programme fails the second Verification Test then the Capacity Credits assigned to the Demand Side Programme are to remain at zero until the end of the relevant Capacity Year.

4.26. Financial Implications of Failure to Satisfy Reserve Capacity Obligations

Explanatory Note

Amendments made to clause 4.26.1 for weekly settlement.

- 4.26.1. If a Market Participant holding Capacity Credits associated with a Facility fails to comply with its Reserve Capacity Obligations applicable to any given Trading Interval then the Market Participant must pay a refund to AEMO calculated in accordance with the following provisions.
 - (a) The Trading Interval Refund Rate for a Facility f in the Trading Interval t is determined as follows:

Trading Interval Refund Rate(f,t)=RF(f,t) × Y(f,t)

where:

- Trading Interval Refund Rate (f,t) is the Trading Interval Refund
 Rate for a Facility f in the Trading Interval t;
- ii. RF(f,t) is the refund factor for a Facility f in the Trading Interval t and is calculated in accordance with clause 4.26.1(c); and
- iii. Y(f,t) is the per Trading Intervalinterval capacity price associated with a Facility f in the Trading Interval t and is determined in accordance with clause 4.26.1(b).
- (b) For a Facility f in the Trading Interval t, Y is determined as follows:

- i. where Facility f is a <u>SemiNon-Scheduled Generator Facility</u>, then <u>unless clause 4.26.1(b)(iiD) applies</u>, Y equals zero if AEMO has determined that in Trading Interval t the <u>NonSemi</u>-Scheduled <u>Generator Facility</u> is in Commercial Operation under clause 4.13.10B and one of the following applies:
 - the NonSemi-Scheduled Generator Facility has operated at a level equivalent to its Required Level in at least two Trading Intervals, adjusted to 100 percent of the level of Capacity Credits currently held; or
 - 2. the Market Participant has provided AEMO with a report under clause 4.13.10C specifying that the Facility can operate at a level equivalent to its Required Level, adjusted to 100 percent of the level of Capacity Credits currently held;
 - the Semi-Scheduled Facility that contains an Electric
 Storage Resource has operated at a level equivalent to the lower of:
 - a. its Declared Sent Out Capacity; and
 - b. the sum of:
 - A. the Capacity Credits associated with the Electric Storage Resource; and
 - B. the value, expressed in MW as a sent out value, that equals the five percent probability of exceedance of expected generation output for the Facility, submitted to AEMO in the report described in clause 4.10.3A(b);
- ii. where Facility f is a Demand Side Programme, Y equals the Facility Monthly Reserve Capacity Price for the Facility multiplied by 12 then divided by 400;
- iiA. where Facility f is an Intermittent Load, Y equals the Reserve Capacity Price divided by 12 then divided by the number of Trading Intervals in the relevant Trading Month the Trading Interval t falls in;
- where Facility f contains only an Electric Storage Resource, Y
 equals the Facility Monthly Reserve Capacity Price for the Facility
 multiplied by 12, then divided by 2920;
- iiC. where Facility f is a Scheduled Facility containing an Electric Storage Resource, Y equals:
 - the number of Capacity Credits associated with the Electric
 Storage Resource component for when a Reserve Capacity
 Obligation applies, divided by the total Capacity Credits
 currently held, then multiplied by the Facility Monthly

- Reserve Capacity Price for the Facility multiplied by 12 then divided by 2920; plus
- 2. the number of Capacity Credits not associated with the Electric Storage Resource component of the Facility, divided by the total Capacity Credits currently held for the Facility, then multiplied by the Facility Monthly Reserve Capacity Price for the Facility multiplied by 12 then divided by the number of Trading Intervals in the relevant Trading Month the Trading Interval t falls in;
- iiD. where Facility f is a Semi-Scheduled Facility containing an Electric

 Storage Resource and has satisfied the requirements in

 accordance with 4.26.1(b)(i), Y equals the number of Capacity

 Credits associated with the Electric Storage Resource component
 of the Facility for when a Reserve Capacity Obligation applies,
 divided by the total Capacity Credits currently held for the Facility,
 then multiplied by the Facility Monthly Reserve Capacity Price for
 the Facility multiplied by 12 then divided by 2920; and
- iii. with the exception of clauses 4.26.1(b)(i), 4.26.1(b)(ii), and 4.26.1(b)(iiA), 4.26.1(b)(iiB), 4.26.1(b)(iiC) and 4.26.1(b)(iiD), for a Facility f in the Trading Interval t, Y equals:
 - the Facility Monthly Reserve Capacity Price for the Facility; divided by
 - 2. the number of Trading Intervals in the relevant Trading Month the Trading Interval t falls in.
- (c) The refund factor RF(f,t) for a Facility f in the Trading Interval t is the lesser of:
 - i. six; and
 - ii. the greater of the dynamic refund factor RF dynamic(t) as determined under clause 4.26.1(d) and the minimum refund factor RF floor(f,t) as determined under clauses 4.26.1(f) or 4.26.1(g) as appropriate.
- (d) The dynamic refund factor RF dynamic(t) in the Trading Interval t is determined as follows:

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

where:

 i. <u>f∈F denotes all Facilities f</u> F is the set of Facilities for which Market Participants hold Capacity Credits in the Trading Interval t and f is a Facility within that set; and

- ii. Spare(f,t) is the available capacity related to the Capacity Credits <u>currently held</u> of the Facility f, which is not dispatched in the Trading Interval t determined in accordance with clause 4.26.1(e).
- (e) For a Facility f in the Trading Interval t, Spare(f,t) is determined as follows:
 - i. where Facility f is a Scheduled Generator Facility, the greater of zero and:
 - the MW quantity of Capacity Credits <u>currently held</u> for Facility f in Trading Interval t; less
 - 2. the MW quantity of Outage for Facility f in Trading Interval t as recorded determined under in accordance with clause 3.21.67.13.1A(b); less
 - 3. the Sent Out Metered Schedule for Facility f in Trading Interval t multiplied by two so as to be a MW quantity;
 - iA. where Facility f is a Scheduled Facility and contains only an Electric

 Storage Resource, zero for the Trading Intervals for which the

 Facility does not have a Reserve Capacity Obligation Quantity; or
 - the MW quantity of the Capacity Credits currently held by
 the Facility less the MW quantity of Outage for Facility f in
 Trading Interval t as determined in accordance with clause
 3.26.1; less
 - the Sent Out Metered Schedule for Facility f in Trading
 Interval t multiplied by two so as to be a MW quantity;
 - ii. where Facility f is a <u>Semi-Scheduled Facility or a Non-Scheduled</u> <u>GeneratorFacility</u>, zero; and
 - iii. where Facility f is a Demand Side Programme which has a Reserve Capacity Obligation Quantity in the Trading Interval t, Spare(f,t) is equal to:

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

where:

- 1. [Blank]
- 2. RCOQ(f,t) is the Reserve Capacity Obligation for the Demand Side Programme f in the Trading Interval t;
- DSP Load(f,t) is the Demand Side Programme Load for the Demand Side Programme f in the Trading Interval t as determined under clause 6.16.2 multiplied by two so as to be a MW quantity; and
- DSP MinLoad(f,t) is the sum of the Minimum Consumption of each Associated Load of the Demand Side Programme f in MW in the Trading Interval t.

(f) Subject to clause 4.26.1(g), the minimum refund factor RF floor(f,t) in the Trading Interval t is determined as follows:

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

where:

i. Dispatchable(f,t) for a Facility f in the Trading Interval t is its portion of capacity which is not subject to a Forced Outage over the 4320 previous Trading Intervals pt where Capacity Credits are held in respect of that Facility f in any of those intervals, prior to and including the Trading Interval t and is determined as follows:

$$\mathsf{Dispatchable}(\mathsf{f},\mathsf{t}) = 1 - (\frac{\sum_{\mathsf{pt} \in \mathsf{PT}} \mathsf{FO}(\mathsf{f},\mathsf{pt})}{\sum_{\mathsf{pt} \in \mathsf{PT}} \mathsf{CC}(\mathsf{f},\mathsf{pt})})$$

where:

- 1. PT is the set of 4320 Trading Intervals immediately prior to and including the Trading Interval t and pt is a Trading Interval within that set;
- FO(f,pt) is the quantity of Forced Outage for a Facility f in the Trading Interval pt, as recorded in accordance with clause 7.13.1A(b); and

Explanatory Note

The following amendment is to clarify the operation of the equation where it could have been divided by zero.

- 3. CC(f,pt) is the number of Capacity Credits a Market
 Participant holds for Facility f in the Trading Interval pt<u>only</u>
 when Capacity Credits are greater than zero; and
- (g) RF floor(f,t) is equal to one in the Trading Interval t for a Facility f to which any of the following applies:
 - i. the Facility is a Demand Side Programme;
 - ii. [Blank]
 - iii. the Facility is an a Semi-Scheduled Facility or Non-Scheduled

 Facility Intermittent Generator to which clauses 4.26.1A(a)(ii)(2) or

 4.26.1A(a)(ii)(3) applies; or
 - iv. the Facility is a Scheduled <u>Facility</u>, <u>Semi-Scheduled Facility</u> or Non-Scheduled <u>Generator-Facility</u> to which clauses 4.26.1A(a)(ii)(4) or 4.26.1A(a)(ii)(5) applies.
- 4.26.1A. AEMO must calculate the Reserve Capacity Deficit refund for each Facility ("Facility Reserve Capacity Deficit Refund") for each Trading Interval t as the lesser of—
 - (a) the product of—

- the Trading Interval Refund Rate applicable to the Facility in Trading Interval t; and
- ii. the Reserve Capacity Deficit in Trading Interval t,

where the Reserve Capacity Deficit for a Facility is equal to whichever of the following applies—

- if the Facility is required to have submitted a Forced Outage under clause 3.21.4, or is a Scheduled Generator Facility that has taken a Refund Payable Planned Outage, the total Forced Outage and Refund Payable Planned Outage in that Trading Interval measured in MW;
- 2. if the Facility is an Intermittent Generator which is not considered by AEMO to have been in Commercial Operation for the purposes of clause 4.26.1(b), the number of Capacity Credits associated with the relevant Intermittent Generator;
- 3. if the Facility is an Intermittent Generator which is considered by AEMO to have been in Commercial Operation for the purposes of clause 4.26.1(b), but for which Y does not equal zero in clause 4.26.1(b), the minimum of
 - i. RL- (2 x Max2); or
 - ii. RL—A

where-

RL is the Required Level, adjusted to 100 percent of the level of Capacity Credits currently held;

Max2 is the second highest value of the output for the Facility (MWh) achieved during for a Trading Interval during the Trading Month the Trading Interval t falls in, 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 Month, where this value must be set equal to or greater than the Max2 applied by AEMO for the previous Trading Month; and

A is the level of output (in MW) detailed in the most recent report provided by the Market Participant for the Facility under clause 4.13.10C,

4. if, from the Trading Day commencing on 30 November of Year 3 for Reserve Capacity Cycles up to and including 2009 or 1 October of Year 3 for Reserve Capacity Cycles from 2010 onwards, the Facility is undergoing an approved

Commissioning Test and, for the purposes of permission sought under clause 3.21A.2, is a new generating system referred to in clause 3.21A.2(b), the number of Capacity Credits associated with the relevant Facility;

- 5. if, from the Trading Day commencing on 30 November of Year 3 for Reserve Capacity Cycles up to and including 2009 or 1 October of Year 3 for Reserve Capacity Cycles from 2010 onwards, the Facility is not yet undergoing an approved Commissioning Test and, for the purposes of permission sought under clause 3.21A.2, is a new generating system referred to in clause 3.21A.2(b), the number of Capacity Credits associated with the relevant Facility; or
- 6. if the Facility is a Demand Side Programme— $\max (0, RCOQ \max(0, (RD MinLoad)))$ where—

RCOQ is the Reserve Capacity Obligation Quantity determined for the Facility under clause 4.12.4;

RD is the Relevant Demand for the Facility determined in accordance with clause 4.26.2CA; and

MinLoad is the sum of the MW quantities of Minimum Consumption for the Facility's Associated Loads; 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.
- 4.26.1B. AEMO must calculate the Generation Reserve Capacity Deficit Refund for each Market Participant for each Trading Interval as the sum of the Facility Reserve Capacity Deficit Refunds for the Trading Interval for each Facility registered to the relevant Market Participant, excluding any registered Demand Side Programmes.
- 4.26.1C. Where AEMO has recorded under clause 7.13.1A(b) the Planned Outage of a Scheduled Generator Facility in a Trading Interval, 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 Trading Interval falls, is less than 8400—a Refund Exempt Planned Outage; or
 - (b) otherwise—a Refund Payable Planned Outage.

Explanatory Note

New proposed clause 4.26.1CA sets out the requirements for classifying Planned Outages

of storage facilities or Facilities containing a storage component as liable or exempt from refunds.

- 4.26.1CA.Where AEMO has recorded under clause [7.13.1A(b)] the Planned Outage of an Electric Storage Resource component of a Scheduled Facility or a Semi-Scheduled Facility, or a Facility that is solely an Electric Storage Resource, in an Electric Storage Resource Obligation Interval, 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.
- 4.26.1D. The Economic Regulation Authority, in consultation with AEMO, must undertake a review, to be completed by 31 December 2020 of whether the limit for the Refund Exempt Planned Outage Count referred to in clause 4.26.1C should be modified to better address the Wholesale Market Objectives. The review must include, at a minimum, an assessment of—
 - variations in Planned Outage rates and Forced Outage rates of Scheduled Generators Facilities since the introduction of the limit on Refund Exempt Planned Outages;
 - (b) for each Scheduled-Generator Facility and each year since the introduction of the limit on Refund Exempt Planned Outages—
 - the number of Equivalent Planned Outage Hours for which Facility Reserve Capacity Deficit Refunds were payable; and
 - ii. the total amount of Facility Reserve Capacity Deficit Refunds associated with Refund Payable Planned Outages; and
 - (c) the level of participation by Scheduled Generators Facilities in the Reserve Capacity Mechanism in each year since the introduction of the limit on Refund Exempt Planned Outages; and
 - (d) changes in the mix of Scheduled-Generators Facilities that have participated in the Reserve Capacity Mechanism in each year since the introduction of the limit on Refund Exempt Planned Outages.
- 4.26.1E. If the Economic Regulation Authority recommends changes in the review in clause 4.26.1D, the Economic Regulation Authority must submit a Rule Change Proposal to implement those changes.

Explanatory Note

New proposed clause 4.26.1F is a 'placeholder' regarding the requirement for a Market Participant to submit a Forced Outage where a Scheduled Facility (with an RCOQ greater than zero) has not complied with a Dispatch Instruction.

- 4.26.1F. Where a Scheduled Facility, that has a Reserve Capacity Obligation Quantity greater than zero for a Dispatch Interval, did not comply with the Dispatch Target in a Dispatch Instruction for that Dispatch Interval, the Market Participant for the Facility must, as soon as practicable at the end of the Dispatch Interval, or in any event, within 24 hours of the end of the Dispatch Interval:
 - (a) submit a Forced Outage in accordance with section 3.21; and
 - (b) the quantity of the Forced Outage to be submitted must be equal to the difference between the Injection of the Facility for the Dispatch Interval and the Dispatch Target.
- 4.26.2. [Blank]AEMO must determine the shortfall ("Net Offer Shortfall") in Reserve

 Capacity supplied by each Market Participant p holding Capacity Credits

 associated with a generation system in each Trading Interval t as:

NetOfferShortfall(p,t)

= Max(0, Min(RCOQ(p,t), OUTA(p,t))

- Min(CAPASTEM(p,t), CAPART(p,t)))

Where:

(a) RCOQ(p,t) for Market Participant p and Trading Interval t is equal to the minimum of RCOQ(p,DI) across the Dispatch Intervals in the Trading Interval:

 $RCOQ(p, t) = Min(RCOQ(p, DI) \forall DI in t)$

Where:

RCOQ(p, DI) for Market Participant p and Dispatch Interval DI is equal to the sum of RCOQ(f,DI) for all of Market Participant p's Registered Facilities.

$$\frac{RCOQ(p,DI) = \sum_{f \in Facilities(p,DI)} RCOQ(f,DI)}{}$$

Where:

<u>Facilities(p, DI)</u> is the set of Registered Facilities registered to Market Participant p in Dispatch Interval DI.

RCOQ(f, DI) is the Reserve Capacity Obligation Quantity for Registered Facility f in Dispatch Interval DI.

(b) OUTA(p,t) is the minimum of OUTA(p,DI) across the Dispatch Intervals in the Trading Interval.

 $OUTA(p, t) = Min(OUTA(p, DI) \forall DI in t)$

Where:

<u>OUTA(p, DI)</u> is the sum over the Market Participant's Registered Facilities of the lower of:

i. RCOQ(f,DI); and

<u>ii.</u> the lowest Remaining Available Capacity for energy for the Registered Facility in the Dispatch Interval under any Outage.

$$\underbrace{\text{OUTA}(p, DI) = \sum_{\text{f} \in \text{Facilities}(p, DI)}}_{\text{f} \in \text{Facilities}(p, DI)}$$

OUTA(f, DI)

= Min(RCOO(f, DI), Min(OutageAvail(f, DI, o) \forall o in Outages))

Where:

<u>Outages is the set of all Outages for Registered Facility f which includes Dispatch Interval DI.</u>

OutageAvail(f, DI, o) is the Remaining Available Capacity for energy for Registered Facility f in Dispatch Interval DI under Outage o.

(c) CAPART(p,t) is the minimum of CAPART(p,DI) for all Dispatch Intervals in Trading Interval t.

 $CAPART(p,t) = Min(CAPART(p,DI) \forall DI in t)$

Where:

<u>CAPART(p,DI)</u> is the sum over the Market Participant's Registered Facilities of CAPART(f,DI).

$$\frac{\text{CAPART}(p, DI) = \sum_{f \in \text{Facilities}(p, DI)} \text{CAPART}(f, DI)}{\text{CAPART}(f, DI)}$$

Where:

<u>CAPART(f,DI)</u> is the MW quantity of energy made available from that <u>Registered Facility in the Real-Time Market for that Dispatch Interval.</u>

CAPART(f,DI) = OfferAvail(f,DI) + BidAvail(f,DI)

Where:

OfferAvail(f, DI) is:

i. for a Demand Side Programme, zero; and

ii. for a Registered Facility other than a Demand Side
Programme, the total MW quantity included in RealTime Market Offers for energy from Registered
Facility f in Dispatch Interval DI (whether offered as
Available Capacity or In-Service Capacity) that were
used in the final Dispatch Schedule for that Dispatch
Interval.

BidAvail(f, DI) is:

i. for a Demand Side Programme, the total MW guantity included in Real-Time Market Bids for

energy from Registered Facility f in Dispatch Interval
DI (whether offered as Available Capacity or InService Capacity) that were used in the final
Dispatch Schedule for that Dispatch Interval; and

ii. for a Registered Facility other than a Demand Side Programme, zero.

CAPASTEM(p,t)

$$= \frac{\left(\frac{NCP(p,t) + UnclearedSTEMOffers(p,t) + ClearedSTEMBids(p,t)}{LF(p,t) \times \frac{30}{60}h}\right)}{LF(p,t) \times \frac{30}{60}h}$$
+ RCOODSP(p,t) + Max(0, OUTA(p,t) - OUTABS(p,t))

Where:

<u>LF(p,t)</u> is the capacity obligation weighted average of the Loss Factors for the Market Participant's Registered Facilities which are not Demand Side Programmes.

$$\frac{LF(p,t) = \frac{\sum_{f \in STEMFacilities(p,t)} LossFactor(f,t) * RCOQ(f,t)}{\sum_{f \in STEMFacilities(p,t)} RCOQ(f,t)}$$

Where:

<u>STEMFacilities(p, t) is the set of Registered Facilities registered to Market Participant p in Trading Interval t other than Demand Side Programmes.</u>

<u>LossFactor(f, t)</u> is the <u>Loss Factor for Registered Facility f in Trading Interval t.</u>

RCOQ(f,t) is the Reserve Capacity Obligation Quantity for Registered Facility f in Trading Interval t.

NCP(p,t)-is Market Participant p's Net Contract Position for Trading Interval t in MWh.

<u>UnclearedSTEMOffers(p, t) is the total MWh quantity covered by the STEM Offers which were not scheduled in the relevant STEM Auction, determined by AEMO for that Market Participant under section 6.9 for Trading Interval t.</u>

ClearedSTEMBids(p,t) is the total MWh quantity covered by the STEM

Bids which were scheduled in the relevant STEM Auction, determined by

AEMO for that Market Participant under section 6.9 for Trading Interval t.

RCOQDSP(p,t) is the sum of RCOQ(f,t) over the Demand Side Programmes registered to Market Participant p in Trading Interval t.

OUTABS(p,t) is the minimum of OUTABS(p,DI) for all Dispatch Intervals in Trading Interval t.

 $\frac{\text{OUTABS}(p, t) = \text{Min}(\text{OUTABS}(p, \text{DI}) \forall \text{ DI in t})}{\text{OUTABS}(p, \text{DI})}$

Where:

OUTABS(p,DI) is the sum of OUTABS(f,DI) for all the Market Participant's Registered Facilities

$$\underbrace{\text{OUTABS}(p, DI)}_{\text{f} \in \text{Facilities}(p, DI)} \underbrace{\text{OUTABS}(f, DI)}_{\text{f} \in \text{Facilities}(p, DI)}$$

OUTABS(f, DI)

= Min(RCOQ(f, DI), Min(OutageAvail(f, DI, o)∀o in OutagesBS))

OutagesBS is the set of all Outages for Registered Facility f which include Dispatch Interval DI as they existed at the STEM Submission Cutoff.

4.26.2A. [Blank] All values in clause 4.26.2 which are required to be corrected for Loss Factor adjustments so as to be a sent out quantity are to be adjusted based on an assumed Loss Factor of 1.

Explanatory Note

Clause 4.26.2 is deleted and replaced with clause 4.26.2AA. Clause 4.26.2 has already been published as part of Tranche 2 Amending Rules, including to cater for weekly settlement. Incremental changes have been made to bring this clause in line with the way capacity availability will be declared in the new market in order to replicate the capacity refund outcomes in the current market. The clause has also been set out in a different form for clarity.

The numbering of this replacement clause, namely clause 4.26.2AA, is a placeholder numbering only to show the intent of the amendments and will be revised in the final version of these Amending Rules in accordance with the usual conventions.

4.26.2AA.1. Subject to clause 4.26.2A, AEMO must determine the shortfall ("Net Offer Shortfall") in Reserve Capacity supplied by each Market Participant p holding Capacity Credits, with the exception of Capacity Credits refunds covered by 4.26.2D and 4.28A.1, in each Trading Interval t in accordance with the rest of this clause 4.26.2AA.

4.26.2AA.2. The Net Offer Shortfall for Market Participant p in Trading Interval t is:

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

Where:

(a) RTMSF(p,t) is the shortfall in the Real-Time Market for Market

Participant p in Trading Interval t, which is equal to the average of

RTMSF(p,DI) for all Dispatch Intervals in Trading Interval t as

calculated in accordance with clause 4.26.2AA.3; and

- (b) STEMSF(p,t) is the shortfall in STEM for Market Participant p in Trading Interval t as calculated in accordance with clause 4.26.2AA.7.
- 4.26.2AA.3. The shortfall in the Real-Time Market for Market Participant p in Trading Interval t is:

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

Where:

- (a) RTMSF(p,DI) is for Market Participant p in Dispatch Interval DI[, the sum of RTMSF(f,DI) for each of the Market Participant's Registered Facilities f in Dispatch Interval DI] as calculated in accordance with clause 4.26.2AA.4; and
- (b) DI in t denotes all Dispatch Intervals in Trading Interval t.
- 4.26.2AA.4. RTMSF(p,DI) for Market Participant p in Dispatch Interval DI is:

$$\underline{RTMSF(p,DI)} = \sum_{f \in Facilities(p,DI)} \underline{RTMSF(f,DI)}$$

Where:

- (a) RTMSF(f,DI) is the shortfall in the Real-Time Market for Registered Facility f in Dispatch Interval DI as calculated in accordance with clause 4.26.2AA.5; and
- (b) f∈Facilities(p,DI) denotes all Registered Facilities for which Market Participant p holds Capacity Credits in Dispatch Interval DI.
- 4.26.2AA.5. RTMSF(f,DI) for Registered Facility f in Dispatch Interval DI is:

$$\underline{RTMSF(f,DI)} = \underline{Max} \Big(0, \underline{RTMREQ(f,DI)} - \Big(\underline{OfferAvail(f,DI)} + \underline{BidAvail(f,DI)} \Big) \Big)$$

Where:

- (a) RTMREQ(f,DI) is the higher of RCOQ(f,DI) (which RCOQ(f,DI) is the Reserve Capacity Obligation Quantity for Registered Facility f in Dispatch Interval DI) and the lowest Remaining Available Capacity for energy for Registered Facility f in Dispatch Interval DI under any Outage, as calculated in accordance with clause 4.26.2AA.6;
- (b) OfferAvail(f,DI) for Registered Facility f in Dispatch Interval DI is:
 - i. for a Demand Side Programme, zero; and
 - ii. for a Registered Facility other than a Demand Side
 Programme, the total MW quantity included in Real-Time
 Market Offers for energy from Registered Facility f in
 Dispatch Interval DI (whether offered as Available Capacity
 or In-Service Capacity) that were used in the final Dispatch

Schedule for that Dispatch Interval less Not In-Service Capacity; and

- (c) BidAvail(f,DI) for Registered Facility f in Dispatch Interval DI is:
 - i. for a Demand Side Programme, the total MW quantity
 included in Real-Time Market Bids for energy from
 Registered Facility f in Dispatch Interval DI (whether offered as Available Capacity or In-Service Capacity) that were used in the final Dispatch Schedule for that Dispatch Interval; and
 - ii. for a Registered Facility other than a Demand Side Programme, zero.

4.26.2AA.6. RTMREQ(f,DI) for Registered Facility f in Dispatch Interval DI under any Outage is:

 $\underline{RTMREQ(f,DI) = Max(RCOQ(f,DI),Min(OutageAvail(f,DI,o)\forall o in Outages))}$

Where:

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

4.26.2AA.7. STEMSF is the shortfall in STEM for Market Participant p in Trading Interval t calculated as:

STEMSF(p,t) = Max(0, STEMREQ(p,t) - CAPASTEM(p,t))

Where:

- (a) STEMREQ(p,t) is for Market Participant p in Trading Interval t, the average of STEMREQ(p,DI) for Market Participant p for all Dispatch Intervals in Trading Interval t calculated in accordance with clause 4.26.2AA.8;
- (b) CAPASTEM(p,t) for Market Participant p in Trading Interval t is calculated in accordance with clause 4.26.2AA.11.

4.26.2AA.8. STEMREQ(p,t) for Market Participant p in Trading Interval t is:

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

Where:

(a) STEMREQ(p,DI) is for Market Participant p in Dispatch Interval DI
the sum of STEMREQ(f,DI) for all the Market Participant p's
Registered Facilities f other than Demand Side Programmes in

<u>Dispatch Interval DI calculated in accordance with clause</u> 4.26.2AA.9; and

(b) DI in t denotes all Dispatch Intervals in Trading Interval t.

4.26.2AA.9. STEMREQ(p,DI) for Market Participant p in Dispatch Interval DI for Market

Participant p's Registered Facilities other than Demand Side Programmes is:

$$\underline{STEMREQ(p,DI)} = \underbrace{\sum_{f \in STEMFacilities(p,DI)} STEMREQ(f,DI)}$$

Where:

- (a) STEMREQ(f,DI) for Registered Facility f other than Demand Side

 Programmes in Dispatch Interval DI is calculated in accordance with clause 4.26.2AA.10; and
- (b) f∈STEMFacilities(p,DI) denotes all Registered Facilities other than Demand Side Programmes registered to Market Participant p in Dispatch Interval DI.
- 4.26.2AA.10. STEMREQ(f,DI) for Registered Facility f other than Demand Side Programmes in Dispatch Interval DI is:

 $\underline{STEMREQ(f,DI) = Min(RCOQ(f,DI), Min(OutageAvail(f,DI,o) \forall o in OutagesBS))}$

Where:

- (a) RCOQ(f,DI) is the Reserve Capacity Obligation Quantity for Registered Facility f in Dispatch Interval DI;
- (b) OutageAvail(f,DI,o) is the Remaining Available Capacity for energy for Registered Facility f in Dispatch Interval DI under Outage o; and
- (c) OutagesBS is the set of all Outages for Registered Facility f which include Dispatch Interval DI as they existed at the Bilateral Submission Cutoff.
- 4.26.2AA.11. CAPASTEM(p,t) for Market Participant p in Trading Interval t is

 STEMREQ(p,t) where the STEM Auction has been suspended by AEMO in accordance with section 6.10 or where STEMREQ(p,t)=0. Otherwise is:

CAPASTEM(p,t)

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

Where:

(a) STEMREQ(p,t) is for Market Participant p in Trading Interval t, the average of STEMREQ(p,DI) for Market Participant p for all Dispatch Intervals in Trading Interval t calculated in accordance with clause 4.26.2AA.8;

- (b) NCP(p,t) is Market Participant p's Net Contract Position for Trading Interval t in MWh;
- (c) UnclearedSTEMOffers(p,t) is the total MWh quantity covered by the STEM Offers which were not scheduled in the relevant STEM Auction, determined by AEMO for that Market Participant under section 6.9 for Trading Interval t;
- (d) ClearedSTEMBids(p,t) is the total MWh quantity covered by the

 STEM Bids which were scheduled in the relevant STEM Auction,

 determined by AEMO for that Market Participant under section 6.9 for

 Trading Interval t; and
- (e) LF(p,t) is the average of the capacity obligation weighted average of the Loss Factors for the Market Participant p's Registered Facilities which are not Demand Side Programmes for all Dispatch Intervals in Trading Interval t calculated in accordance with clause 4.26.2AA.12.
- 4.26.2AA.12. LF(p,t) for Market Participant p's Registered Facilities which are not Demand Side Programmes for Trading Interval t is:

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

Where:

- (a) LF(p,DI) is the capacity obligation weighted average of the Loss

 Factors for the Market Participant p's Registered Facilities which are
 not Demand Side Programmes in Dispatch Interval DI calculated in
 accordance with clause 4.26.2AA.13; and
- (b) DI in t denotes all Dispatch Intervals in Trading Interval t.
- 4.26.2AA.13. LF(p,DI) for Market Participant p's Registered Facilities which are not Demand Side Programmes in Dispatch Interval DI is:

$$\underline{LF(p,DI)} = \frac{\sum_{f \in STEMFacilities(p,DI)} LossFactor(f,DI) * RCOQ(f,DI)}{\sum_{f \in STEMFacilities(p,DI)} RCOQ(f,DI)}$$

Where:

- (a) LossFactor(f,DI) is the Loss Factor for Registered Facility f in Dispatch Interval DI;
- (b) RCOQ(f,DI) is the Reserve Capacity Obligation Quantity for Registered Facility f in Dispatch Interval DI; and
- (c) f∈STEMFacilities(p,DI) denotes all Registered Facilities other than Demand Side Programmes registered to Market Participant p in Dispatch Interval DI.

Explanatory Note

The proposed amendments to clause 4.26.2A forms part of the Tranche 2 Amending Rules.

- 4.26.2A. Clause 4.26.2 does not apply to any generation systems associated with an Intermittent Load. All values in clause 4.26.2 which are required to be corrected for Loss Factor adjustments so as to be a sent out quantity are to be adjusted based on an assumed Loss Factor of 1.
- 4.26.2B. AEMO is to set the factor described in the definition of RCOQ(p,t) in clause 4.26.2 to equal one in all situations except for Scheduled Generators and Non-Scheduled Generators with Loss Factors less than one, in which case the factor must equal the Facility's Loss Factor. [Blank]
- 4.26.2C. [Blank]
- 4.26.2CA. The Relevant Demand of a Demand Side Programme for a Trading Day d in a Capacity Year is the lesser of:
 - (a) a value determined for the Demand Side Programme using the methodology set out in Appendix 10; and
 - (b) the sum of Individual Reserve Capacity Requirement Contributions of the Associated Loads of the Demand Side Programme for the Trading Month in which Trading Day d falls.
- 4.26.2CB. For the purposes of step 2(c) of Appendix 10:
 - (a) a Market <u>CustomerParticipant</u> may submit a Consumption Deviation Application to AEMO in accordance with the WEM Procedure referred to in clause 4.26.2CE, in respect of an Associated Load for the previous Capacity Year, if:
 - i. the level of consumption of the Associated Load was affected in a Trading Interval; and
 - ii. the Market <u>CustomerParticipant</u> considers that the deviation in the level of consumption was due to:
 - 1. a request received from AEMO; or
 - 2. a maintenance event; and
 - (b) AEMO must accept or reject a Consumption Deviation Application submitted under clause 4.26.2CB(a) by the time specified in clause 4.26.2CG.
- 4.26.2CC. AEMO may charge an Application Fee to cover its costs of requesting clarification or further information of any aspect of a Consumption Deviation Application in accordance with clause 4.26.2CF.
- 4.26.2CD. A Consumption Deviation Application submitted under clause 4.26.2CB(a) must:
 - (a) subject to clause 4.26.2CH, be submitted as soon as practicable but, in any event, on or before 31 October in the Capacity Year to which the Relevant Demand applies; and

- (b) contain, or be accompanied by, the information specified in the WEM Procedure referred to in clause 4.26.2CE.
- 4.26.2CE. AEMO must specify the following matters in a WEM Procedure:
 - (a) the process that a Market <u>CustomerParticipant</u> must follow when submitting a Consumption Deviation Application for an Associated Load under clause 4.26.2CB(a);
 - (b) the information and supporting evidence that a Market <u>CustomerParticipant</u> must provide in its Consumption Deviation Application submitted under clause 4.26.2CB(a);
 - (c) the process that AEMO must follow when it receives a Consumption Deviation Application submitted under clause 4.26.2CB(a);
 - the criteria that AEMO must consider when deciding whether to accept or reject a Consumption Deviation Application submitted under clause 4.26.2CB(a); and
 - (e) for the purposes of step 2(c) of Appendix 10, the process that AEMO must follow when estimating what the consumption of an Associated Load would have been if it had not been affected by the matters set out in the Consumption Deviation Application.
- 4.26.2CF. If it considers it reasonably necessary to assess the Consumption Deviation Application, AEMO may request clarification or further information of any aspect of the Consumption Deviation Application submitted under clause 4.26.2CB(a). Any clarification or information received is deemed to be part of the Consumption Deviation Application.
- 4.26.2CG. AEMO must accept or reject a Consumption Deviation Application submitted by a Market Customer Participant in accordance with clause 4.26.2CB(a) within 10 Business Days of the later of:
 - (a) receipt of the Consumption Deviation Application; and
 - (b) receipt of any clarification or information provided under clause 4.26.2CF.
- 4.26.2CH. A Consumption Deviation Application for a Load that was first associated with a Demand Side Programme under clause 2.29.5G, for the Market CustomerParticipant submitting the Consumption Deviation Application, after the date and time 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.
- 4.26.2D. AEMO must determine the capacity shortfall in Reserve Capacity ("Capacity Shortfall") supplied by each Market Participant p holding Capacity Credits associated with a Demand Side Programme in each Trading Interval t relative to its Reserve Capacity Obligation Quantity as:

(a) where AEMO has issued a Dispatch Instruction under clause 7.6.1C(d) or 7.6.1C(e) to the Demand Side Programme for the Trading Interval as determined under clause 7.13.1:

max(0, min(RCOQ, DIMW) - max(0, RD - DSPLMW)) where

RCOQ is the Reserve Capacity Obligation Quantity of the Demand Side Programme for Trading Interval t (in MW), determined in accordance with clause 4.12.4;

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

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

DSPLMW is the Demand Side Programme Load of the Demand Side Programme in Trading Interval t, multiplied by two to convert to units of MW; and

(b) zero, where AEMO has not issued a Dispatch Instruction under clause 7.6.1C(d) or 7.6.1C(e) to the Demand Side Programme for Trading Interval t as determined under clause 7.13.1.

Explanatory Note

Amendments made to clause 4.26.2E for weekly settlement.

- 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 Month Day md as the sum of the Trading Interval Capacity Cost Refunds of every Trading Interval in the Trading Month Day md, as calculated in accordance with clause 4.26.2F.
- 4.26.2F. The Trading Interval Capacity Cost Refund for Market Participant p and Trading Interval t is the sum of:
 - (a) either:
 - where Market Participant p holds Capacity Credits associated with a generation system, the Generation Capacity Cost Refund for Market Participant p for Trading Interval t, determined in accordance with clause 4.26.3; or
 - ii. zero, otherwise; and
 - (b) the sum of all Demand Side Programmes Capacity Cost Refunds for Demand Side Programmes for which Market Participant p holds Capacity Credits.

The proposed amendments to clause 4.26.3 are consequential amendments to refer to the new terms "Net Offer Shortfall" and "Net Offer Refund". Further changes are expected to be made in the Reserve Capacity Mechanism workstream.

The proposed amendments to clause 4.26.3 forms part of the Tranche 2 Amending Rules.

- 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 a generation system is the lesser—of—_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 Offer Refund in Trading Interval t for Market Participant p,

where the Net-STEM Offer Refund is calculated as follows follows:

N-STEM Offer Refund(p, t) = TIRR weighted(p, t) \times N-STEM Offer Short(p, t)

Where—Where:

- N-STEM Offer Refund(p, t) is the Net-STEM Offer Refund for Market Participant p in Trading Interval t;
- ii. TIRR weighted(p, t) is the weighted average of the Trading Interval Refund Rate in Trading Interval t for each Facility that Market Participant p holds Capacity Credits for and is calculated as follows—follows:

$$TIRR\ weighted(p,t) = \sum\nolimits_{f \in F} \frac{TIRR(f,t) \times CC(f,t)}{\sum_{f \in F} CC\left(f,t\right)}$$

where—where:

- F is the set of Scheduled <u>Generators Facilities</u> registered to Market Participant p and f is a Facility within that set;
- 2. TIRR(f, t) is the Trading Interval Refund Rate for Facility f in Trading Interval t; and
- 3. CC(f,t) is the number of Capacity Credits associated with Facility f in Trading Interval t; and
- iii. N-STEM_Offer Short(p, t) is the Net-STEM_Offer Shortfall for Market Participant p in Trading Interval t.
- 4.26.4. For each Market Participant holding Capacity Credits associated with a Scheduled Generator 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.

Explanatory Note

Clause 4.26.2 has been replaced with clause 4.26.2AA.

- 4.26.5. To support the calculation of the values of RCOQ(p,t) required by clause 4.26.2AA:
 - (a) AEMO must record the following temperature data for generation systems (other than Intermittent Generators) in respect of which Market Participants hold Capacity Credits and which, in accordance with clause 4.10.1(e)(iv), indicated a valid method for measuring ambient temperature:
 - the publicly available maximum daily temperature associated with a Facility for which temperature is defined in accordance with clause 4.10.1(e)(iv)(1); and
 - ii. temperatures measured by the SCADA system for Facilities for which temperature is defined in accordance with clause 4.10.1(e)(iv)(2).
 - (b) [Blank]

Explanatory Note

Clause 4.26.6(b) is amended to clarify that amounts collected in accordance with clause 4.25.4E are to be distributed in accordance with this clause.

Clause 4.26.6(e)(i)(3) is proposed to be amended to correct an existing minor typographical error.

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

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

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 <u>and any</u> <u>amounts collected in accordance with 4.25.4E</u>, for all Market Participants in Trading Interval t;
- (c) F is the set of Facilities, being Scheduled-Generators Facilities or Demand Side Programmes and f is a Facility within that set;
- (d) CC(f, t) for a Facility f in a Trading Interval t is the Facility's capacity in t, which is not subject to an Outage, determined as follows—

- for a Scheduled-Generator Facility, the MW value of Capacity
 Credits less the MW quantity of Outage as recorded under clause
 7.13.1A(b); and
- ii. for a Demand Side Programme, the lesser of—
 - 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 Generator Facility and the following applies—
 - 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;
 - the sum of the Facility Reserve Capacity Deficit Refunds for Facility f, in Capacity Year y that the Trading Interval t falls in, for trading intervals prior to and including Trading Interval t, is less than the Maximum Facility Refund for Facility f in Capacity Year y; and
 - 3. the sum of the Generation Reserve Capacity Deficit Refund in Capacity Year y that the Trading Interval t falls in, for trading intervals prior to and including Trading Interval t, is less than the Maximum Participant Generation Refund for for the Market Participant p which the Facility is registered to, in Capacity Year y; and
 - ii. one for any Facility which is a Demand Side Programme and the following applies—
 - 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;
 - the Reserve Capacity Obligation Quantity for the Demand Side Programme does not equal zero under clause 4.12.4(c); and
 - 3. the sum of the Demand Side Programme Capacity Cost Refunds for Facility f, in Capacity Year y that the Trading Interval t falls in, for trading intervals prior to and including Trading Interval t, is less than the Maximum Facility Refund for Facility f in Capacity Year y; and
 - iii. zero otherwise.

4.27. Reserve Capacity Performance Monitoring

4.27.1. [Blank]

Explanatory Note

Clause 4.27.2 is to proposed to be amended in line with the new registration taxonomy.

- 4.27.2. By the 25th day of each month, AEMO must assess the number of Equivalent Planned Outage Hours taken in the preceding 12 Trading Months by each Scheduled Generator Facility and Semi-Scheduled Facility and Non-Scheduled Generator assigned Capacity Credits for the current Capacity Year.
- 4.27.3. If the number of Equivalent Planned Outage Hours for a Facility, as determined under clause 4.27.2, exceeds 1,750 hours for the preceding 12 Trading Months, AEMO may require the Market Participant holding Capacity Credits for that Facility to provide to AEMO—
 - (a) a Reserve Capacity Performance Report as described in clause 4.27.4; and
 - (b) a Reserve Capacity Performance Improvement Report as described in clause 4.27.4A, to be provided at intervals specified by AEMO, but not more frequently than once per quarter.
- 4.27.3A. In making its decision whether to require a report under clause 4.27.3, AEMO must assess whether the number of Equivalent Planned Outage Hours taken by the Facility in the previous 12 Trading Months was attributable to specific, infrequent events or is indicative of an underlying performance deficiency, and may consider any matters it deems relevant in making this assessment.
- 4.27.4. A Reserve Capacity Performance Report must include—
 - (a) explanations of all Planned Outages taken by the Facility in the 12 Trading Months referred to in clause 4.27.2;
 - (b) a statement of the expected maximum number of days of Planned Outages to be taken by the Facility in each of the next 36 Trading Months commencing from the Trading Month in which the report is requested, including adequate explanation to make clear the reason for each Planned Outage;
 - (bA) the relationship of the Planned Outages to the long term asset management strategy and established maintenance plan for the Facility;
 - (c) measures being undertaken or proposed by the Market Participant to increase the availability of the Facility, and their actual and anticipated effect on the frequency of Planned Outages; and
 - (d) any other information concerning the availability of the Facility that AEMO may request.

- 4.27.4A. A Reserve Capacity Performance Improvement Report must include—
 - descriptions of the measures proposed, being undertaken or already undertaken by the Market Participant to increase the availability of the Facility;
 - (b) details of any changes to the expected maximum number of days of Planned Outages to be taken by the Facility for a Trading Month previously provided by the Market Participant under clause 4.27.4(b) or this clause 4.27.4A(b), including adequate explanations for each change; and
 - (c) explanation of any variation between expected and actual improvement of the availability of the Facility as a result of the measures taken.

4.27.5. A Market Participant must—

- (a) provide a Reserve Capacity Performance Report to AEMO in a format specified in the WEM Procedure referred to in clause 4.27.12 within 20 Business Days of being requested to do so; and
- (b) provide a Reserve Capacity Performance Improvement Report to AEMO in a format specified in the WEM Procedure referred to in clause 4.27.12 by the date specified by AEMO under clause 4.27.3(b).
- 4.27.6. AEMO may, at the Market Participant's expense, consult with any person AEMO considers suitably qualified to provide an opinion on a report provided under clause 4.27.5. AEMO may ask the person to provide an opinion on the report generally, or to limit the scope of the opinion to specified matters covered in the report.
- 4.27.7. [Blank]
- 4.27.8. [Blank]
- 4.27.9. [Blank]
- 4.27.10. Market Participants holding Capacity Credits for Facilities that are yet to commence operation must file a report on progress with AEMO:
 - (a) at least once every three months from the date the Capacity Credit are confirmed under clause 4.20.5A; and
 - (b) at least once every month between the start of the calendar year in which the date referred to in clause 4.10.1(c)(iii)(7) falls and the date AEMO notifies the Market Participant, under clause 4.13.14, that the need to maintain the Reserve Capacity Security for the Facility has ceased.
- 4.27.11. Reports provided under clause 4.27.10 must include any changes to Key Project Dates.
- 4.27.11A Upon receipt of a report provided under clause 4.27.10(a) AEMO must revise the date referred to in clause 4.10.1(c)(iii)(7) in accordance with the report unless, in

its opinion, the Facility, or part of the Facility, is unlikely to have completed all Commissioning Tests by that date.

4.27.11B [Blank]

- 4.27.11C If, in accordance with clause 4.27.11A, AEMO rejects a change to the Key Project Dates provided in accordance with clause 4.27.10(b) or 4.27.11D AEMO must, within ten business days of receiving the report, notify the Market Participant of its decision and provide reasons why the dates have been rejected.
- 4.27.11D Where AEMO rejects a change to the Key Project Dates it may require the Market Participant to provide additional information, submitted by a suitably authorised person, and may also require the Market Participant to submit further reports or revise the Key Project Dates. The provisions of clauses 4.27.11 to this clause 4.27.11D will apply to any further reports.
- 4.27.12. AEMO must document the procedure to be followed in performing Reserve Capacity monitoring in a WEM Procedure. Amongst other things, the WEM Procedure must list the documents and other items that may be required by AEMO as supporting evidence in accordance with clause 4.27.11D.

Funding Reserve Capacity Purchased by AEMO

Explanatory Note

Clause 4.28.1 is proposed to be amended as a consequence of the Reserve Capacity Auction being deleted.

Amendments made to clause 4.28.1 for weekly settlement and because the Special Price Arrangement concept is no longer applicable.

4.28. Funding Reserve Capacity Purchased by AEMO

- 4.28.1. AEMO must separate the total costs of Capacity Credits acquired by it for a Trading Month Day, including Capacity Credits covered by Special Price Arrangements, into the following two sets:
 - (a) the cost of acquiring enough Capacity Credits to ensure, to the extent possible given the number of Capacity Credits AEMO has acquired, that the lesser of:
 - the Reserve Capacity Requirement applicable to that Trading MonthDay; and
 - total Capacity Credits assigned to Facilities minus the total DSM Capacity Credits,

is just covered after allowing for Capacity Credits traded bilaterally (as defined in clause 4.14.2 and subject to clause 4.28.2(b)) in that Trading Month Day; and

(b) the cost of other Capacity Credits acquired but not allocated to the set referred to in clause 4.28.1(a),

determined on the basis that the Capacity Credits acquired by AEMO are allocated to the set referred to in clause 4.28.1(a) in order of decreasing cost per Capacity Credit, other than DSM Capacity Credits, until the capacity requirements referred to in clause 4.28.1(a) are met, with the remaining Capacity Credits acquired by AEMO being allocated to the set referred to in clause 4.28.1(b).

Explanatory Note

Amendments made to clause 4.28.2 for weekly settlement, the new registration taxonomy and the moving of the capacity credit allocations from Chapter 9 to Chapter 4.

- 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 Month-Day if that Capacity Credit has not been allocated by that Market Participant to another Market Participant for settlement purposes under sections 9.44.30 and 9.5 4.31;
 - (b) any Capacity Credits that have been allocated to a Market Customer

 Participant in excess of that Market Participant Customer's Individual

 Reserve Capacity Requirement must be:
 - i. deemed to be Capacity Credits acquired by AEMO from the Market <u>ParticipantCustomer</u>; and
 - ii. not counted as Capacity Credits traded bilaterally;
 - (c) [Blank]
 - (cA) [Blank]
 - (cB) the cost of a Capacity Credit deemed to be acquired by AEMO from a Market Participant Customer under clause 4.28.2(b)(i) is the Excess Allocation Price for that Market Customer in that Trading Month Day; and
 - (d) the cost of each other Capacity Credit acquired by AEMO from a Facility is the Facility Monthly Daily Reserve Capacity Price for that Facility in that Trading Month Day as determined in accordance with clause 4.29.1A.

Explanatory Note

Amendments made to clause 4.28.3 for weekly settlement and changes in taxonomy.

4.28.3. For each Trading Month Day, AEMO must calculate the Targeted Reserve Capacity Cost and must allocate this cost to Market Customers Participants in accordance with section 9.79.8.

Explanatory Note

Amendments made to clause 4.28.4 for weekly settlement and changes in taxonomy.

- 4.28.4. For each Trading Month Day, AEMO must calculate a Shared Reserve Capacity Cost being the sum of:
 - (a) the cost defined under clause 4.28.1(b); and
 - (b) the net payments to be made by AEMO under Supplementary Capacity
 Contracts less any amount drawn under a Reserve Capacity Security or a
 DSM Reserve Capacity Security by AEMO and distributed in accordance
 with clauses 4.13.11A(a) or 4.13A.16(a); less
 - (c) the Intermittent Load Refunds for that Trading Menth Day; less
 - (d) any amount drawn under a Reserve Capacity Security or a DSM Reserve Capacity Security by AEMO and distributed in accordance with clauses 4.13.11A(b) or 4.13A.16(b),

and AEMO must allocate this total cost to Market <u>CustomersParticipants</u> in proportion to each Market <u>Customer'sParticipant's</u> Individual Reserve Capacity Requirement.

- 4.28.5. The Shared Reserve Capacity Cost may have a negative value.
- 4.28.6. For each Trading Month, AEMO must determine and publish an Indicative Individual Reserve Capacity Requirement for each Market <u>CustomerParticipant</u> by the date and time specified in clause 4.1.23C, where this Indicative Individual Reserve Capacity Requirement is determined using the methodology described in Appendix 5.

Explanatory Note

Amendments made to clause 4.28.7 for weekly settlement and changes in taxonomy.

4.28.7. For each Trading Month, AEMO must determine and publish an Individual Reserve Capacity Requirement for each Market <u>Customer Participant</u> by the date and time specified in clause 4.1.24, where this Individual Reserve Capacity Requirement is determined using the methodology described in Appendix 5.

Explanatory Note

Amendments made to clause 4.28.8 for changes in taxonomy and to remove clause 4.28.8(b) (this clause was deleted due to the infeasibility of operationalizing the rule).

- 4.28.8. To assist AEMO in determining Indicative Individual Reserve Capacity Requirements in accordance with clause 4.28.6 and Individual Reserve Capacity Requirements in accordance with clause 4.28.7 for the Capacity Year starting on 1 October of Year 3 of a Reserve Capacity Cycle, Market CustomersParticipants must, by the date and time specified in clause 4.1.23, provide to AEMO:
 - (a) the identity of all interval meters associated with that Market

 Customer Participant which measure Loads that it nominates as NonTemperature Dependent Loads; and

- (b) details of any Demand Side Management measures that the Market
 Customer has implemented since the previous Hot Season, including the
 expected MW reduction in peak consumption resulting from those
 measures; and[Blank]
- (c) nominations of capacity requirements for Intermittent Loads, expressed in MW, where the nominated quantity cannot exceed the greater of:
 - the maximum allowed level of Intermittent Load specified in Standing Data for that Intermittent Load at the time of providing the data; and
 - ii. the maximum Contractual Maximum Demand expected to be associated with that Intermittent Load during the Capacity Year to which the nomination relates. The Market CustomerParticipant must provide evidence to AEMO of this Contractual Maximum Demand level unless AEMO has previously been provided with that evidence.
- 4.28.8A. A Market <u>CustomerParticipant</u> with an Intermittent Load that was not registered by the date and time specified in clause 4.1.23 must provide AEMO with the information described in clause 4.28.8(c) no later than 5 Business Days prior to the date and time specified in clause 4.1.23C where that date and time relates to the Trading Month in which the Intermittent Load will first commence operation.
- 4.28.8B. AEMO must accept a nomination for capacity for an Intermittent Load from a Market <u>CustomerParticipant</u> if that nomination is made in accordance with clauses 4.28.8 or 4.28.8A provided that AEMO is satisfied of the accuracy of the data and evidence provided in accordance with clause 4.28.8(c)(ii).

Amendments made to clause 4.28.8C for changes in taxonomy and to remove clause 4.28.8(b) (this clause was deleted due to the infeasibility of operationalizing the rule).

- 4.28.8C. Subject to clause 4.28.11, a Market Customer Participant may provide to AEMO_=
 - the identity of additional interval meters (to those provided under clause 4.28.8) associated with the Market CustomerParticipant which measure Loads that it nominates as Non-Temperature Dependent Loads for the remainder of the relevant Capacity Year; and
 - (b) details of any additional Demand Side Management measures (to those provided under clause 4.28.8) that the Market Customer has implemented since the previous Hot Season, including the expected MW reduction in peak consumption resulting from those measures,

by providing the relevant information to AEMO no later than 15 Business Days prior to the date and time specified in clause 4.1.23C for the first Trading Month for which the Market <u>CustomerParticipant</u> wants AEMO to take the updated information into account.

- 4.28.9. AEMO must only accept the load measured by an interval meter nominated in accordance with clauses 4.28.8(a) or 4.28.8C(a) as a Non-Temperature Dependent Load if that load satisfies the requirements of Appendix 5A.
- 4.28.9A. A Market <u>CustomerParticipant</u> 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 <u>CustomerParticipant</u> considers that the deviation in the level of consumption was due to:
 - the Trading Interval falling on a Trading Day that is not a Business Day; or
 - ii. a maintenance event.
- 4.28.9B. AEMO may charge an Application Fee to cover its costs of requesting clarification or further information of any aspect of a Consumption Deviation Application in accordance with clause 4.28.9F.
- 4.28.9C. A Consumption Deviation Application submitted under clause 4.28.9A must:
 - (a) be submitted as soon as practicable, but in any event:
 - for an application that relates to the Individual Reserve Capacity Requirement for October in the relevant Capacity Year, must be submitted by the date and time specified in clause 4.1.23; and
 - ii. for an application that relates to the Individual Reserve Capacity Requirement for a Trading Month, other than October, in the relevant Capacity Year, must be submitted by the date and time specified in clause 4.28.8C; and
 - (b) contain, or be accompanied by, the information specified in the WEM Procedure referred to in clause 4.28.9E.
- 4.28.9D. AEMO must accept or reject a Consumption Deviation Application submitted under clause 4.28.9A in accordance with the WEM Procedure referred to in clause 4.28.9E no later than the time the information is needed for the calculation of the relevant Indicative Individual Reserve Capacity Requirement.
- 4.28.9E. AEMO must specify the following matters in a WEM Procedure:
 - (a) the process that a Market <u>Customer Participant</u> must follow when submitting a Consumption Deviation Application for a Load under clause 4.28.9A;
 - (b) the information and supporting evidence that a Market <u>CustomerParticipant</u> must provide in its Consumption Deviation Application submitted under clause 4.28.9A;

- (c) the process that AEMO must follow when it receives a Consumption Deviation Application submitted under clause 4.28.9A; and
- (d) the criteria that AEMO must consider when deciding whether to accept or reject a Consumption Deviation Application submitted under clause 4.28.9A.
- 4.28.9F. If it considers it reasonably necessary to assess the Consumption Deviation Application, AEMO may request clarification or further information of any aspect of the Consumption Deviation Application submitted under clause 4.28.9A. Any clarification or information received is deemed to be part of the Consumption Deviation Application.

Clause 4.28.10 is deleted because of the infeasibility of a Market Participant implementing changes to a single Load.

- 4.28.10. [Blank] AEMO must only take into account a MW reduction in peak consumption resulting from Demand Side Management measures specified in accordance with clauses 4.28.8(b) or 4.28.8C(b) in applying the methodology of Appendix 5 to the extent that AEMO is satisfied that the peak consumption associated with the applicable Market Participant would have been lowered by that number of MWs had those Demand Side Management measures been in place during the preceding Hot Season.
- 4.28.11. For each Capacity Year, a <u>CustomerParticipant</u> Customer may only provide AEMO with the relevant information specified in clauses 4.28.8, 4.28.8A and 4.28.8C once with respect to each load.

Explanatory Note

Clause 4.28.11A is amended for weekly settlement.

- 4.28.11A. When undertaking the Adjustment Process for a Trading Month. Week, which Trading Week contains the first Trading Day of a Trading Month, under clause 9.16.39.3.5 in accordance with the settlement cycle timeline, AEMO must recalculate the Individual Reserve Capacity Requirements for applicable for the each Trading Month Day in that Trading Month, using the methodology described in Appendix 5, and must publish the recalculated Individual Reserve Capacity Requirements applicable for each Trading Day in that Trading Month by the Relevant Settlement Statement Date for the Trading Week.
- 4.28.12. AEMO must document the process to be followed in calculating Indicative Individual Reserve Capacity Requirements and Individual Reserve Capacity Requirements in a WEM Procedure.

Intermittent Load Refunds

4.28A. Intermittent Load Refunds

Explanatory Note

Clause 4.28A.1(c) is proposed to be amended as a consequence of Consequential Outages being removed from the Outages framework and to reflect the new registration taxonomy.

Clause 4.28A.1 is further amended for weekly settlement.

- 4.28A.1. AEMO must determine for each Intermittent Load registered to Market Participant p the amount of the refund ("Intermittent Load Refund") to be applied for each Trading Month-Day md in respect of that Intermittent Load as the sum over all Trading Intervals t of Trading Day d in the Trading Month m of the product of:
 - (a) the applicable value of Y for the Intermittent Load as determined in clause 4.26.1(b)(iiA); and
 - (b) [Blank]
 - (c) the Capacity Shortfall for Trading Interval t of Trading Day d-and Trading Month m which is the greater of zero and:
 - 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 generating system described in clause 2.30B.2(a) is undergoing a Planned Outage or a Consequential Outage, the quantity nominated for that Intermittent Load by its Market Customer Participant in accordance with clauses 4.28.8(c) or 4.28.8A; less
 - iii. 3% of the quantity nominated for that Intermittent Load by its Market Customer Participant in accordance with clauses 4.28.8(c) or 4.28.8A; less
 - iv. for Trading Intervals where the temperature data described in clause 4.28A.2 shows a temperature in excess of 41°C and the generating system described in clause 2.30B.2(a) is not undergoing a Planned Outage, or experiencing a Forced Outage or a Consequential Outage, the capacity reduction, if any, specified in accordance with clause 2.30B.3(b)(i).
- 4.28A.2. To support the implementation of clause 4.28A.1(c)(iv)
 - (a) AEMO must record the following temperature data for generation 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 generating 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 generating systems for which temperature is defined in accordance with clause 2.30B.3(b)(ii)(2).
- (b) [Blank]
- 4.28A.3. AEMO must document the procedure AEMO must follow in calculating Intermittent Load Refunds in a WEM Procedure.

Explanatory Note

Section 4.28B is proposed to be deleted.

Section 4.28B enabled new small generators (i.e. with a nameplate capacity of ≤1 MW) to apply for Capacity Credits outside the standard process and timelines for a Reserve Capacity Cycle. Instead, new small generators will be required to comply with the standard processes and timelines for certification of Reserve Capacity and assignment of Capacity Credits and Network Access Quantities set out in this Chapter 4.

The new Network Access Quantity framework is unable to accommodate assignment of Capacity Credits outside the standard processes.

Treatment of New Small Generators

4.28B. [Blank]Treatment of New Small Generators

- 4.28B.1. This section 4.28B is applicable to Registered Facilities to which the following conditions apply:
 - (a) the Facility is a Non-Scheduled Generator and has commenced operation;
 - (b) the Facility has a nameplate capacity not exceeding 1 MW;
 - (c) the Facility has not previously held Capacity Credits for past Reserve
 Capacity Cycles and does not hold Capacity Credits for the Reserve
 Capacity Cycle for which Capacity Credits are sought; and
 - (d) there has been no opportunity for the Market Participant to which the Facility is registered to apply for certification of Reserve Capacity for the Facility for the Reserve Capacity Cycle for which Capacity Credits are sought in accordance with clause 4.9 since the date upon which the Facility became a Registered Facility;
- 4.28B.2. A Market Participant to which a Facility is registered that this clause 4.28B relates to may apply to AEMO for Capacity Credits for that Facility at any time between

the date upon which the Facility became a Registered Facility and the earliest date upon which either:

- (a) Reserve Capacity Obligations could apply to the Facility where such
 Reserve Capacity Obligations relate to Capacity Credits secured in
 accordance with clause 4.20 at the earliest possible opportunity following
 the registration of the Facility; or
- (b) Reserve Capacity Obligations actually apply to the Facility due to Capacity Credits secured in accordance with clause 4.20 prior to the registration of the Facility.
- 4.28B.3. An application made under clause 4.28B.2 must include all the information required by clause 4.10 for a Non-Scheduled Generator, with the modification that the decommissioning date required by clause 4.10.1(d) is only required if the Facility will be decommissioned prior to the end date defined in clause 4.28B.6.
- 4.28B.4. AEMO must process an application made in accordance with clause 4.28B.2 so as to determine the Certified Reserve Capacity, Capacity Credits and Reserve Capacity Obligations to associate with the Facility:
 - (a) AEMO must set Certified Reserve Capacity for the Facility to that amount it would normally grant the Facility if processing an application for Certified Reserve Capacity in accordance with clause 4.11;
 - (b) AEMO must set the Capacity Credits for the facility to equal the Certified Reserve Capacity of the Facility; and
 - (c) AEMO must set the Reserve Capacity Obligations, including the initial Reserve Capacity Obligation Quantity, for the Facility in accordance with clause 4.12 as if set as part of an application for Certified Reserve Capacity made in accordance with clause 4.11.
- 4.28B.5. AEMO must process an application made in accordance with clause 4.28B.2 within 10 Business Days of receipt of the application.
- 4.28B.6. If AEMO approves the granting of Capacity Credits to the Facility then the Capacity Credits and the Reserve Capacity Obligations associated with that Facility are to apply from the commencement of the Trading Day commencing on the start date until the end of the Trading Day ending on the end date where:
 - (a) the start date is the next occurrence of the date 1 October after the date on which AEMO grants approval, or if AEMO grants approval prior to Energy Market Commencement then the date of Energy Market Commencement; and
 - (b) the end date is the earlier of:
 - i. the first date that Reserve Capacity Obligations could apply to the
 Facility where such Reserve Capacity Obligations relate to Capacity
 Credits secured in accordance with clause 4.20 at the earliest
 possible opportunity following the registration of the Facility;

- ii. the first date that Reserve Capacity Obligations actually apply to the Facility due to Capacity Credits secured in accordance with clause 4.20 prior to the registration of the Facility;
- iii. the first instance of the date 1 October after the start date; and
- iv. the decommissioning date of the Facility;
- 4.28B.7. A Market Participant may re-apply to AEMO for Capacity Credits in accordance with this clause 4.28B if Capacity Credits issued in accordance with this clause 4.28B have, or are due to, expire in accordance with clause 4.28B.6(b)(iii).
- 4.28B.8. Any Capacity Credit issued by AEMO under this section 4.28B:
 - (a) is, for the purpose of settlement, to be treated as if it were traded bilaterally in accordance with section 4.14 (as defined in clause 4.14.2);
 - (b) is not eligible to have a Special Price Arrangement associated with it; and
 - (c) is not eligible for a Facility Monthly Reserve Capacity Price that is determined in accordance with clause 4.29.1D.
- 4.28B.9. AEMO must document the process for applying for and approving Capacity

 Credits in accordance with this section 4.28B in a Market Procedure.

Section 4.28C enables Market Participants with new facilities that require a long lead time to apply to AEMO for early certification of Reserve Capacity. Currently, an application may be made for eligible facilities for a Capacity Year prior to 1 January of Year 1 of the Reserve Capacity Cycle relating to that Capacity Year.

The ability for a Market Participant to make an application for early certification of Reserve Capacity will continue subject to the following key changes:

- applications may only be made up to two years before the start of the relevant Reserve Capacity Cycle;
- Market Participants will need to demonstrate to AEMO that the project requires a lead time longer than the start of the Reserve Capacity Cycle in which Capacity Credits are being sought for the facility; and
- eligible facilities will be assigned certified Reserve Capacity and an Indicative Network Access Quantity. However, the number of Capacity Credits and a Final Network Access Quantity will only be determined for the facility at the time, and in accordance with, the standard processes and timeframes for the Reserve Capacity Cycle in which Capacity Credits for the facility are being sought.
 - For example, Capacity Credits for an application for Early Certified Reserve Capacity that is submitted by a Market Participant in the 2021 Reserve Capacity Cycle for which Capacity Credits are being sought for the facility for the 2022 Reserve Capacity Cycle will only be determined and assigned to the facility by AEMO on 30 September 2022.

Early Certification of Reserve Capacity

4.28C. Early Certification of Reserve Capacity

- 4.28C.1. This section 4.28C is applicable to Facilities to which the following conditions apply:
 - (a) the Facility is a new Facility;
 - (b) the Facility is a generating an energy producing system; and
 - (c) the Facility is deemed by AEMO to be committed-; and
 - (d) AEMO is satisfied that:
 - the construction of the Facility cannot be achieved within the Reserve Capacity Cycle for which Capacity Credits are being sought for the Facility; and
 - ii. the Commissioning Tests for the Facility cannot be achieved before
 the commencement of the Capacity Year for which Capacity Credits
 are being sought for the Facility.
- 4.28C.1A.In forming its opinion under clause 4.28C.1(d), AEMO may have regard to the type of generation system for which Capacity Credits are being sought for the Facility, and any required augmentation of the SWIS or construction of other infrastructure.

Explanatory Note

Clause 4.28C.2 is proposed to be amended to restrict applications for Early Certified Reserve Capacity being made more than two years prior to the start of the Reserve Capacity Cycle for which Capacity Credits are being sought for a facility.

- 4.28C.2. A Market Participant with a Facility that meets the criteria in clause 4.28C.1 may apply to AEMO, at any time, <u>but no earlier than two years</u>, before 1 January of Year 1 of the Reserve Capacity Cycle to which the application relates, for certification of <u>Reserve</u> Capacity and Capacity Credits for that Facility ("Early Certified Reserve Capacity").
- 4.28C.2A.AEMO must acknowledge receipt of an application made under clause 4.28C.2 within five Business Days of receiving the application.
- 4.28.2B. Where AEMO considers that the Facility does not meet the criteria in clause
 4.28C.1, AEMO must reject an application made under clause 4.28C.2 in respect
 of the Facility.
- 4.28C.3. Each application for Early Certified Reserve Capacity must relate to a single future Reserve Capacity Cycle. AEMO must not accept more than one application for certification of Reserve Capacity per Facility per calendar year.
- 4.28C.4. An application under clause 4.28C.2 must state that the applicant intends to trade all assigned Certified Reserve Capacity bilaterally as defined in clause 4.14.2.

Clause 4.28C.5 is proposed to be amended as the information requirements in section 4.10.1 relate to generation types and facility classes.

4.28C.5. An application made under clause 4.28C.2 must include all the information required by-clause section 4.10 for the appropriate type of generation system and Facility Class for which the application pertains to.

Explanatory Note

Clause 4.28C.6 is proposed to be amended as Capacity Credits will only be determined and assigned to the Facility in Year 1 of the Reserve Capacity Cycle to which the application for Early Certified Reserve Capacity relates.

4.28C.6. AEMO must process each application made in accordance with clause 4.28C.2 so as to determine the Early Certified Reserve Capacity, Capacity Credits and Reserve Capacity Obligations in connection with for the Facility.

Explanatory Note

Clause 4.28C.7 is proposed to be amended to alter the timeframe for AEMO to assess and determine the Early Certified Reserve Capacity for the Facility. AEMO will assess the application when it next undertakes the process for assessing and assigning applications for Certified Reserve Capacity under section 4.11.

For example, for an application submitted under clause 4.28C.2 in December 2021 – which relates to the 2023 Reserve Capacity Cycle – AEMO will set the Early Certified Reserve Capacity for the Facility when it assesses applications for certified Reserve Capacity for the 2022 Reserve Capacity in or about August 2022.

- 4.28C.7. AEMO must, within 90 days of receiving the application, Where AEMO has received an application under clause 4.28C.2, AEMO must set Early Certified Reserve Capacity for the Facility:
 - to that amount it would normally grant the Facility if processing an application for Certified Reserve Capacity in accordance with clause section 4.11; and
 - (b) at the time AEMO next processes applications for Certified Reserve

 Capacity in accordance with section 4.11.

Explanatory Note

New proposed clause 4.28C.7A requires AEMO to determine an Indicative Network Access Quantity for the Facility when it next determines Network Access Quantities for Facilities under section 4.15.

See Step 14 of Part A and Part B of Appendix 3.

For example, for an application submitted under clause 4.28C.2 in December 2021 – which relates to the 2023 Reserve Capacity Cycle – AEMO will set the Indicative Network Access Quantity for the Facility when it assesses applications for certified Reserve Capacity for the 2022 Reserve Capacity in or about August 2022.

- 4.28C.7A.Where AEMO has received an application under clause 4.28C.2, AEMO must determine an Indicative Network Access Quantity for the Facility in accordance with Appendix 3 at the time AEMO next determines Network Access Quantities for Facilities under section 4.15.
- 4.28C.7AA.Where AEMO has previously determined an Indicative Network Access Quantity for a Facility in accordance with Appendix 3, and at the time AEMO next determines Network Access Quantities in accordance with Appendix 3 it does not determine a Final Network Access Quantity for that Facility, then AEMO must revise the Indicative Network Access Quantity in accordance with Appendix 3.

New proposed clause 4.28C.7A requires AEMO to notify the applicant of the Early Certified Reserve Capacity set for the Facility and the Indicative Network Access Quantity determined for the Facility by 31 October of the year in which both assessments are undertaken by AEMO.

- 4.28C.7B.By 5:00 PM on the last Business Day falling on or before 31 October of the year in which AEMO sets the Early Reserve Capacity for the Facility under clause

 4.28C.7 and determines the Indicative Network Access Quantity for the Facility under clause 4.28C.7A, AEMO must notify the applicant of:
 - (a) the Early Certified Reserve Capacity set for the Facility under clause 4.28C.7; and
 - (b) the Indicative Network Access Quantity determined for the Facility under clause 4.28C.7A.

Explanatory Note

New proposed clause 4.28C.7C requires AEMO to notify the applicant of any revised Indicative Network Access Quantity determined for the Facility by 31 October of the year in which the assessment is undertaken by AEMO.

4.28C.7C.By 5:00 PM on the last Business Day falling on or before 31 October of the year in which AEMO determines the revised Indicative Network Access Quantity under clause 4.28C.7AA, AEMO must notify the applicant of the Indicative Network Access Quantity determined for the Facility under clause 4.28C.7AA.

Explanatory Note

Clause 4.28C.8 is proposed to be amended to refer to the relevant clause number for clarity.

4.28C.8. Within 30 Business Days of the applicant receiving notification by AEMO <u>under clause 4.28C.7B(a)</u> of the amount of Early Certified Reserve Capacity assigned to the Facility the applicant must ensure that AEMO holds the benefit of a Reserve Capacity Security equal to the amount specified in clause 4.28C.9.

Explanatory Note

Clause 4.28C.8A is proposed to be amended to clarify that the Indicative Network Access Quantity for the Facility will also lapse.

- 4.28C.8A_If a Market Participant does not comply with clause 4.28C.8 in full by the time specified in clause 4.28C.8, the Early Certified Reserve Capacity and Indicative Network Access Quantity assigned to that Facility will lapse.
- 4.28C.9. The amount for the purposes of clauses 4.28C.8 and 4.28C.12 is 25 percent of the Benchmark Reserve Capacity Price included in the most recent Request for Expressions of Interest at the time and date associated with clause 4.28C.8 or 4.28C.12 as applicable, multiplied by an amount equal to the Early Certified Reserve Capacity assigned to the Facility.

Explanatory Note

Clauses 4.28C.10 and 4.28C.11 are proposed to be deleted as Capacity Credits will be set in line with the Final Network Access Quantity determined for Facilities under section 4.15.

- 4.28C.10. AEMO must set the Capacity Credits for the Facility to equal the Early Certified Reserve Capacity of the Facility once the Reserve Capacity Security is provided to AEMO under clause 4.28C.8.
- 4.28C.11. AEMO must set the Reserve Capacity Obligations, including the initial Reserve Capacity Obligation Quantity, for the Facility in accordance with clause 4.12 as if set as part of an application for Certified Reserve Capacity made in accordance with clause 4.11.
- 4.28C.12. Prior to the time and date specified in clause 4.1.13, in Year 1 of the first Reserve Capacity Cycle specified in clause 4.10.1(b) in which the Facility will enter service, AEMO must recalculate the amount of Reserve Capacity Security to be provided by each Market Participant in accordance with clause 4.28C.9 and:
 - (a) If an additional amount of Reserve Capacity Security is required, the Market Participant must ensure that AEMO holds the benefit of the additional Reserve Capacity Security by the time and date specified in clause 4.1.13(a); and
 - (b) If a reduced amount of Reserve Capacity Security is required, the Market Participant may request AEMO to return any additional Reserve Capacity Security, in accordance with clause 4.13.14, provided that at all times AEMO holds a Reserve Capacity Security to the level determined in accordance with this clause 4.28C.12.

Explanatory Note

Clauses 4.28C.12A, 4.28C.13 and 4.18C.14 are proposed to be deleted as Capacity Credits will be set in line with the Final Network Access Quantity determined for Facilities under section 4.15 and the normal processes applying to and consequential upon the assignment of Capacity Credits will apply.

- 4.28C.12A. From the time and date specified in clause 4.1.13 of Year 1 of the first Reserve Capacity Cycle in which the Facility will enter service, all of the provisions of sectionclause 4.13 apply equally to the Reserve Capacity Security of Facilities with Early Certified Reserve Capacity.
- 4.28C.13. [Blank]If AEMO approves the granting of Capacity Credits to the Facility under this section 4.28C, then the Capacity Credits and the Reserve Capacity Obligations associated with that Facility will apply from the commencement of the Trading Day commencing on the start date until the end of the Trading Day ending on the end date, where:

(a) the start date is:

- i. where AEMO has determined, under clause 4.20.5A(aA), that the Reserve Capacity Requirement has been met or exceeded with the Capacity Credits assigned for Year 3:
 - to Facilities to which section 4.13 applies, for which no Reserve Capacity Security was required to be provided under section 4.13; or
 - to Demand Side Programmes determined by AEMO to be in Commercial Operation,
 - 1 October of Year 3 of the Reserve Capacity Cycle to which the application relates, as determined under clause 4.28C.2; and
- ii. where AEMO has determined, under clause 4.20.5A(aA), that the Reserve Capacity Requirement has not been met with the Capacity Credits assigned for Year 3:
 - to Facilities to which section 4.13 applies, for which no Reserve Capacity Security was required to be provided under section 4.13; or
 - 2. to Demand Side Programmes determined by AEMO to be in Commercial Operation,

for:

- 3. Facilities that complete all Commissioning Tests and are capable of meeting Reserve Capacity Obligations in full, between the scheduled time for the Reserve Capacity Auction for the Reserve Capacity Cycle as specified in clause 4.1.18(a) 15 September and 1 June of Year 3 1 June of Year 3:
- 4. Facilities commissioned between 1 June of Year 3 and 1
 October of Year 3 the date on which the Facility completes
 all Commissioning Tests and is capable of meeting Reserve
 Capacity Obligations in full, as specified in accordance with
 clause 4.10.1(c)(iii)(7), or as revised in accordance with
 clause 4.27.11A; or

- 5. new generating systems undertaking Commissioning Tests after 1 October of Year 3 1 October of Year 3: and
- (b) the end date is the earlier of:
 - i. 1 October of Year 4 of the Reserve Capacity Cycle to which the application relates, as determined under clause 4.28C.2; and
 - ii. the decommissioning date of the Facility.

Applicants for early Certified Reserve Capacity will continue not to be eligible for a fixed reserve capacity price for their facility.

- 4.28C.14. Capacity Credits issued by AEMO under this section 4.28C:
 - (a) are not eligible to be used in a Reserve Capacity Auction;
 - (b) are not eligible to have Special Price Arrangements associated with them; and
 - (c) are not eligible for a Facility Monthly Reserve Capacity Price that is determined in accordance with clause 4.29.1D.
- 4.28C.14. Capacity Credits that are issued pursuant to applications for Early Certified

 Reserve Capacity under this section 4.28C are not eligible for a Facility Monthly

 Reserve Capacity Price that is determined in accordance with clause 4.29.1D.

Explanatory Note

Clause 4.28C.15 is proposed to be amended to provide for AEMO to publish details of the application of this section 4.28C.

4.28C.15. AEMO must document the process for the application of applying for and approving Capacity Credits in accordance with this section 4.28C and the matters

AEMO will have regard to in forming its opinion under clause 4.28C.1(d) in a WEM Procedure.

Settlement Data

Explanatory Note

Clause 4.29.1(a) is proposed to be deleted as a consequence of the Reserve Capacity Auction being deleted, and to remove redundant references to previous Reserve Capacity Cycles.

4.29. Settlement Data

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) if a Reserve Capacity Auction is run for the Reserve Capacity Cycle, the Reserve Capacity Price determined from the Reserve Capacity Auction result for the Reserve Capacity Cycle; or
- (b) if no Reserve Capacity Auction is run:
 - for a Reserve Capacity Cycle prior to 1 October 2008, 85 percent of the Benchmark Reserve Capacity Price for the Reserve Capacity Cycle;
 - ii. for a Reserve Capacity Cycle up to and including the 2014 Reserve
 Capacity Cycle, 85 percent of the Benchmark Reserve Capacity
 Price for the Reserve Capacity Cycle multiplied by the excess
 capacity adjustment and where the excess capacity adjustment is
 equal to the minimum of:
 - 1. one; and
 - the Reserve Capacity Requirement for the Reserve Capacity
 Cycle divided by the total number of Capacity Credits
 assigned by AEMO in accordance with clause 4.20.5A for
 the Reserve Capacity Cycle; and
- (a)iii. for a Reserve Capacity Cycle from the 2015 Reserve Capacity Cycle up to and including the 2018 Reserve Capacity Cycle, the value calculated using the following formula set out below for the relevant Capacity Year:

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

RESERVE CAPACITY ADMINISTERED PRICE TABLE

Reserve Capacity Cycle	Capacity Year commencing	Formula
2015	1 October 2017	$MIN\{\left(\frac{BRCP \times 1.113}{1 - \left((surplus + 0.03) \times -3.75\right)}\right), BRCP \times 1.1\}$
2016	1 October 2018	$MIN\{\left(\frac{BRCP \times 1.119}{1 - \left((surplus + 0.03) \times -3.95\right)}\right), BRCP \times 1.1\}$
2017	1 October 2019	$MIN\{\left(\frac{BRCP \times 1.126}{1 - \left((surplus + 0.03) \times -4.2\right)}\right), BRCP \times 1.1\}$
2018	1 October 2020	$MIN\{\left(\frac{BRCP \times 1.141}{1 - \left((surplus + 0.03) \times -4.7\right)}\right), BRCP \times 1.1\}$

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:

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

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)iv. for a Reserve Capacity Cycle from the 2019 Reserve Capacity Cycle onwards, the value calculated using the following formula:

max(Segment 1, Segment 2, 0) * BRCP

where:

Segment 1 =
$$\frac{EZ BRCP Factor - BRCP Cap Factor}{EZ} x (surplus + BRCP Cap Factor)$$
Segment 2 =
$$\frac{EZ BRCP Factor}{EZ - AZ} x (surplus - AZ)$$

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:

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

Clauses 4.29.1A is proposed to be amended as a consequence of the Reserve Capacity Auction being deleted.

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

- (a) for a Reserve Capacity Cycle up to and including the 2018 Reserve Capacity Cycle, the Reserve Capacity Price for the Reserve Capacity Cycle divided by 12; and:
 - i. for a Facility to which a Special Price Arrangement applies, the Facility Monthly Special Reserve Capacity Price determined in accordance with clause 4.29.2; or
 - ii. for all other Facilities, the Reserve Capacity Price for the Reserve Capacity Cycle divided by 12; and
- (b) for a Reserve Capacity Cycle from the 2019 Reserve Capacity Cycle onwards:
 - i. [Blank] for a Facility to which a Special Price Arrangement applies, the Facility Monthly Special Reserve Capacity Price determined in accordance with clause 4.29.2;
 - ii. for a Transitional Facility during a Transitional Reserve Capacity Cycle, the value determined in accordance with clause 4.29.1B;
 - iii. for a Fixed Price Facility during a Fixed Price Reserve Capacity
 Cycle for that Fixed Price Facility, the value determined in
 accordance with clause 4.29.1D for that Fixed Price Facility; or
 - iv. for all other Facilities, the Reserve Capacity Price for the Reserve Capacity Cycle divided by 12.
- 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:

TFMRCP = Min(max(Reserve_Capacity_Price, Trans_Floor), 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:

 $Trans_Ceiling = Trans_Ceiling_{[previous]} \times max(1, (1 + CPI))$

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:

$$Trans_Floor = Trans_Floor_{[previous]} \times max(1, (1 + CPI))$$

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.

- 4.29.1D. The Facility Monthly Reserve Capacity Price for a Fixed Price Facility during a Fixed Price Reserve Capacity Cycle for the Fixed Price Facility is:
 - (a) for the first Reserve Capacity Cycle for which a Facility is classified as a Fixed Price Facility, the Reserve Capacity Price divided by 12; and
 - (b) for each subsequent Fixed Price Reserve Capacity Cycle for the Fixed Price Facility, the value calculated in accordance with the following formula divided by 12:

$$FRCP = FRCP_{[previous]} \times max(1, (1 + CPI))$$

where:

FRCP is the Facility Monthly Reserve Capacity Price for the Fixed Price Facility in the current Fixed Price Reserve Capacity Cycle for that Fixed Price Facility;

FRCP_[previous] is the Facility Monthly Reserve Capacity Price for the Fixed Price Facility in the previous Fixed Price Reserve Capacity Cycle for that Fixed Price Facility; 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 Fixed Price 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 that time, at the time AEMO undertakes the calculation in clause 4.29.2A.

Explanatory Note

Clause 4.29.2 is proposed to be deleted as a consequence of the Reserve Capacity Auction being deleted.

4.29.2. [Blank] The Facility Monthly Special Reserve Capacity Price to apply during a Trading Month for each Special Price Arrangement associated with a Facility is to equal the Special Reserve Capacity Price for that Special Price Arrangement and Reserve Capacity Cycle divided by 12.

Explanatory Note

Clause 4.29.2A is proposed to be amended as a consequence of the Reserve Capacity Auction being deleted.

- 4.29.2A. AEMO must determine the information specified in clause 4.29.2B by the date and time specified in clause 4.1.16A.÷
 - (a) if a Reserve Capacity Auction is not cancelled under clause 4.15.1 the date and time specified in clause 4.1.16; or
 - (b) if a Reserve Capacity Auction is cancelled under clause 4.15.1 the date and time specified in clause 4.1.21A.

Explanatory Note

Clause 4.29.2B(d) is proposed to be deleted as a consequence of the Reserve Capacity Auction being deleted and to enable weekly settlement. AEMO will now be required to calculate a daily Reserve Capacity Price applicable to each Facility.

- 4.29.2B. For each Reserve Capacity Cycle AEMO must determine the following information in accordance with this section 4.29:
 - (a) the Facility Monthly Reserve Capacity Price for a Transitional Facility if the Reserve Capacity Cycle is a Transitional Reserve Capacity Cycle;
 - (b) the Facility Monthly Reserve Capacity Price for each Fixed Price Facility for which the Reserve Capacity Cycle is a Fixed Price Reserve Capacity Cycle;
 - (c) the Facility Monthly Reserve Capacity Price for all other Facilities; and
 - (d) [Blank]the Facility Monthly Special Reserve Capacity Price for each Special Price Arrangement for the Reserve Capacity Cycle.
 - (e) the Facility Daily Reserve Capacity Price for a Transitional Facility if the Reserve Capacity Cycle is a Transitional Reserve Capacity Cycle;

- (f) the Facility Daily Reserve Capacity Price for each Fixed Price Facility for which the Reserve Capacity Cycle is a Fixed Price Reserve Capacity Cycle; and
- (g) the Facility Daily Reserve Capacity Price for all other Facilities.

Clause 4.29.3(d) is proposed to be amended as a consequence of the Reserve Capacity Auction being deleted, to reflect the new registration taxonomy and for weekly settlement.

- 4.29.3. AEMO must determine the following information in time for settlement of Trading Month mDay d:
 - (a) the Facility Monthly Reserve Capacity Price 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 Month Day as defined in clause 4.28.3;
 - (c) the Shared Reserve Capacity Cost for that Trading Month Day as defined in clause 4.28.4;
 - (d) subject to clause 4.29.4, for each Market Participant p and for Trading Day d Month m:
 - the quantity of Capacity Credits (including Capacity Credits from Facilities subject to Network Control Service Contracts) acquired by AEMO which are not DSM Capacity Credits:
 - 1. DSM Capacity Credits; or
 - 2. covered by a Special Price Arrangement;
 - ii. [Blank]
 - iii. [Blank]the total quantity of Capacity Credits covered by Special Price Arrangements;
 - iv. the quantity of Capacity Credits (other than DSM Capacity Credits) traded bilaterally (as defined in clause 4.14.2), including Capacity Credits from Facilities subject to Network Control Service Contracts to which clause 4.20.1(d)(iii) does apply;
 - ivA. the quantity of DSM Capacity Credits;
 - v. the Individual Reserve Capacity Requirement for each Market

 Customer Participant for that Trading Month in which that Trading

 Day falls;
 - vi. the total Capacity Cost Refund to be paid by the Market Participant to AEMO for all Trading Intervals in Trading Day dMonth m; and

- vii. the total Participant Capacity Rebate to be paid to the Market Participant by AEMO for all Trading Intervals in Trading Day dMonth m;
- viii. the Tranche 2 DSM Dispatch Payments to be made to the Market Participant;
- (dA) for each Market Participant, the Intermittent Load Refund to be paid by the Market Participant to AEMO for each of its Intermittent Loads; and

Clause 4.29.3(e)(iii) has been moved to clause 4.24.18 with conforming amendments.

- (e) for each Supplementary Capacity Contract:
 - the net payment to be made by AEMO under that contract for the Trading Month Day; and
 - ii. to whom the payment is to be made.; and
 - iii. how the payment is to be made if the party identified in clause 4.29.3(e)(ii) is not a Market Participant.
- 4.29.4. If a Capacity Credit is terminated, created or reinstated for any reason during a Trading Month then AEMO must adjust the quantities specified in clause 4.29.3(d) to reflect the proportion of the Trading Month for which the Capacity Credit existed.

Explanatory Note

New proposed clause 4.29.5 is being added to clarify that the Reserve Capacity Price to be paid for early entry facilities will be the Reserve Capacity Price for the Capacity Year immediately prior to the start of the relevant Capacity Year. This reflects the current practice.

4.29.5. Where a Facility first enters service prior to 1 October of Year 3 of the 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 Reserve Capacity
Price and Facility Monthly Reserve Capacity Price for the Facility for that period is
the Reserve Capacity Price and Facility Monthly Reserve Capacity Price for the
Capacity Year immediately preceding 1 October of Year 3 of that Reserve
Capacity Cycle.

. . .

Explanatory Note

New sections 4.30 and 4.31 are added moving capacity credit allocation from chapter 9 (sections 9.4 and 9.5) to chapter 4, changes in taxonomy, change to clause references in

Chapter 9. Changes also made to make sure Market Participants know what the cut off time is.

The clause numbering in new sections 4.30 and 4.31 are consistent with the numbering in sections 9.4 and 9.5, and will be renumbered in the final version of these Amending Rules.

Capacity Credit Allocation Process

- 4.30.1. A Market Participant may submit one or more Capacity Credit Allocation

 Submissions in respect of a Facility by the date and time published by AEMO in accordance with clause 4.32.1.
- 4.30.2. [Blank]
- 4.30.3. A Capacity Credit Allocation Submission must be submitted in the form specified by AEMO and must include the information specified in clause 4.31.1.
- 4.30.4. Within one Business Day following receipt of a Capacity Credit Allocation Submission, AEMO must:
 - (a) decide whether to approve or reject the Capacity Credit Allocation Submission;
 - (b) notify the submitting Market Participant of the decision;
 - (c) if the decision is to reject the Capacity Credit Allocation Submission, notify the submitting Market Participant of the reason for the rejection; and
 - if the decision is to approve the Capacity Credit Allocation Submission,
 notify the Market Participant specified as the receiver of the Capacity
 Credits of the details of the Capacity Credit Allocation Submission.
- 4.30.5. AEMO must reject a Capacity Credit Allocation Submission in respect of a Facility if:
 - (a) the sum of the Capacity Credits:
 - i. proposed to be allocated in the Capacity Credit Allocation
 Submission;
 - ii. proposed to be allocated in any other Capacity Credit Allocation

 Submission for that Facility by that Market Participant for the
 relevant Trading Month that is approved by AEMO but not yet
 accepted by the relevant Market Participant specified as the
 receiver of the Capacity Credits (excluding any Capacity Credit
 Allocation Submissions withdrawn under clause 4.30.12); and
 - iii. in any approved Capacity Credit Allocation for that Facility by that

 Market Participant for the relevant Trading Month (excluding any
 Capacity Credit Allocations reversed under clause 4.30.14 and
 accounting for any reductions under clauses 4.30.16 or 4.30.17),

- exceeds the number of Capacity Credits that are able to be traded bilaterally for that Facility by that Market Participant under the WEM Rules for the Trading Month; or
- (b) AEMO reasonably considers that the Trading Margin of the Market

 Participant specified as the provider of the Capacity Credits is likely to be
 negative after allocating the Capacity Credits as outlined in the Capacity
 Credit Allocation Submission.
- 4.30.6. AEMO must approve a Capacity Credit Allocation Submission if the Capacity Credit Allocation Submission is not rejected in accordance with clause 4.30.5.
- 4.30.7. Once AEMO has approved a Capacity Credit Allocation Submission, the Market
 Participant specified as the receiver of the Capacity Credits may accept the
 allocation of Capacity Credits specified in the Capacity Credit Allocation
 Submission by submitting a Capacity Credit Allocation Acceptance by the date
 and time published by AEMO in accordance with clause 4.32.1.
- 4.30.8. A Capacity Credit Allocation Acceptance must be submitted in the form specified by AEMO.
- 4.30.9. Within one Business Day following receipt of a Capacity Credit Allocation Acceptance, AEMO must:
 - (a) decide whether to approve or reject the Capacity Credit Allocation Acceptance:
 - (b) notify the submitting Market Participant and the Market Participant that submitted the corresponding Capacity Credit Allocation Submission of the decision:
 - (c) if the decision is to reject the Capacity Credit Allocation Acceptance under clause 4.30.10(a), notify the submitting Market Participant of the reason for the rejection; and
 - (d) if the decision is to reject the Capacity Credit Allocation Acceptance under clauses 4.30.10(b) or 4.30.10(c), notify the Market Participant that submitted the corresponding Capacity Credit Allocation Submission of the reason for the rejection.
- 4.30.10. AEMO must reject a Capacity Credit Allocation Acceptance in respect of a Facility if:
 - (a) the Capacity Credit Allocation Submission has been withdrawn under clause 4.30.12;
 - (b) the sum of the Capacity Credits:
 - i. proposed to be allocated in the relevant Capacity Credit Allocation
 Submission; and

- ii. in any approved Capacity Credit Allocation for the Facility by the

 Market Participant that submitted the relevant Capacity Credit

 Allocation Submission for the relevant Trading Month (excluding
 any Capacity Credit Allocations reversed under clause 4.30.14 and
 accounting for any reductions under clauses 4.30.16 or 4.30.17),
- exceeds the number of Capacity Credits that are able to be traded bilaterally for the Facility by the Market Participant that submitted the relevant Capacity Credit Allocation Submission under the WEM Rules for the Trading Month; or
- (c) AEMO reasonably considers that the Trading Margin of the Market

 Participant specified as the provider of the Capacity Credits is likely to be
 negative after allocating the Capacity Credits as outlined in the Capacity
 Credit Allocation Submission.
- 4.30.11. AEMO must approve a Capacity Credit Allocation Acceptance if the Capacity Credit Allocation Acceptance is not rejected in accordance with clause 4.30.10.
- 4.30.12. A Market Participant may withdraw a Capacity Credit Allocation Submission in respect of a Facility at any time before AEMO has approved a corresponding Capacity Credit Allocation Acceptance from the Market Participant specified as the receiver of the Capacity Credits for that Facility in accordance with clause 4.30.11.
- 4.30.13. Within one Business Day after a Market Participant has withdrawn a Capacity

 Credit Allocation Submission in respect of a Facility under clause 4.30.12, AEMO

 must notify the Market Participant specified as the receiver of the Capacity Credits
 that the Capacity Credit Allocation Submission for that Facility has been
 withdrawn.
- 4.30.14. AEMO must reverse a Capacity Credit Allocation in respect of a Facility if AEMO receives a request for a reversal of that Capacity Credit Allocation from the Market Participant that submitted the Capacity Credit Allocation Submission and the Market Participant specified as the receiver of the Capacity Credits in that Capacity Credit Allocation Submission, before the date and time published by AEMO in accordance with clause 4.32.1 which is the latest date and time at which Capacity Credit Allocation Submissions and Capacity Credit Allocation Acceptances may be made for the relevant Trading Month.
- 4.30.15. If the termination of a Capacity Credit in respect of a Facility results in the number of Capacity Credits allocated by a Market Participant in Capacity Credit Allocations for that Facility for a Trading Month exceeding the number of Capacity Credits held for that Facility for a Trading Month by the Market Participant that are allowed to be traded bilaterally under the WEM Rules, then AEMO must notify the Market Participant within one Business Day after the termination.
- 4.30.16. A Market Participant may, within two Business Days following receipt of a notice provided under clause 4.30.15, amend one or more of its approved Capacity

Credit Allocations in respect of the relevant Facility for the Trading Month to reduce the-number of Capacity Credits allocated in respect of the relevant Facility by the quantity needed to eliminate the excess identified by AEMO under clause 4.30.15.

- 4.30.17. If a Market Participant does not make a reduction under clause 4.30.16, AEMO must, within one Business Day after the deadline specified in clause 4.30.16:
 - (a) amend one or more of the Capacity Credit Allocations in respect of the relevant Facility for the Market Participant for the Trading Month to eliminate the excess identified by AEMO under clause 4.30.15 in accordance with the WEM Procedure specified in clause 4.30.18; and
 - (b) for each amended Capacity Credit Allocation, notify each affected Market Participant of the details of the amendment.
- 4.30.18. AEMO must develop a WEM Procedure dealing with:
 - (a) Capacity Credit Allocations; and
 - (b) other matters relating to sections 4.30 and 4.31.

4.31. Format of Capacity Credit Allocation Submissions

- 4.31.1. A Capacity Credit Allocation Submission must set out:
 - (a) the identity of the submitting Market Participant, which must be the holder of Capacity Credits;
 - (aA) the identity of the Facility from which the Capacity Credits are to be allocated for settlement purposes;
 - (b) the identity of the Market Participant to which the Capacity Credits are to be allocated for settlement purposes, which may be the submitting Market Participant; and
 - (c) the number of Capacity Credits to be allocated for settlement purposes
 from the Market Participant which was the holder of Capacity Credits to the
 Market Participant which was allocated Capacity Credits, which may be the
 same Market Participant.
- 4.31.2. A Capacity Credit Allocation Submission in respect of a Facility may allocate part of a Capacity Credit for that Facility provided that the number of Capacity Credits allocated is specified to a precision of 0.001 MW.

Explanatory Note

Clause 9.3.1(b) (from the Tranche 2 Amending Rules) is moved to new section 4.32 with consequential amendments (for example, reverting to "Trading Month").

4.32. Capacity Credit Allocation Timeline

- 4.32.1. AEMO must publish the Capacity Credit Allocation Submission and Capacity

 Credit Allocation Acceptance timeline for a Financial Year at least one calendar month prior to the commencement of that Financial Year. This Capacity Credit Allocation Submission and Capacity Credit Allocation Acceptance timeline must include:
 - (a) the earliest date and time at which Capacity Credit Allocation Submissions
 and Capacity Credit Allocation Acceptances for a Trading Month can be
 submitted, where this is to be not less than 10 Business Days prior to the
 start of the relevant Trading Month; and
 - (b) the latest date and time at which Capacity Credit Allocation Submissions and Capacity Credit Allocation Acceptances for a Trading Month can be submitted, where this is to be no later than 5:00 PM on the day before the start of the relevant Trading Month.

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Explanatory Note

Proposed new clause 6.2.8 requires AEMO to notify Market Participants of any changes to the Electric Storage Resource Obligation Intervals for a Trading Day.

6.2. Bilateral Submission Timetable and Process

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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, immediately 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.

. . .

9.3. Settlement Timeline

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- 9.3.1 The settlement timeline for settlement of amounts payable under these WEM Rules for each Trading Week within a Financial Year must be published by AEMO at least one calendar month prior to the commencement of that Financial Year. This settlement timeline must include for each Trading Week:
 - (a) the Interval Meter Deadline, being 5:00 PM on the seventeenth (17th) day following the end of a Trading Week;

Existing clause 9.3.1(b) (as published in the Tranche 2 Amending Rules) is deleted from clause 9.3.1 and moved to new section 4.32.

- (b) the Capacity Credit Allocation Submission and Capacity Credit Allocation Acceptance timeline, including:
 - i. the earliest date and time at which Capacity Credit Allocation
 Submissions and Capacity Credit Allocation Acceptances for a
 Trading Week can be submitted, where this is to be not less than 10

 Business Days prior to the start of the relevant Trading Week; and
 - ii. the latest date and time at which Capacity Credit Allocation

 Submissions and Capacity Credit Allocation Acceptances for a

 Trading Week can be submitted, where this is the Interval Meter

 Deadline as specified in clause 9.3.1(a) for the relevant Trading Week.

. . .

Explanatory Note

Settlement Calculations –RCM equations have been amended for weekly settlement. All of these equations will be made consistent in form with the other settlement equations after public consultation.

9.8. Settlement Calculations - Reserve Capacity

- 9.8.1. AEMO must calculate for each Market Participant the Reserve Capacity settlement amount for a Trading Day.
- 9.8.2. The Reserve Capacity settlement amount for Market Participant p for Trading Day d is:

RCSA(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.
- 9.8.3. For the purposes of clause 9.8.2, Capacity_Provider_Payment(p,d) for Market Participant p for Trading Day d is:

Capacity Provider Payment(p,d)

- = Participant Capacity Rebate(p,d)
- + Capacity Payments(p,d) Intermittent Load Refund(p,d)
- + Supplementary Capacity Payment(p,d) Capacity Cost Refund(p,d)
- + Over Allocation Payment(p,d)

Where:

- (a) Participant Capacity Rebate(p,d) is the Participant Capacity Rebate
 payable to the Market Participant p for all Trading Intervals in Trading
 Day d, as determined in accordance with clause 4.29.3(d)(vii);
- (b) Capacity Payments $(p,d) = \sum_{f \in F} ((CC(p,f,d) Facility CCA(p,f,d)) \times DMRCP(f,d))$

Where:

- i. f∈F denotes the Facilities f registered to Market Participant p in Trading Day d;
- ii. CC(p,f,d) is the number of Capacity Credits assigned to the Facility f, registered to Market Participant p, for the Trading Day d as may be adjusted in accordance with clause 4.29.4;
- iii. Facility_CCA(p,f,d) is the sum of the Capacity Credits associated with the Facility f, registered to Market Participant p, for the Trading Month in which the Trading Day d falls that have been allocated in a Capacity Credit Allocation; and
- iv. DMRCP(f,d) is the Facility Daily Reserve Capacity Price, as applicable, associated with the Facility f in Trading Day d as determined in accordance with clause 4.29.2B;
- (c) Intermittent Load Refund(p,d) is the sum over all of Market Participant p's

 Intermittent Loads of the Intermittent Load Refund payable to AEMO by

 Market Participant p in respect of each of its Intermittent Loads for Trading

 Day d, as specified in clause 4.28A.1;
- (d) Supplementary Capacity Payment(p,d) is the net payment to be made by AEMO under a Supplementary Capacity Contract to Market Participant p for Trading Day d, as specified by AEMO in accordance with clause 4.29.3(e)(i);
- (e) Capacity_Cost_Refund(p,d) is the Capacity Cost Refund payable to AEMO
 by Market Participant p in respect of that Market Participant's Capacity
 Credits for Trading Day d, as specified in clause 4.29.3(d)(vi);
- (g) Participant CCA(p,d) is the sum of Capacity Credits allocated to Market Participant p in Trading Day d in a Capacity Credit Allocation;
- (h) IRCR(p,d) is the Individual Reserve Capacity Requirement for Market

 Participant p for the Trading Month in which the Trading Day d falls,
 expressed in units of MW;
- (i) Excess_Allocation_Price(p,d) =
 - 0, if Participant_CCA(p,d) = 0; and

$Sum(c \in C, (CCA(c,d) \times DMRCP(f,d)) / Sum(c \in C, CCA(c))$ otherwise;

- (j) c denotes a Capacity Credit Allocation associated with the Facility f and Trading Day d;
- (k) C is the set of Capacity Credit Allocations made to Market Participant p in Trading Day d; and
- (I) CCA(c,d) is the number of Capacity Credits that have been allocated in a

 Capacity Credit Allocation associated with the Facility f to Market

 Participant p in the Trading Month in which the Trading Day d falls.
- 9.8.4. For the purposes of clause 9.8.2, Capacity_Purchaser_Payment(p,d) for Market Participant p for Trading Day d is:
 - Capacity Purchaser Payment(p,d) = Targeted Reserve Capacity Cost(p,d)
 + Shared Reserve Capacity Cost(p,d)
 LF Capacity Cost(p,d)

Where:

- (a) Targeted_Reserve_Capacity_Cost(p,d) =
 Targeted_Reserve_Capacity_Cost(d) × Shortfall_Share(p,d)
- (b) Shared_Reserve_Capacity_Cost(p,d) =
 Shared_Reserve_Capacity_Cost(d) × Capacity_Share(p,d)
- (c) LF_Capacity_Cost(p,d) =

 LF_Capacity_Cost(d) × Capacity_Share(p,d)
- (d) Targeted Reserve Capacity Cost(d) is the cost of Reserve Capacity to be shared amongst those Market Participants who have not had sufficient Capacity Credits allocated to them for Trading Month m where this cost is specified for Trading Day d under clause 4.29.3(b);
- (e) Shortfall Share(p,d) =

 (max(0, IRCR(p,d) Participant_CCA(p,d))) / Sum(p∈P,(max(0, IRCR(p,d) Participant_CCA(p,d))))

 Participant_CCA(p,d))))
- (f) Shared Reserve Capacity Cost(d) is the cost of Reserve Capacity to be shared amongst all Market Participants for Trading Day d where this cost is specified for Trading Day d under clause 4.29.3(c);
- (g) Capacity Share(p,d) = $IRCR(p,d) / Sum(p \in P, IRCR(p,d))$
- (h) P is the set of all Market Participants where p is a member of that set;
- (i) IRCR(p,d) is the Individual Reserve Capacity Requirement for Market

 Participant p for the Trading Month in which the Trading Day d falls,

 expressed in units of MW; and
- (j) Participant_CCA(p,d) is the sum of the Capacity Credits allocated to

 Market Participant p in the Trading Month in which the Trading Day d falls,
 in a Capacity Credit Allocation.

9.8.5. The net payment to be made by AEMO under a Supplementary Capacity Contract to a person who is not a Market Participant will be settled by AEMO in accordance with contract conditions which are not required to be consistent with other settlement processes or prudential processes under these WEM Rules.

. . .

9.14 Settlement Statements

- 9.14.1 AEMO must provide Settlement Statements to Market Participants and to each Network Operator in accordance with the settlement timeline in section 9.3.
- 9.14.2 A Settlement Statement must include:

Explanatory Note

Cross references have been updated to reflect move of sections 9.4 and 9.5.

. . .

- (g) details of any Capacity Credits allocated to the Market Participant from another Market Participant in accordance with sections 9.4 and 9.54.30 and 4.31;
- (h) details of any Capacity Credits allocated to another Market Participant from the Market Participant in accordance with sections 9.4 and 9.54.30 and 4.31;

..

10 Market Information

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Information to be Released via the WEM Website

10.5. Public Information

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Explanatory Note

Clause 10.5.1(f)(vi) is proposed to be deleted as a consequence of the Reserve Capacity Auction being deleted.

New proposed clauses 10.5.1(f)(xii) and (xiii) provides that Network Access Quantities and the Highest Network Access Quantity for facilities are to be made public.

New proposed clause 10.5.1(f)(xiv) provides that information relating to Facilities that are funding network augmentations is to be made public.

10.5.1. AEMO must set the class of 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:

. .

(f) the following Reserve Capacity information (if applicable):

..

- vi. [Blank]for each Special Price Arrangement for each Registered Facility:
 - 1. the amount of Reserve Capacity covered;
 - 2. the term of the Special Price Arrangement; and
 - 3. the Special Reserve Capacity Price applicable to the Special Price Arrangement,

where this information is to be current as at, and published on, 7January of each year;

. . .

- x. the following information identified for a Reserve Capacity Cycle under the Relevant Level Methodology:
 - 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
 - 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; and
- 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 information provided to AEMO under clause 4.10A.5 with respect to a Market Participant nominating that a Facility be classified as a Network Augmentation Funding Facility;

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Explanatory Note

Clause 10.7.1(a) is proposed to be deleted as a consequence of the Reserve Capacity Auction being deleted.

10.7. Rule Participant Market Restricted Information

- 10.7.1. AEMO 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) all Reserve Capacity Offer information issued by that Market Participant and all details of Special Price Arrangements for that Market Participant prior to the publication of that information in accordance with clause 10.5.1(f);

. . .

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Explanatory Note

The Chapter 11 Glossary is proposed to be amended to amend, delete or add the following definitions in line with the draft Amending Rules.

In particular, the definitions that are marked as proposed to be deleted are redundant in the new frameworks.

Existing definitions relating to Chapter 4 are set out in these draft Amending Rules to assist with reviewing the proposed amendments.

11. Glossary

Arrangement for Access: When used in the context of a "covered network" (as that term is defined in the Access Code) means an "access contract" (as that term is defined in the Access Code). When used in the context of a network which is not a "covered network" (as that term is defined in the Access Code) means any commercial arrangement through which "access" (as that term is defined in the Access Code) to that network is obtained.

Availability Class: Means the annual availability of Certified Reserve Capacity set out in clause 4.5.12, as either Availability Class 1 or Availability Class 2, as applicable.

Availability Class 1: The Availability Class assigned by AEMO to Certified Reserve Capacity that includes all generation capacity, and any other capacity that is expected to be available to be dispatched for all Trading Intervals in a Capacity Year, under clause 4.11.4(a).

Availability Class 2: The Availability Class assigned by AEMO to Certified Reserve Capacity that is not expected to be available to be dispatched for all Trading Intervals in a Capacity Year, under clause 4.11.4(b).

Benchmark Reserve Capacity Price: In respect of a Reserve Capacity Cycle, the price in clause 4.16.2 as revised in accordance with section 4.16.

Bilateral Contract: A contract formed between any two persons for the sale of electricity by one of those persons to the other.

Candidate Fixed Price Facility: Means a Facility that has been nominated to be classified as a Fixed Price Facility in accordance with clause 4.14.1B.

Capacity Cost Refund: Has the meaning given in clause 4.26.2E.

Capacity Credit: A notional unit of Reserve Capacity provided by a Facility during a Capacity Year. The total number of Capacity Credits provided by a Facility is determined in accordance with clause sections 4.20, clause 4.28B, or clause 4.28C. Each Capacity Credit is equivalent to 1MW of Reserve Capacity. The Capacity Credits to be provided by a Facility are held by the Market Participant registered in respect of that Facility. The number of Capacity Credits to be provided by a Facility may be reduced in certain circumstances under the WEM Rules, including under clause 4.25.4 or adjusted under clause 4.25.6.

Explanatory Note

Changes have been made to the definition of 'Capacity Credit Allocation' to reflect the movement of sections 9.4 and 9.5 and for changes in the registration taxonomy.

Capacity Credit Allocation: The allocation of a number of Capacity Credits held by a Market Participant for a Facility to a Market <u>Customer Participant</u> for a Trading Month for settlement purposes through the allocation process in sections <u>9.4 4.30</u> and <u>9.5 4.31</u>.

Explanatory Note

The definition of 'Capacity Credit Allocation Acceptance' has been amended to reflect the changes in the registration taxonomy.

Capacity Credit Allocation Acceptance: A submission from a Market <u>Customer Participant</u> to AEMO made in accordance with clauses <u>9.4.7 and 9.4.8 4.30.7 and 4.30.8</u> to accept a Capacity Credit Allocation Submission.

Explanatory Note

Changes have been made to the definition of 'Capacity Credit Allocation Submission' to reflect the movement of sections 9.4 and 9.5 and for changes in the registration taxonomy.

Capacity Credit Allocation Submission: A submission from a Market Participant to AEMO made in accordance with clauses <u>9.4.1 and 9.4.3 4.30.1 and 4.30.3</u> to allocate Capacity Credits to a single Market <u>CustomerParticipant</u>.

Capacity Year: A period of 12 months commencing at the start of the Trading Day which commences on 1 October and ending on the end of the Trading Day ending on 1 October of the following calendar year.

A definition for "CC Uplift Quantity" is added. See clause 4.1A.4.

CC Uplift Quantity: Has the meaning given in clause 4.1A.4.

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 clause 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.

Commercial Operation: The status determined by AEMO that:

- (a) under clause 4.13.10B a Facility (other than a Demand Side Programme); or
- (b) under clause 4.13A.25 a Demand Side Programme, is operating in the Wholesale Electricity Market.

Commissioning Test: Has the meaning given in clause 3.21A.1.

Commissioning Test Plan: The information submitted to AEMO in accordance with clause 3.21A.4, which may be an original Commissioning Test Plan or a revised Commissioning Test Plan, as applicable.

Commissioning Test Period: The proposed period during which Commissioning Tests will be conducted, as provided to AEMO under clause 3.21A.4(b).

Conditional Certified Reserve Capacity: Has the meaning given in clause 4.9.5.

Explanatory Note

The definition for 'Constrained Access Certification Review' is proposed to be deleted as a consequence of the proposed deletion of clause 4.1.34.

Constrained Access Certification Review: Means the review conducted by AEMO contemplated in clause 4.1.34.

Explanatory Note

The definition for 'Constrained Access Entitlement' is proposed to be deleted as a consequence of the proposed deletion of the Constrained Access Review regime, including Appendix 11.

Constrained Access Entitlement: Means the value determined by the relevant Network Operator and provided to AEMO under clause 4.10A, or subsequently confirmed by the relevant Network Operator under clause 4.11.5 (if applicable), for a Constrained Access Facility for a Capacity Year.

The definition for 'Constrained Access Facility' is proposed to be deleted as a consequence of the proposed deletion of the Constrained Access Review regime, including Appendix 11.

Constrained Access Facility: A Facility that is, or will be, subject to an Arrangement for Access entered into or amended after the day on which the Wholesale Electricity Market Amending Rules 2017 made under regulation 7(4) of the WEM Regulations come into effect, under which the Facility is not entitled to unconstrained access to the relevant Network for all of its capacity on and from the date and time specified in clause 4.1.11(b) for a Reserve Capacity Cycle.

Constraint: Means:

- (a) a Network Constraint; and
- (b) a limitation or requirement affecting the capability of a Load or generating system such that it would represent a risk to Power System Security or Power System Reliability if the limitation or requirement was removed.

Constraint Equation: A mathematical representation of a Constraint on the SWIS.

Constraint Sets: Each group of Constraint Equations that respond to a particular condition or set of conditions.

Explanatory Note

The definition for 'Constraints Library' is proposed to be amended to include the information referred to in clause 4.1.15.

Constraints Library: The collection of:

- (a) Constraint Equations and Constraint Sets that AEMO is required to develop and maintain in accordance with section 2.27A;—and
- (b) supporting information, including:
 - i. Limit Advice, including Limit Equations and Limit Advice Inputs;
 - ii. the Operating Margin forming part of each Constraint Equation; and
 - iii. any other information specified in the WEM Procedure referred to in clause 2.27A.10-; and
- (c) for each Reserve Capacity Cycle:
 - i. the information provided by each Network Operator under clause4.1B.4; and
 - ii. the Preliminary RCM Constraint Equations; and
 - iii. the Final RCM Constraint Equations used by AEMO in the Network

 Access Quantity Model for determining Network Access Quantities
 under Appendix 3.

The definition of 'Consumption Deviation Application' has been amended to reflect the changes in taxonomy.

Consumption Deviation Application: An application submitted by a Market Customer Participant to AEMO under clause 4.26.2CB(a) or clause 4.28.9A, notifying AEMO and providing evidence that the consumption of a Load was affected.

Explanatory Note

The definition for 'Coordinator' is added as part of the Tranche 1 Amending Rules.

Coordinator: Means the Coordinator of Energy referred to in section 4 of the Energy Coordination Act 1994 (WA).

Declared Sent Out Capacity: Has the meaning given in Appendix 3 of the Electricity Networks Access Code 2004.

Demand Side Management: A type of capacity held in respect of a Facility connected to the SWIS; specifically, the capability of a Facility connected to the SWIS to reduce its consumption of electricity through the SWIS, as measured at the connection point of the Facility to the SWIS.

Demand Side Programme: Means a Facility registered in accordance with clause 2.29.5A.

Demand Side Programme Capacity Cost Refund: Has the meaning given in clause 4.26.3A.

Demand Side Programme Load: Has the meaning given in clause 6.16.2.

DSM Activation Price: An estimate, expressed in dollars per MWh, of the value of customer reliability in the SWIS for a Capacity Year, to be calculated by AEMO under clause 4.5.14A. For a given Capacity Year, the **DSM Activation Price** is the value specified for the Capacity Year in the Statement of Opportunities Report most recently published before the start of the Capacity Year.

DSM Capacity Credits: Capacity Credits assigned to a Demand Side Programme.

DSM Reserve Capacity Price: The price that will be paid per DSM Capacity Credit for a Capacity Year. It equals—

- (a) the Expected DSM Dispatch Quantity for that Capacity Year plus 0.5; multiplied by
- (b) the DSM Activation Price for that Capacity Year.

DSM Reserve Capacity Security: The reserve capacity security to be provided for a Demand Side Programme that:

(a) has the meaning given in clause 4.13A.6; and

(b) is as calculated and re-calculated under section 4.13A.

Early Certified Reserve Capacity: Reserve Capacity which is certified and assigned to a new Facility by AEMO for a future Reserve Capacity Cycle under clause 4.28C.

Explanatory Note

An 'Electric Storage Resource' is to be defined in the draft Amending Rules in the Registration, Participation and Storage workstream.

New definitions for 'Electric Storage Obligation Duration', 'Electric Storage Resource Obligation Interval' and 'Electric Storage Resource Metering' are proposed to be added.

Electric Storage Resource Obligation Duration: The eight contiguous Electric Storage Resource Obligation Intervals which commence at the time published by AEMO in accordance with clause 4.11.3A each Trading Day.

<u>Electric Storage Resource Obligation Quantity</u>: The Capacity Credits associated with the <u>Electric Storage Resource</u>.

<u>Electric Storage Resource Obligation Interval</u>: A Trading Interval in which a Reserve Capacity Obligation Quantity for an Electric Storage Resource applies.

Electric Storage Resource Metering: A meter or meters that:

- (a) a Market Participant is required to install under clause 2.29.5BA; and
- (b) are to be used solely for the purpose of Reserve Capacity Certification and a Reserve Capacity Test under section 4.25 for a Facility containing an Electric Storage Resource.

Environmental Approval: In respect of a Facility is a licence, consent, certificate, notification, declaration or other authorisation required under any law relating to the protection or conservation of the environment for the lawful construction of the Facility or the development of the site on which the Facility is to be constructed.

Expected DSM Dispatch Quantity: A forecast, expressed on a MWh per DSM Capacity Credit basis, of the quantity of Unserved Energy which might be expected to be avoided in a Capacity Year by dispatch of all Facilities which have been assigned DSM Capacity Credits for the Capacity Year, to be calculated by AEMO under clause 4.5.14A based on the scenario described in clause 4.5.10(a)(iv). For a given Capacity Year, the **Expected DSM Dispatch Quantity** is the value specified for the Capacity Year in the Statement of Opportunities Report most recently published before the start of the Capacity Year.

Explanatory Note

The definition of "Excess Allocation Price" has been amended to reflect a change in clause numbering.

Excess Allocation Price: For a Market Participant is as calculated in accordance with clause <u>9.8.3(i)</u>9.7.1A.

Extra Consumption Decrease Price: A price specified in item (h)(vi)(3) and (4) of Appendix 1, accepted by AEMO under section 6.11A, to apply in forming the Non-Balancing Dispatch Merit Order for a Trading Interval for a Demand Side Programme and in the calculation of the Non-Balancing Facility Dispatch Instruction Payment for that Demand Side Programme for that Trading Interval.

Explanatory Note

New definition of "Facility Daily Reserve Capacity Price" inserted for purposes of weekly settlement.

Facility Daily Reserve Capacity Price: The Facility Monthly Reserve Capacity Price divided by the number of Trading Days in the relevant month.

Facility Monthly Reserve Capacity Price: Means the dollar price per Capacity Credit per Trading Month calculated in respect of a Facility in accordance clause 4.29.1A.

Explanatory Note

The definition for 'Facility Monthly Special Reserve Capacity Price' is proposed to be deleted as a consequence of the Reserve Capacity Auction being deleted.

Facility Monthly Special Reserve Capacity Price: Means the dollar price per Capacity Credit per Trading Month calculated in respect of a Facility in accordance with clause 4.29.2.

Facility Reserve Capacity Deficit Refund: Has the meaning given in clause 4.26.1A.

Explanatory Note

A new definition for 'Final Network Access Quantity' is to be added. See new (replacement) section 4.15.

<u>Final Network Access Quantity</u>: Means, in respect of a Facility for a Reserve Capacity Cycle, the value recorded by AEMO for the Facility in accordance with Appendix 3 for the Reserve Capacity Cycle.

Fixed Price Facility: Means a Candidate Fixed Price Facility that was assigned Capacity Credits for a Reserve Capacity Cycle in which it nominated in accordance with clause 4.14.1B to be classified as a Fixed Price Facility.

Fixed Price Reserve Capacity Cycle: Means, for a Fixed Price Facility, which is either:

- (a) the Reserve Capacity Cycle in which the Fixed Price Facility was first assigned Capacity Credits; or
- (b) any of the subsequent four Reserve Capacity Cycles.

Generation Capacity Cost Refund: Has the meaning given in clause 4.26.3.

Generation Reserve Capacity Deficit Refund: Has the meaning given in clause 4.26.1B.

A new definition for 'GIA Facility' is to be added. See new proposed section 4.1A.

GIA Facility: A Facility that is, or will be, subject to an Arrangement for Access entered into or amended after 24 June 2017 under which the Facility is not entitled to unconstrained access to the relevant Network for all of its capacity on and from the date and time specified in clause 4.1.11(b) for a Reserve Capacity Cycle.

Explanatory Note

A new definition for 'Highest Network Access Quantity' is to be added. See new (replacement) section 4.15.

<u>Highest Network Access Quantity</u>: In respect of a Facility, the amount determined by AEMO in accordance with clause 4.15.14.

Explanatory Note

The definition of 'Indicative Individual Reserve Capacity Requirement' has been amended to reflect the changes in taxonomy.

Indicative Individual Reserve Capacity Requirement: Means the estimate of a Market Customer's Participant's Individual Reserve Capacity Requirement determined and published by AEMO in accordance with clause 4.28.6.

Explanatory Note

A new definition for 'Indicative Network Access Quantity' is to be added. See section 4.28C, clause 4.15.1 and Appendix 3.

Indicative Network Access Quantity: Means the estimate of the Network Access Quantity for a Facility that has made an application under section 4.28C for Early Certified Reserve Capacity in the current Reserve Capacity Cycle for Capacity Credits in a future Reserve Capacity Cycle as determined at Step 14 of Part A or Part B, as applicable, of Appendix 3.

Individual Intermittent Load Reserve Capacity Requirement: Means the Individual Reserve Capacity Requirement for an Intermittent Load for a Trading Month determined in accordance with Appendix 4A.

Explanatory Note

The definition of 'Individual Reserve Capacity Requirement' has been amended to reflect the changes in taxonomy.

Individual Reserve Capacity Requirement: The MW quantity determined by AEMO in respect of a Market <u>CustomerParticipant</u>, in accordance with clause 4.28.7 and, if applicable, as revised in accordance with clause 4.28.11A.

Explanatory Note

The definition of 'Individual Reserve Capacity Requirement Contribution' has been amended to reflect the changes in taxonomy.

Individual Reserve Capacity Requirement Contribution: Means the contribution of an Associated Load to a Market <u>Customer's Participant's</u> Indicative Individual Reserve Capacity Requirement determined in accordance with Step 11 of Appendix 5.

Explanatory Note

A new definition for 'Initial Network Access Quantity' is to be added. See new proposed section 4.1A.

<u>Initial Network Access Quantity:</u> The Network Access Quantity determined for a Facility in accordance with clause 4.1A.1.

Explanatory Note

The cross reference in the Tranche 2 Amending Rules in the definition for 'Interval Meter Deadline' is updated to clause 9.3.1(a).

Interval Meter Deadline: The date determined in accordance with clause <u>9.3.1(a)</u>9.3.2.

Limit Advice: Has the meaning given in clause 2.27A.2.

Limit Advice Inputs: Information used in the development of Limit Advice including:

- (a) the rating for each transmission system element or equipment comprising the transmission system, including any part of the distribution system that is used for the transmission of electricity as part of the secure operation of the transmission system or the SWIS; and
- (b) the Limit Margin forming part of each Limit Equation.

Limit Equation: Means a mathematical expression defining the power transfer capability across a particular Network element or group of Network elements.

Limit Margin: A margin applied by a Network Operator when formulating a Limit Equation, or a Network Limit where a Limit Equation is not appropriate, to account for uncertainty.

Explanatory Note

A new definition for 'Linear Derating Method' is to be added.

The Certified Reserve Capacity quantity assigned to an Electric Storage Resource that is not able to sustain its output across all required Trading Intervals will be derated.

Linear Derating Method: The method for determining the discharge capability, in MW, of an Electric Storage Resource, in accordance with clause 4.11.3, by multiplying its maximum discharge capability (in MW) by the lower of:

(a) 1; and

(b) the ratio of the discharge duration of the Electric Storage Resource and the Electric Storage Resource Obligation Duration.

Maximum Facility Refund: The total amount of the Capacity Credit payments paid or to be paid under these WEM Rules to a Market Participant in relation to a Facility and in relation to a Capacity Year assuming that:

- (a) AEMO acquires all of the Capacity Credits held by the Market Participant in relation to its Facility; and
- (b) the cost of each Capacity Credit so acquired is determined in accordance with clauses 4.28.2(c), 4.28.2(cA) and 4.28.2(d) (as applicable).

Maximum Participant Generation Refund: The total amount of the Capacity Credit payments paid or to be paid under these WEM Rules to a Market Participant in relation to its generating Facilities and in relation to a Capacity Year assuming that—

- (a) AEMO acquires all of the Capacity Credits held by the Market Participant in relation to its generating Facilities; and
- (b) the cost of each Capacity Credit so acquired is determined in accordance with clauses 4.28.2(c) and 4.28.2(d) (as applicable).

Explanatory Note

A new proposed definition for 'Minimum Capacity Credits Quantity' is proposed to be added to refer to the minimum number of Capacity Credits a Market Participant requires to be assigned to its Facility for the Facility to participate in the Reserve Capacity Mechanism.

Minimum Capacity Credits Quantity: The minimum quantity of Capacity Credits required to be assigned to a Facility for the Facility to participate in the Reserve Capacity Mechanism.

Net Offer Refund: Has the meaning given in clause 4.26.3.

Explanatory Note

The definition of 'Net Offer Shortfall' (previously amended in Tranche 1) has been amended to reflect a change in clause numbering.

Net Offer Shortfall: Has the meaning given in clause 4.26.2<u>AA</u>.

Explanatory Note

The definition for 'Network' is proposed to be amended to correct an existing minor typographical error.

Network: A transmission system or distribution—System system registered as a Network under clause 2.29.3.

Explanatory Note

A definition for 'Network Access Quantity' is proposed to be added. See new proposed

(replacement) section 4.15.

Network Access Quantity: The quantity, in MW, that is determined for a Facility pursuant to clause 4.15.1.

Explanatory Note

A definition for 'Network Access Quantity Cycle' is proposed to be added.

Network Access Quantity Cycle: The first Reserve Capacity Cycle following commencement of [Reserve Capacity Mechanism (No. 1)] Amendments.

Explanatory Note

A definition for 'Network Access Quantity Model' is proposed to be added.

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

Explanatory Note

A proposed new definition for 'Network Access Quantity Model Inputs' is proposed to be added to describe the information AEMO uses in the Network Access Quantity Model for a Reserve Capacity Cycle. AEMO is required to publish this information on the WEM Website under clause 4.15.15.

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

- (a) the preliminary Network Access Quantity determined by AEMO for a Facility for each applicable step in Appendix 3;
- (b) each of the assumptions and parameters used by AEMO in the Network Access Quantity Model;
- (c) each RCM Constraint Equation that is used in the Network Access

 Quantity Model;
- (d) RCM Limit Advice used in the Network Access Quantity Model; and
- (e) the Highest Network Access Quantity for each Facility.

Explanatory Note

A new definition for 'Network Augmentation Funding Facility' is proposed to be added. See section 4.10A.

Network Augmentation Funding Facility: Has the meaning given in clause 4.10A.4.

Explanatory Note

A new definition for 'Network Augmentation Works' is proposed to be added. See section

4.10A.

Network Augmentation Works: Means any wires, apparatus, equipment, plant or buildings used, or to be used, for, or in connection with, or to control, the transfer of electricity that directly results in an increase in the capacity of a part of the transmission system or distribution system.

Explanatory Note

The proposed amended definition for 'Network Constraint' is contained in the Tranche 2 Amending Rules.

Network Constraint: A limitation or requirement in a part of the Network that may impact one or more Registered Facilities in the Central Dispatch Process affecting the capability in a part of the transmission system, including any part of the distribution system that is used for the transmission of electricity as part of the secure operation of the transmission system or the SWIS, such that it would be unacceptable to transfer electricity across that part of the Network at a level or in a manner outside the limit or requirement.

Network Control Service: A service provided by generation or demand side management that can be a substitute for transmission or distribution network upgrades.

Network Control Service Contract: A contract between a Network Operator and a Market Participant to provide a Network Control Service.

Explanatory Note

The proposed amended definition for 'Network Limit' is contained in the Tranche 2 Amending Rules.

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 the 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

The proposed definition for 'Network Constraint' is contained in the Tranche 2 Amending Rules.

Non-Thermal Network Limit: Means a Network Limit that is not a Thermal Network Limit.

Explanatory Note

A new definition for 'Non-Thermal Network Limit Advice' is proposed to be added.

Non-Thermal Network Limit Advice: Limit Advice in respect of a Non-Thermal Network Limit.

New definition of 'Not In-Service Capacity' used in clause 4.26.2AA.5(b)(ii) (redrafted clause 4.26.2).

Not In-Service Capacity: The capacity in MW that AEMO considered was in merit and would have been dispatched by AEMO but was not dispatched only due to the capacity not being declared to be In-Service Capacity.

Notice of Intention to Cancel Capacity Credits: A notice issued by AEMO under clause 4.20.8 and containing the information required under clause 4.20.9.

Operating Margin: A margin applied by AEMO when formulating a Constraint Equation to account for uncertainty.

Participant Capacity Rebate: For a Market Participant holding Capacity Credits associated with a Scheduled-Generator Facility or a Demand Side Programme, the rebate determined for a Trading Month, as calculated in accordance with clause 4.26.4.

Explanatory Note

A new definition for "Preliminary RCM Constraint Equation' is proposed to be added. See section 4.1B.

Preliminary RCM Constraint Equation: Means an RCM Constraint Equation developed by AEMO pursuant to section 4.1B and published by AEMO in accordance with, and by the time specified in, clause 4.1B.5.

Explanatory Note

A new definition for "RCM Limit Advice" is proposed to be added.

RCM Limit Advice: Means Limit Advice for a Thermal Network Limit at an ambient temperature of 41°C or for a Non-Thermal Network Limit.

Explanatory Note

A new definition for "RCM Constraint Equation" is proposed to be added.

RCM Constraint Equation: Means a Constraint Equation developed by AEMO in accordance with section 4.1B.

Reference Node: Is:

- (a) up to the New WEM Commencement Day, the Muja 330 kV bus-bar; and
- (b) on and from the New WEM Commencement Day, the Southern Terminal 330 kV bus-bar,

(relative to which Loss Factors are defined and Constraint Equations are formulated).

Refund Exempt Planned Outage: Means a Planned Outage of a Scheduled Generator Facility for which a Facility Reserve Capacity Deficit Refund is not payable, as determined by AEMO under clause 4.26.1C.

Refund Exempt Planned Outage Count: Means, in respect of a Scheduled-Generator Facility and a period of time, the sum over all Trading Intervals in that period of—

- 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 MW quantity of Refund Exempt Planned Outage for the Facility in the Trading Interval, divided by the number of Capacity Credits associated with the Facility in the Trading Interval.

Refund Payable Planned Outage: Means a Planned Outage of a Scheduled Generator Facility for which a Facility Reserve Capacity Deficit Refund is payable, as determined by AEMO under clause 4.26.1C.

Relevant Demand: The consumption, expressed in MW, of a Demand Side Programme as determined in clause 4.26.2CA.

Relevant Level: Means the MW quantity determined by AEMO in accordance with the Relevant Level Methodology.

Relevant Level Methodology: Means the method of determining the Relevant Level specified in Appendix 9.

Request for Expression of Interest: In respect of a Reserve Capacity Cycle, the request for expression of interest made available in accordance with clause 4.2.2.

Required Level: The level of output (expressed in MW) required to be met by a Facility as determined in clause 4.11.3B.

Explanatory Note

The definition of "Reserve Capacity" has been amended to reflect new types of facilities.

Reserve Capacity: Capacity associated with a Facility. Capacity may be:

- (a) the capacity of generation <u>or storage sSystems</u> to produce generate electricity and send it out into a network forming part of the SWIS; or
- (b) Demand Side Management, being the capability of a Facility registered by the Market <u>Customer Participant</u> at a connection point to a Network forming part of the SWIS to reduce the consumption of electricity at that connection point.

Explanatory Note

The definition for 'Reserve Capacity Auction' is proposed to be deleted as a consequence of the Reserve Capacity Auction being deleted.

Reserve Capacity Auction: The process for determining the Reserve Capacity Price for a Reserve Capacity Cycle and the quantity of Reserve Capacity scheduled by AEMO for each Market Participant under clause 4.19.

Explanatory Note

The definition for 'Reserve Capacity Auction Requirement' is proposed to be deleted as a consequence of the Reserve Capacity Auction being deleted.

Reserve Capacity Auction Requirement: The quantity of Reserve Capacity calculated in accordance with clause 4.15.2(b), which is the target quantity to be procured in a Reserve Capacity Auction.

Reserve Capacity Cycle: The cycle of events described in clause 4.1.

Reserve Capacity Deficit: Has the meaning given in clause 4.26.1A.

Explanatory Note

The definition for 'Reserve Capacity Information Pack' is proposed to be amended as a consequence of the Reserve Capacity Auction being deleted.

Reserve Capacity Information Pack: A package of information, including the information described in clause 4.7.3, pertaining to a Reserve Capacity—Auction Cycle.

Reserve Capacity Mechanism: Chapter 4 of the WEM Rules.

Reserve Capacity Obligations: For a Market Participant holding Capacity Credits, determined in accordance with clause 4.12.1, clause 4.28B or clause 4.28C.

Reserve Capacity Obligation Quantity: The specific amount of capacity required to be provided in a Trading Interval as part of a Reserve Capacity Obligation set by AEMO in accordance with clauses 4.12.4 and 4.12.5 or clauses 4.28B or section 4.28C as adjusted from time to time in accordance with these WEM Rules, including under clause 4.12.6.

Explanatory Note

The definition for 'Reserve Capacity Offer' is proposed to be deleted as a consequence of the Reserve Capacity Auction being deleted.

Reserve Capacity Offer: A submission from a Market Participant to AEMO, in the format and including the information described in clause 4.18.1.

Reserve Capacity Performance Improvement Report: A report including the information specified in clause 4.27.4A of the WEM Rules, provided by a Market Participant to AEMO under clause 4.27.5(b) in response to a request made under clause 4.27.3(b).

Reserve Capacity Performance Report: A report including the information specified in clause 4.27.4 of the WEM Rules, provided by a Market Participant to AEMO under clause 4.27.5(a) in response to a request made under clause 4.27.3(a).

Reserve Capacity Price: In respect of a Reserve Capacity Cycle, the price for Reserve Capacity determined in accordance with clause 4.29.1, where this price is expressed in units of dollars per Capacity Credit per year.

Reserve Capacity Requirement: Has the meaning given in clause 4.6.1.

Reserve Capacity Security: The reserve capacity security to be provided for a Facility (other than a Demand Side Programme) that:

- (a) has the meaning given in clause 4.13.5; and
- (b) is as calculated and re-calculated under section 4.13 and section 4.28C.

Reserve Capacity Target: In respect of a Capacity Year, AEMO's estimate of the total amount of generation or Demand Side Management capacity required in the SWIS to satisfy the Planning Criterion for that Capacity Year determined in accordance with clause 4.5.10(b).

Reserve Capacity Test: Means a test of the Reserve Capacity associated with a Facility as conducted under section 4.25.

Shared Reserve Capacity Cost: The amount determined in accordance with clause 4.28.4.

Small Generating Unit: A generation system which has a rated capacity of less than 10MW.

Explanatory Note

The definition for 'Special Price Arrangement' is proposed to be deleted as a consequence of the Reserve Capacity Auction being deleted.

Special Price Arrangement: An arrangement under section 4.21 whereby a Market Participant can secure a price for Reserve Capacity in respect of a Facility that may differ from the Reserve Capacity Price for a Reserve Capacity Cycle.

Explanatory Note

The definition for 'Special Reserve Capacity Price' is proposed to be deleted as a consequence of the Reserve Capacity Auction being deleted.

Special Reserve Capacity Price: In respect of a Reserve Capacity Cycle, the price for Reserve Capacity subject to a Special Price Arrangement determined in accordance with section 4.21, where this price is expressed as units of dollars per Capacity Credit per year.

Statement of Opportunities Report: A report prepared in accordance with clause 4.5.13 presenting the results of the Long Term PASA study, including a statement of required investment if Power System Security and Power System Reliability are to be maintained.

Storage Works: Has the meaning given to it in the Electricity Industry Act.

Supplementary Capacity Contract: An agreement under which a service provider agrees to supply one or more Eligible Services to AEMO, entered into in accordance with clause 4.24.

Targeted Reserve Capacity Cost: The cost defined under clause 4.28.1(a).

Test: Means a Commissioning Test or a Reserve Capacity Test.

Test Plan: Means a plan approved under Chapter 3 in relation to a Test.

Explanatory Note

A new definition for 'Thermal Limit' Advice is proposed to be added.

Thermal Limit Advice: Limit Advice in respect of a Thermal Network Limit.

Explanatory Note

The proposed definition for 'Thermal Network Limit' is contained in the Tranche 2 Amending Rules.

Thermal Network Limit: Means a Network Limit that describes the maximum capacity for electrical throughput of a particular Network element due to temperature or related effects.

Trading Interval: A period of 30 minutes commencing on the hour or half-hour during a Trading Day.

Trading Interval Capacity Cost Refund: The refund a Market Participant holding Capacity Credits incurs in a Trading Interval, as calculated in accordance with clause 4.26.2F.

Trading Interval Refund Rate: The refund rate applicable in a Trading Interval, and in respect of a Facility, as calculated in accordance with clause 4.26.1(a).

Transitional Facility: Means a Facility (other than a Demand Side Programme) that was assigned Capacity Credits for the 2018 Reserve Capacity Cycle.

Transitional Reserve Capacity Cycle: Means either:

- (a) the 2019 Reserve Capacity Cycle; or
- (b) any of the subsequent Reserve Capacity Cycles up to and including the 2028 Reserve Capacity Cycle.

Explanatory Note

A new definition for 'Transmission Node' is proposed to be added.

<u>Transmission Node</u>: A location on a transmission system identified for the purposes of aggregating transfer of electricity through that part of the transmission system.

A new definition for 'Transmission Node Identifier' is proposed to be added.

Transmission Node Identifier: The code identifying the relevant Transmission Node.

Unserved Energy: An estimate, expressed in MWh, of energy demanded, but not supplied, as a result of involuntary load shedding in the SWIS.

Verification Test: Means a test conducted under clause 4.25A.

Explanatory Note

A new definition for 'Whole of System Plan' is proposed to be added. See new proposed section 4.5A.

Whole of System Plan: A plan prepared and published by the Coordinator in accordance with section 4.5A.

Appendix 1: Standing Data

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Explanatory Note

Appendix 1, paragraph (h)(xiv) is proposed to be amended to record the Transmission Node Identifier (TNI) for each Associated Load in Standing Data, and to reflect the consistency of the drafting style of the WEM Rules.

Appendix 1, paragraph (k)(i)(7) is proposed to be deleted as a consequence of the Reserve Capacity Auction being deleted.

(h) for a Demand Side Programme:

. . .

xiv. the information for each Associated Load described in clauses 2.29.5B (b) to (f) 2.29.5B(b) to 2.29.5B(f) and 4.10.1(f); and

. . .

...

- (k) for each Registered Facility:
 - i. Reserve Capacity information including:

. . .

- 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).; and
- 7. for each Special Price Arrangement associated with the facility, the number of Capacity Credits covered, the Special Reserve Capacity Price to be applied, and the expiration date and time of the Special Price Arrangement.

. . .

. . .

Appendix 3 is amended to:

- a. remove the Reserve Capacity Auction; and
- b. prescribe the prioritisation order for determining Network Access Quantities (NAQ) for Facilities for a Reserve Capacity Cycle (RCC).

This Appendix should be read in conjunction with new proposed section 4.15 – Network Access Quantity.

The Wholesale Electricity Market Amendment (Reserve Capacity Pricing Reforms) Rules 2019 that commenced on 22 February 2020 introduced new provisions for assigning Capacity Credits in scenarios where no new facilities wish to receive a fixed Reserve Capacity Price (Scenario 1) and where one or more new facilities wish to receive a fixed Reserve Capacity Price (Scenario 2).

The NAQ assignment process has been designed to accommodate the changes to the prioritisation order that was introduced by the Reserve Capacity Mechanism (**RCM**) pricing reforms.

Scenario 1 – there are no nominated Fixed Price facilities

If the Reserve Capacity Requirement (**RCR**) is not met after an NAQ is determined for all existing and committed facilities, AEMO will determine a NAQ for proposed facilities, applying a new prioritisation order, until the RCR is achieved or there are no facilities left.

In accordance with the new prioritisation order, AEMO will not select a proposed facility where the NAQ determined for the facility is less than a specified minimum quantity of Capacity Credits (the quantity of which is based on the facility's NAQ) for the facility to participate in the RCM.

For the purposes of determining an NAQ for each facility, using the NAQ Model to be developed by AEMO in accordance with section 4.15, AEMO will be required to determine a preliminary NAQ for each facility and then adjust (which can only be upwards in a subsequent step) that NAQ as NAQs for other facilities are progressively determined in the priority order, but if, and only to the extent, any earlier preliminary NAQ determination is impacted by a subsequent NAQ determination.

Scenario 2 – there are nominated Fixed Price facilities

The process for Scenario 2 is similar to Scenario 1 with some modifications to reflect the existing priority order with respect to facilities that wish to receive a fixed Reserve Capacity Price.

Specifically, unless there is a shortfall in an Availability Class, NAQs will be determined for facilities wishing to receive a fixed Reserve Capacity Price only if the NAQs determined for new market price facilities and existing capacity providers is less than the RCR + 3%.

Where there is a shortfall in an Availability Class, NAQs will be determined for new committed and proposed facilities that wish to receive a fixed Reserve Capacity Price, in accordance with a prioritisation order that includes other facilities, until the shortfall is fully covered or there are no facilities left in the NAQ Model without an NAQ (excluding facilities where the NAQ is less than the specified minimum quantity of Capacity Credits for the facility).

Appendix 3: Reserve Capacity Auction and Trade Methodology <u>Determination of Network Access Quantities</u>

The objectives of this appendix are:

- 1. To prevent AEMO assigning Network Access Quantities to facilities with bilateral trades (as defined in clause 4.14.2) that have insufficient access to the Network and availability to usefully address the Reserve Capacity Requirement. A single algorithm is used for testing of bilateral trades under clause 4.14.1(c) and for determining whether any new Candidate Fixed Price Facilities will be assigned a Network Access Quantity for the current Reserve Capacity Cycle. The process is:
 - where the facilities seeking Capacity Credits for the current Reserve Capacity
 Cycle do not include a Candidate Fixed Price Facility, set out in Part A; and
 - where the facilities seeking Capacity Credits for the current Reserve Capacity
 Cycle include a Candidate Fixed Price Facility, set out in Part B.

Explanatory Note

Where AEMO has received an application from a Market Participant for Early Certified Reserve Capacity under section 4.28C, AEMO will determine an Indicative NAQ for the facility. A facility to which Early Certified Capacity has been assigned will only be assigned a Final NAQ (and Capacity Credits) in Year 1 of the Reserve Capacity Cycle to which the application for Early Certified Reserve Capacity relates and subsequently receive the same treatment as other facilities holding Capacity Credits and NAQ.

- 2. To determine, using the Network Access Quantity Model:
 - <u>a Network Access Quantity (which may be zero) for each facility for the current</u>
 Reserve Capacity Cycle; and
 - an Indicative Network Access Quantity for a Facility that has made an application for Early Certified Reserve Capacity under section 4.28C for a future 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 or the context otherwise requires.

In this Appendix 3:

- "offer" is the proposed transaction (as specified under clause 4.14.1(c) for each facility);
- <u>"bilateral trade declaration"</u> is the notification by a Market Participant under clause 4.14.1 of the total amount of Reserve Capacity intended to be traded bilaterally for a facility (as specified under clause 4.14.1(c));

 Q[a] is the quantity associated with Availability Class "a" in clauses 4.5.12(b) or 4.5.12(c);

Explanatory Note

The policy with respect to determining NAQs for Network Control Service Contract facilities is still being settled. Accordingly, further amendments to "X[a]" may be required.

- X[a] is the total quantity of:
 - Certified Reserve Capacity to be provided by facilities subject to Network Control Service Contracts during the period to which the Reserve Capacity Requirement applies; plus
 - the total number of Capacity Credits assigned under section 4.28C
 for the period to which the Reserve Capacity Requirement applies,

where the capacity is certified as belonging to Availability Class "a" and is not subject to a bilateral trade;

- CR[a] is the capacity requirement associated with Availability Class "a";
- Z is the total quantity of bilateral offers accepted for Availability Class 1;
- Z is the total preliminary Network Access Quantity determined for facilities where the capacity is associated with Availability Class 1;
- the "capacity requirement" of:
 - Availability Class 1 is CR[1] = max(0, Q[1] X[1]); and
 - O Availability Class 2 is CR[2] = max(0, max(0,(Q[2] X[2]) max(0, X[1] Q[1]) max(0, Z CR[1])); and
- "Early CRC Facility" is a Facility for which an application for Early Certified Reserve Capacity has been made under section 4.28C for a future Reserve Capacity Cycle.

Explanatory Note

The NAQ for new upgrades to existing facilities are determined separately to the NAQ for the parent facility. Accordingly, the intent of the definition of 'Facility Upgrade' is to calculate the quantity of the increase in the capacity of the facility by reference to the difference between the parent facility's nameplate capacity prior to the upgrade and the total Certified Reserve Capacity assigned to the parent facility include the upgrade.

- <u>"Facility Upgrade" means, for a NAQ Facility, there was an increase in the capacity of the NAQ Facility, being the difference between:</u>
 - the nameplate capacity specified under clause 4.10.1(dA), for the NAQ Facility as provided in the immediately preceding 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.

An Early CRC Facility during an "intervening" RCC is to be classified as an Indicative NAQ Facility, except for Early CRC Facilities that are also Network Augmentation Facilities as the associated augmentation works will not yet be constructed. An "intervening" RCC is the RCC after the first RCC when the application for Early CRC is assessed under Step 14 of Part A or Part B (and an Indicative NAQ is determined for the Facility) and prior to the RCC when a Final NAQ is determined for the Early CRC Facility (and Capacity Credits are assigned to the Facility). This will apply to Early CRC Facilities for which an application for Early Certified Reserve Capacity is made two years before the commencement of Year 1 of the RCC in which Capacity Credits for the facility are first being sought. Early CRC Facilities that are first assigned Early CRC in the RCC immediately prior to the RCC in which Capacity Credits are first sought for the Facility will be classified as an NAQ Facility in the subsequent RCC.

- <u>"Indicative NAQ Facility" means an Early CRC Facility that was assigned</u> an Indicative Network Access Quantity in the immediately preceding Reserve Capacity Cycle but does not include:
 - an Early CRC Facility that is also a Network Access Funding Facility; and
 - o an NAQ Facility.

Explanatory Note

A transitional provision has been added at clause [1.AA.5] that deems a facility that was assigned Capacity Credits for the Reserve Capacity Cycle immediately prior to commencement of these Amending Rules to be classified as an 'NAQ Facility'.

An Indicative NAQ will be determined at Step 14 for a facility that makes an application under section 4.28C for Early Certified Reserve Capacity in the current RCC. However, to enable the facility to be assigned a Final NAQ for the RCC to which the application for Early CRC relates (i.e. the RCC in which Capacity Credits are first being sought for the facility), the facility will be classified as an NAQ Facility, in that RCC, which means it will be assessed for a preliminary NAQ at Step 3 in that RCC.

- "NAQ Facility" means:
 - <u>a facility for which a Network Access Quantity has been determined</u>
 <u>for the facility in a previous Reserve Capacity Cycle; or</u>
 - an Early CRC Facility where the current Reserve Capacity Cycle is the Reserve Capacity Cycle for which Capacity Credits are first being sought for the Facility pursuant to an application for Early Certified Reserve Capacity under section 4.28C.

Explanatory Note

AEMO's determination of preliminary NAQs at each relevant step of this Part A is subject to the NAQ rules. These rules reflect the principles that once an NAQ is determined is cannot be reduced in a subsequent step (i.e. the facility's priority cannot be displaced by a facility with a lower prioritisation), and must not exceed the quantity of CRC that is nominated to be bilaterally traded for the facility.

- "NAQ rules" means:
 - the preliminary Network Access Quantity determined for a facility under a step in Part A or Part B, as applicable, cannot be reduced, but can be increased, in a subsequent step; and
 - the maximum preliminary Network Access Quantity that can be determined for a facility at the end of a step in Part A or Part B, as applicable, cannot exceed the Certified Reserve Capacity nominated by the Market Participant for the facility under clause 4.14.1(c).

Where a facility is first added to the NAQ Model at step, AEMO determines a preliminary NAQ for the facility. The NAQ is "preliminary" as it may be adjusted (upwards only) in a subsequent step. After all relevant steps are completed, the preliminary NAQ is the Final NAQ for the facility.

 <u>"preliminary Network Access Quantity"</u> is the Network Access Quantity first determined by AEMO for a facility in a step, as may be adjusted by AEMO in a subsequent step;

Explanatory Note

AEMO will apply the 'prioritisation order' to resolve any ties between one or more facilities.

- "prioritisation order" means, where two or more-offers facilities are tied with respect to the selection criteria such that-accepting assigning a preliminary Network Access Quantity to all but one of them would result in the total preliminary Network Access Quantity assigned to those facilities capacity selected exceeding the total capacity requirement of the Availability Class, then those tied facilities the tied offers are to be accepted selected according to the following rules until the tie is resolved:
 - the ratio of a facility's preliminary Network Access Quantity to tradeable Certified Reserve Capacity from highest to lowest; then
 - the combination of the tradeable Certified Reserve Capacity for facilities that will minimise the excess of the total Network Access
 Quantities to be assigned to the facilities to achieve the capacity requirement for the Availability Class; then
 - in the order of the time Expression of Interest submissions were received by AEMO, with the facility to which the earlier submission relates being selected first; then
 - o in the order of the time the applications for Certified Reserve

 Capacity were received by AEMO, with the facility to which the earlier application relates being selected first:
 - offers are to be accepted in decreasing order of capacity offered;
 then

- offers for capacity that was included in an Expression of Interest are to be accepted ahead of capacity that was not; then
- offers are to be accepted in the order of the time the offers were received, with the earlier offer being taken first; and then
- offers are to be accepted in the order of the time the applications for Certified Reserve Capacity were received by AEMO, with the earlier application being taken first.
- "tradeable Certified Reserve Capacity" means the amount of Certified Reserve Capacity specified in the bilateral trade declaration for the facility for the relevant Reserve Capacity Cycle.

Part A No Candidate Fixed Price Facility

Step 1: Calculate the capacity requirement of Availability Class 1.

Explanatory Note

All facilities that were assigned an NAQ or Indicative NAQ (except for any Indicative NAQ Facility that is also Network Augmentation Funding Facility) in the immediately preceding RCC are added to the NAQ Model at Step 2.

An Early CRC Facility that is also a Network Augmentation Funding Facility is not added to Step 2 as the associated network augmentation works are not yet constructed.

Step 2: Let the Network Access Quantity Model contain:

- (a) NAQ Facilities for Availability Class 1 and Availability Class 2; and
- (b) Indicative NAQ Facilities.

Explanatory Note

Step 3 (and each relevant subsequent step) requires AEMO to determine a "preliminary NAQ" for facilities for which an NAQ was determined in the immediately preceding RCC, and for Early CRC Facilities where the current RCC is the RCC in which Capacity Credits are first being sought for the facility.

The intent of classifying the NAQ as "preliminary" is because as other groups of facilities are added to the NAQ Model and NAQs determined for them in a subsequent step, an earlier NAQ determination may need to be adjusted (upwards only). The intent is at the end of all relevant steps, the preliminary NAQ (as may have been adjusted) is recorded as the Final NAQ for facility. The Final NAQ for a facility determines the number of Capacity Credits assigned to the facility for the RCC.

The intent of this step is for AEMO to determine an NAQ for each facility by 'testing' whether the existing NAQ determined for the facility in immediately preceding RCC is in order for the current RCC. In other words:

- 1. verify that the Market Participant for the facility has committed to bilaterally trade CRC for at least (i.e. minimum):
 - the NAQ currently determined for the facility or, in the case of an Early CRC Facility, the facility's Indicative NAQ; and
 - the amount specified to be bilaterally traded for the facility in the current RCC; then

- 2. if the amount of CRC specified to be bilaterally traded for the facility in the current RCC is lower than the NAQ in 1, reduce the NAQ to the amount specified to be bilaterally traded for the facility in the current RCC; then
- 3. if the amount of CRC is at least equal to the NAQ, check whether there has been any material changes in the network that permanently reduces the transfer capability of the network and, where that is the case, reduce the NAQ to the expected level of reduced transfer capability of the network.
- Step 3: Subject to the NAQ rules, using the Network Access Quantity Model determine the preliminary Network Access Quantity for each NAQ Facility, which is the value assessed, and as may be adjusted, in the following sequence, and up to the amount specified at (a), (b) and (c), as applicable:
 - (a) a value equal to the minimum of:
 - i. the Network Access Quantity assigned to the NAQ Facility in the immediately preceding Reserve Capacity Cycle, which, for an Early CRC Facility, is deemed to be the Indicative NAQ determined for the facility in the immediately preceding Reserve Capacity Cycle; and
 - ii. the tradeable Certified Reserve Capacity for the NAQ Facility; then
 - (b) a value equal to the Highest Network Access Quantity for the NAQ Facility where this is greater than the preliminary Network Access Quantity determined for the NAQ Facility in Step 3(a); then
 - (c) a value equal to the tradeable Certified Reserve Capacity for the NAQ Facility, excluding any Facility Upgrade applicable to the NAQ Facility, where this is greater than the preliminary Network Access Quantity determined at Step 3(b).

At Step 4 AEMO adds new committed facilities that have committed to funding network augmentations and the applicable Constraint Set to the NAQ Model and determines preliminary NAQs for such facilities.

AEMO also adjusts (upwards only) any preliminary NAQs for facilities determined under previous steps and any Indicative NAQ for Indicative NAQ Facilities if they are impacted by the NAQs first determined for facilities under this step.

- Step 4: Add all Network Augmentation Funding Facilities (as defined in section 4.10A) to the Network Access Quantity Model and the applicable Constraint Set, then:
 - using the Network Access Quantity Model and, subject to the NAQ rules, determine the preliminary Network Access Quantity for each such facility; then
 - (b) using the Network Access Quantity Model and, subject to the NAQ rules,
 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, where the facility's preliminary Network Access

Quantity or Indicative Network Access Quantity, as applicable, is impacted as a result of the preliminary Network Access Quantity determined for one or more facilities under Step 4(a).

Explanatory Note

The following clarification has been added to ensure that no Early CRC Facilities that are also Network Augmentation Funding Facilities are added at Step 4.

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.

Explanatory Note

At Step 5 AEMO adds any remaining committed facilities associated with Availability Class 1 (i.e. committed facilities are already dealt with as NAQ Facilities at Step 3 or Network Augmentation Funding Facilities at Step 4) and committed facility upgrades determines preliminary NAQs for such facilities.

AEMO also adjusts (upwards only) any preliminary NAQs for facilities determined under previous steps and any Indicative NAQ for Indicative NAQ Facilities if they are impacted by the NAQs first determined for facilities under this step.

Step 5: Add to the Network Access Quantity Model:

- (a) any remaining committed facilities associated with Availability Class 1; and
- (b) any committed Facility Upgrade for an NAQ Facility, then:
- (c) using the Network Access Quantity Model and, subject to the NAQ rules,
 determine the preliminary Network Access Quantity for each such facility, or
 part of a facility, up to the Certified Reserve Capacity for the facility, or part
 of the facility, as applicable; then
- (d) if the preliminary Network Access Quantity determined for a facility under Step 5(c) impacts the preliminary Network Access Quantity determined for a facility under Steps 3 and 4 of this Part A or an Indicative Network Access Quantity for an Indicative NAQ Facility, then, using the Network Access Quantity Model and, subject to the NAQ rules, adjust the preliminary Network Access Quantity or Indicative Network Access Quantity, as applicable, determined for any such impacted facility.

Explanatory Note

At Step 6 AEMO adds any remaining proposed facilities and proposed facility upgrades associated with Availability Class 1.

AEMO determines preliminary NAQs for such facilities and only selects facilities where the preliminary NAQ is not less than the minimum number of capacity credits nominated by the Market Participant in the bilateral declaration for the facility that are required for the facility to participate in the RCM.

AEMO also adjusts (upwards only) any preliminary NAQs for facilities determined under previous steps and any Indicative NAQ for Indicative NAQ Facilities if they are impacted by the NAQs first determined for facilities under this step.

The Indicative Network Access Quantity for any Indicative NAQ Facility is excluded from the calculation testing whether the capacity requirement is met. This is because, the capacity for Indicative NAQ Facilities will not be available in the current RCC.

- Step 6: If the sum of the preliminary Network Access Quantity (excluding any Indicative Network Access Quantities for any Indicative NAQ Facilities) determined for each facility that is associated with Availability Class 1 under all previous steps in this Part A does not fully cover the capacity requirement of Availability Class 1, then:
 - (a) add all remaining facilities and Facility Upgrades associated with Availability

 Class 1 to the Network Access Quantity Model; then
 - (b) using the Network Access Quantity Model and, subject to the NAQ rules, determine the preliminary Network Access Quantity for each such facility; then
 - (c) select facilities for which the preliminary Network Access Quantity is equal to or greater than the Minimum Capacity Credits Quantity for the facility (as specified under clause 4.10.1(c)((iv)) until the capacity requirement of Availability Class 1 is fully covered, applying the prioritisation order, if required, or until there are no facilities left to be selected; then
 - (d) using the Network Access Quantity Model and, subject to the NAQ rules, determine the preliminary Network Access Quantity for each such facility selected under Step 6(c); then
 - (e) using the Network Access Quantity Model and, subject to the NAQ rules, 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, where the facility's preliminary Network Access Quantity or Indicative Network Access Quantity, as applicable, is impacted as a result of the preliminary Network Access Quantity determined for one or more facilities selected under Step 6(c).

Explanatory Note

At Step 12 AEMO is required to record each preliminary NAQ as the Final NAQ for each facility. To avoid facilities for which a preliminary NAQ was determined at Step 6(b) but the facility was not accepted at Step 6(c) being considered at Step 12, only facilities selected under Step 6(c) will be deemed to be facilities for which a preliminary NAQ has been determined.

For the purposes of Step 12, only a facility that has been selected under Step 6(c) will be treated as a facility for which a preliminary Network Access Quantity has been determined.

Explanatory Note

At Step 7 AEMO is required to determine whether there is a shortfall in the capacity requirement for Availability Class 1.

Step 7: If a preliminary Network Access Quantity (excluding any Indicative Network
Access Quantities for any Indicative NAQ Facilities) has been determined for each
facility in the Network Access Quantity Model associated with Availability Class 1
(except for any facilities that were not selected due to the preliminary Network
Access Quantity determined for the facility being less than the Minimum Capacity
Credits Quantity for the facility) but the capacity requirement of Availability Class 1
has not been covered, then record the difference as the capacity shortfall for
Availability Class 1.

Step 8: Calculate the capacity requirement of Availability Class 2.

Explanatory Note

At Step 9 AEMO adds any remaining committed facilities associated with Availability Class 2 (i.e. existing committed facilities are already dealt with as NAQ Facilities at Step 3) and determines preliminary NAQs for such facilities.

AEMO also adjusts (upwards only) any preliminary NAQs for facilities determined under previous steps and any Indicative NAQ for Indicative NAQ Facilities if they are impacted by the NAQs first determined for facilities under this step.

- Step 9: Add to the Network Access Quantity Model any remaining committed facilities associated with Availability Class 2, then:
 - using the Network Access Quantity Model and, subject to the NAQ rules, determine the preliminary Network Access Quantity for each such facility; then
 - (b) if the preliminary Network Access Quantity determined for a facility under

 Step 9(a) impacts the preliminary Network Access Quantity determined for a
 facility under Steps 3 to 8 or the Indicative Network Access Quantity for an
 Indicative NAQ Facility, then, using the Network Access Quantity Model and,
 subject to the NAQ rules, adjust the preliminary Network Access Quantity or
 the Indicative Network Access Quantity, as applicable, determined for any
 such impacted facility.

Explanatory Note

At Step 10 AEMO is required to determine whether the capacity requirement for Availability Class 2 has been covered by preliminary NAQs determined for facilities under all previous steps.

If the capacity requirement has not been covered, AEMO will continue to determine preliminary NAQs for facilities until the capacity requirement is covered or there are no facilities left in the NAQ Model for which a preliminary NAQ has not been determined

The facilities added at this step are proposed Availability Class 2 and facilities that were not selected under a previous step because the preliminary NAQ determined for them under the relevant step was less than the minimum quantity of Capacity Credits nominated for the facility to participate in the RCM.

- Step 10: If the sum of the preliminary Network Access Quantity (excluding any Indicative

 Network Access Quantities for any Indicative NAQ Facilities) determined for each
 facility that is associated with Availability Class 2 under all previous steps in this
 Part A does not fully cover the capacity requirement of Availability Class 2, then:
 - (a) add all remaining facilities associated with Availability Class 2 to the Network Access Quantity Model; then
 - (b) using the Network Access Quantity Model and, subject to the NAQ rules, determine the preliminary Network Access Quantity for each such facility:
 - i. added at Step 10(a); or
 - ii. not selected under Step 6(c); then
 - (c) select facilities for which the preliminary Network Access Quantity is not less than the Minimum Capacity Credits Quantity for the facility (as specified under clause 4.10.1(c)((iv)) until the capacity requirement of Availability Class 2 is fully covered, applying the prioritisation order, if required, or until there are no facilities left to be selected; then
 - (d) using the Network Access Quantity Model and, subject to the NAQ rules, determine the preliminary Network Access Quantity for each such facility selected under Step 10(c); then
 - (e) using the Network Access Quantity Model and, subject to the NAQ rules, adjust the preliminary Network Access Quantity determined for a facility under a prior step or Indicative Network Access Quantity for an Indicative NAQ Facility, where the facility's preliminary Network Access Quantity or Indicative Network Access Quantity, as applicable, is impacted as a result of the preliminary Network Access Quantity determined for one or more facilities selected under Step 10(c).

For the purposes of Step 12, only a facility that has been selected under Step 10(c) will be treated as a facility for which a preliminary Network Access Quantity has been determined.

Explanatory Note

At Step 11 AEMO is required to determine whether there is a shortfall in the capacity requirement for Availability Class 2.

Step 11: If a preliminary Network Access Quantity (excluding any Indicative Network

Access Quantities for any Indicative NAQ Facilities) has been determined for each
facility in the Network Access Quantity Model associated with Availability Class 2
(except for any facilities that were not selected due to the preliminary Network
Access Quantity determined for the facility being less than the Minimum Capacity
Credits Quantity for the facility) but the capacity requirement of Availability Class 2
has not been covered, then record the difference as the capacity shortfall for
Availability Class 2.

At Step 12(a) AEMO is required to record any adjusted Indicative Network Access Quantity for an Indicative NAQ Facility.

At Step 12(b) AEMO is required to record the preliminary NAQ determined for a facility as the Final NAQ for the facility. Under clause 4.15.2, the Final NAQ determined for a facility through the processes in this Appendix 3 is the NAQ for the facility for the RCC.

Step 12: Record:

- (a) for an Indicative NAQ Facility, if the Indicative Network Access Quantity has been adjusted under this Part A, the adjusted Indicative Network Access Quantity; and
- (b) for each other facility, the preliminary Network Access Quantity determined under this Part A as the Final Network Access Quantity for each such facility.

Explanatory Note

AEMO will procure Supplementary Reserve Capacity under section 4.24 to address any shortfall in the capacity requirement for Availability Class 1 or Availability Class 2.

Step 13: For each Availability Class report the capacity shortfall, which indicates the amount to be procured through the Supplementary Reserve Capacity process in section 4.24.

Explanatory Note

AEMO will determine an Indicative NAQ for facilities for which an application for Early Certified Reserve Capacity has been made under section 4.28C in the current RCC for a future RCC. The Indicative NAQ must not exceed the quantity of Early Certified Reserve Capacity set for the facility in accordance with clause 4.28C.7.

- Step 14: Add the facilities referred to in (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 Step 14(c) for that group of facilities before adding the next group of facilities and repeating Step 14(c) for that subsequent group of facilities:
 - (a) new Early CRC Facilities that are also Network Augmentation Funding Facilities and all applicable Constraint Equations; then
 - (b) any other new Early CRC Facilities; then
 - (c) using the Network Access Quantity Model and, subject to the NAQ rules, determine the preliminary Network Access Quantity for each facility in that group of facilities.

Step 15: End.

Part B applies where there is one or more new offers from facilities that wish to be classified as Fixed Price Facilities. The processes for determining NAQs for Availability Class 1 and Availability Class 2 facilities is amended to reflect the priority order for assigning Capacity Credits to facilities that wish to be classified as Fixed Price Facilities.

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) Indicative NAQ Facilities.

Explanatory Note

See Explanatory Note to Step 3, Part A.

- Step 3: Subject to the NAQ rules, using the Network Access Quantity Model determine the preliminary Network Access Quantity for each NAQ Facility, which is the value assessed, and as may be adjusted, in the following sequence, and up to the amount specified in (a), (b) or (c), as applicable:
 - (a) a value equal to the minimum of:
 - i. the Network Access Quantity assigned to the NAQ Facility in the immediately preceding Reserve Capacity Cycle, which, for an Early CRC Facility, is deemed to be the Indicative NAQ determined for the facility in the immediately preceding Reserve Capacity Cycle; and
 - ii. the tradeable Certified Reserve Capacity for the NAQ Facility; then
 - (b) a value equal to the Highest Network Access Quantity for the NAQ Facility where this is greater than the preliminary Network Access Quantity determined for the NAQ Facility in Step 3(a); then
 - (c) a value equal to the tradeable Certified Reserve Capacity for the NAQ Facility, excluding any Facility Upgrade applicable to the NAQ Facility, where this is greater than the preliminary Network Access Quantity determined at Step 3(b).

Explanatory Note

See Explanatory Note to Step 4, Part A.

Step 4: Add all Network Augmentation Funding Facilities (as defined in section 4.10A) to the Network Access Quantity Model and the applicable Constraint Set, then:

- (a) using the Network Access Quantity Model and, subject to the NAQ rules, determine the preliminary Network Access Quantity for each such facility; then
- (b) using the Network Access Quantity Model and, subject to the NAQ rules, 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, where the facility's preliminary Network Access Quantity or Indicative Network Access Quantity, as applicable, is impacted as a result of the preliminary Network Access Quantity determined for one or more facilities under Step 4(a).

See Explanatory Note to Step 4, Part A.

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.

Explanatory Note

See Explanatory Note to Step 5, Part A.

Step 5: Add to the Network Access Quantity Model:

- (a) any remaining committed facilities associated with Availability Class 1; and
- (b) any committed Facility Upgrade for an NAQ Facility,

then:

- (c) using the Network Access Quantity Model and, subject to the NAQ rules,
 determine the preliminary Network Access Quantity for each such facility, or
 part of a facility, up to the Certified Reserve Capacity for the facility, or part
 of the facility, as applicable; then
- (d) if the preliminary Network Access Quantity determined for a facility under
 Step 5(c) impacts the preliminary Network Access Quantity determined for a
 facility under Steps 3 and 4 of this Part A, or an Indicative Network Access
 Quantity for an Indicative NAQ Facility, then, using the Network Access
 Quantity Model and, subject to the NAQ rules, adjust the preliminary
 Network Access Quantity or Indicative Network Access Quantity, as
 applicable, determined for any such impacted facility.

Explanatory Note

Consistent with the current WEM Rules, an NAQ will only be determined for facilities that wish to be classified as a Fixed Price Facility if the preliminary NAQs determined for existing and new operating or committed market prices facilities is less than the Reserve Capacity Requirement plus 3%.

The Indicative Network Access Quantity for any Indicative NAQ Facility is excluded from the calculation testing whether the capacity requirement is met. This is because, the capacity for Indicative NAQ Facilities will not be available in the current RCC.

- Step 6: If the sum of the preliminary Network Access Quantity (excluding any Indicative Network Access Quantities for any Indicative NAQ Facilities) determined for each facility under all previous steps in this Part B is:
 - (a) less than the Reserve Capacity Requirement plus 3%, then go to Step 6A; or
 - (b) equal to or more than the Reserve Capacity Requirement plus 3%, then go to Step 6C.

Explanatory Note

At Step 6A AEMO adds new committed Candidate Fixed Price Facilities to the NAQ Model and determines preliminary NAQs for such facilities.

AEMO also adjusts (upwards only) any preliminary NAQs for facilities determined under previous steps and any Indicative NAQ for Indicative NAQ Facilities if they are impacted by the NAQs first determined for facilities under this step.

- Step 6A: Add each committed Candidate Fixed Price Facility to the Network Access Quantity Model, then:
 - (a) using the Network Access Quantity Model and, subject to the NAQ rules, determine the preliminary Network Access Quantity for each such facility; then
 - (b) using the Network Access Quantity Model and, subject to the NAQ rules, 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, where the facility's preliminary Network Access Quantity or Indicative Network Access Quantity, as applicable, is impacted as a result of the preliminary Network Access Quantity determined for one or more facilities under Step 6A(a).

Explanatory Note

If the capacity requirement for Availability Class 1 has not yet been covered, at Step 6B AEMO is required to add proposed market price facilities and proposed facilities that wish to be classified as fixed price facilities to the NAQ Model.

The intent at this step is that AEMO:

- adds the facilities described at (i) as the first group of facilities to the NAQ Model;
 then
- determines a preliminary NAQ for each of the facilities in that group; then
- adjusts any preliminary NAQs (determined for facilities under previous steps) and any Indicative NAQs impacted by the preliminary NAQs determined for facilities in that group; then

- if the capacity requirement is not yet covered, adds the facilities described at (ii) as the next group of facilities to the NAQ Model; then
- determines a preliminary NAQ for the facilities in that next group; then
- adjusts any preliminary NAQs (determined for facilities under previous steps) and any Indicative NAQs impacted by the preliminary NAQs determined for facilities in that next group.

The Indicative Network Access Quantity for any Indicative NAQ Facility is excluded from the calculation testing whether the capacity requirement is met. This is because, the capacity for Indicative NAQ Facilities will not be available in the current RCC.

- Step 6B: If the sum of the preliminary Network Access Quantity (excluding any Indicative Network Access Quantities for any Indicative NAQ Facilities) determined for each facility that is associated with Availability Class 1 under all previous steps in this Part B does not fully cover the capacity requirement of Availability Class 1, then:
 - (a) add the facilities referred to in (i) and (ii) (each comprising a "group") in the order specified to the Network Access Quantity Model, except that before adding the next group of facilities to the Network Access Quantity Model, undertake Steps 6B(b) and 6B(c) for that group of facilities, and Step 6B(d) in respect to any other facilities referred to in Step 6B(d), before adding the next group of facilities, if required, and repeating Steps 6B(b) and 6B(c) for that subsequent group of facilities, and Step 6B(d) in respect of any other facilities referred to in Step 6B(d):
 - i. any remaining facilities associated with Availability Class 1 that are not committed or added under Step 6B(a)(ii); then
 - ii. Candidate Fixed Price Facilities that are not committed; then
 - (b) using the Network Access Quantity Model and, subject to the NAQ rules, determine the preliminary Network Access Quantity for each facility in that group of facilities; then
 - (c) select facilities from that group of facilities for which the preliminary Network

 Access Quantity is not less than the Minimum Capacity Credits Quantity for
 the facility (as specified under clause 4.10.1(c)((iv)) until the capacity
 requirement of Availability Class 1 is fully covered, applying the prioritisation
 order, if required, or until there are no facilities left to be selected; then
 - (d) using the Network Access Quantity Model and, subject to the NAQ rules, determine the preliminary Network Access Quantity for each such facility selected under Step 6B(c); then
 - (e) using the Network Access Quantity Model, and subject to the NAQ rules, adjust the preliminary Network Access Quantity determined for a facility under a prior step (other than a step in this Step 6B) or the Indicative Network Access Quantity for an Indicative NAQ Facility where the facility's preliminary Network Access Quantity or Indicative Network Access Quantity, as applicable, is impacted as a result of the preliminary Network Access Quantity determined for one or more facilities selected under Step 6B(c),

then go to Step 8.

For the purposes of Step 12, only a facility that has been selected under Step 6B(c) will be treated as a facility for which a preliminary Network Access Quantity has been determined.

Explanatory Note

If the capacity requirement for Availability Class 1 has not yet been covered, at Step 6C AEMO is required to add the following groups of facilities to the NAQ Model in the following order, and determine preliminary NAQ for each of those facilities until the capacity requirement is covered or there are no facilities left for which a preliminary NAQ has not been determined:

- proposed market price facilities; then
- committed facilities that wish to be classified as a Fixed Price Facility; then
- proposed facilities that wish to be classified as a Fixed Price Facility.

Again, the Indicative Network Access Quantity for any Indicative NAQ Facility is excluded from the calculation testing whether the capacity requirement is met. This is because, the capacity for Indicative NAQ Facilities will not be available in the current RCC.

AEMO will apply the 'prioritisation order' to resolve any tied facilities.

See the Explanatory Note to Step 6B regarding the intent with respect to processing and determining preliminary NAQs in groups, etc.

- Step 6C: If the sum of the preliminary Network Access Quantity determined for each facility that is associated with Availability Class 1 under Steps 3, 4 and 5 (excluding any Indicative Network Access Quantities for any Indicative NAQ Facilities) does not fully cover the capacity requirement of Availability Class 1, then:
 - (a) add the facilities referred to in (i), (ii) and (iii) (each comprising a "group") in the order specified to the Network Access Quantity Model, except that before adding the next group of facilities to the Network Access Quantity Model, undertake Steps 6C(b), 6C(c) and 6C(d) for that group of facilities (except where the group of facilities comprises committed facilities in which case Steps 6C(c) and 6C(d) do not apply), and Step 6C(e) in respect to any other facilities referred to in Step 6C(e), before adding the next group of facilities, if required, and repeating Steps 6C(b), 6C(c) and 6C(d) for that subsequent group of facilities (as applicable), and Step 6C(e) in respect of any other facilities referred to in Step 6C(e):
 - i. any remaining facilities associated with Availability Class 1 that are not Candidate Fixed Price Facilities; then
 - ii. committed Candidate Fixed Price Facilities; then
 - iii. Candidate Fixed Price Facilities that are not committed; then
 - (b) using the Network Access Quantity Model and, subject to the NAQ rules, determine the preliminary Network Access Quantity for each facility in that group of facilities; then

- (c) select facilities from that group of facilities for which the preliminary Network

 Access Quantity is not less than the Minimum Capacity Credits Quantity for
 the facility (as specified under clause 4.10.1(c)((iv)) until the capacity
 requirement of Availability Class 1 is fully covered, applying the prioritisation
 order, if required, or until there are no facilities left to be selected; then
- (d) using the Network Access Quantity Model and, subject to the NAQ rules, determine the preliminary Network Access Quantity for each such facility selected under Step 6C(c); then
- (e) using the Network Access Quantity Model and, subject to the NAQ rules, adjust the preliminary Network Access Quantity determined for a facility under a prior step (other than a step in this Step 6C) or the Indicative Network Access Quantity for an Indicative NAQ Facility where the facility's preliminary Network Access Quantity or Indicative Network Access Quantity, as applicable, is impacted as a result of the preliminary Network Access Quantity determined for one or more facilities selected under Step 6C(c).

For the purposes of Step 12, only a facility that has been selected under Step 6C(c) will be treated as a facility for which a preliminary Network Access Quantity has been determined.

Explanatory Note

At Step 7 AEMO is required to determine whether there is a shortfall in the capacity requirement for Availability Class 1.

Step 7: If a preliminary Network Access Quantity (excluding any Indicative Network Access Quantities for any Indicative NAQ Facilities) has been determined for all facilities in the Network Access Quantity Model associated with Availability Class 1 (except for any facilities that were not selected due to the preliminary Network Access Quantity determined for the facility being less than the Minimum Capacity Credits Quantity for the facility) but the capacity requirement of Availability Class 1 has not been covered, then record the difference as the capacity shortfall for Availability Class 1.

Step 8: Calculate the capacity requirement for Availability Class 2.

Explanatory Note

At Step 9 AEMO adds any remaining committed facilities associated with Availability Class 2 (i.e. existing committed facilities are already dealt with as NAQ Facilities at Step 3).

AEMO determines preliminary NAQs for such facilities and adjusts (upwards only) any preliminary NAQs for facilities determined under previous steps and any Indicative NAQ for Indicative NAQ Facilities if they are impacted by the NAQs first determined for facilities under this step.

Step 9: Add to the Network Access Quantity Model any remaining committed facilities associated with Availability Class 2, then:

- using the Network Access Quantity Model and, subject to the NAQ rules, determine the preliminary Network Access Quantity for each such facility; then
- (b) if the preliminary Network Access Quantity determined for a facility under Step 9(a) impacts the preliminary Network Access Quantity determined for a facility under Steps 2 to 7 or the Indicative Network Access Quantity for an Indicative NAQ Facility, then, using the Network Access Quantity Model and, subject to the NAQ rules, adjust the preliminary Network Access Quantity or the Indicative Network Access Quantity, as applicable, determined for any such impacted facility.

At Step 10 AEMO is required to determine whether there is a shortfall in the capacity requirement for Availability Class 2.

- Step 10: Based on the facilities for which a preliminary Network Access Quantity (excluding any Indicative Network Access Quantities for any Indicative NAQ Facilities) has been determined under the previous steps (except for any facilities that were not selected due to the preliminary Network Access Quantity determined for the facility being less than the Minimum Capacity Credits Quantity for the facility), determine if there is a shortfall. Go to Step 12 if there is no shortfall, otherwise go to:
 - (a) Step 10A if no committed Candidate Fixed Price Facility was added to the Network Access Quantity Model at Step 6A; or
 - (b) Step 10B if one or more Candidate Fixed Price Facilities were added to the Network Access Quantity Model at Step 6A.

Explanatory Note

If the capacity requirement for Availability Class 2 has not yet been covered, AEMO is required to add the following groups of facilities to the NAQ Model in the following order and determine preliminary NAQ for each of those facilities until the capacity requirement is covered or there are no facilities left for which a preliminary NAQ has not been determined:

- committed facilities that wish to be classified as a Fixed Price Facility; then
- any proposed market price facilities for which a preliminary NAQ was not determined for the facility under a previous step to cover the capacity requirement for Availability Class 1; then
- any proposed market price facilities for which a preliminary NAQ was not determined for the facility under a previous step to cover the capacity requirement for Availability Class 2; then
- proposed facilities that wish to be classified as a Fixed Price Facility.

Again, the Indicative Network Access Quantity for any Indicative NAQ Facility is excluded from the calculation testing whether the capacity requirement is met. This is because, the capacity for Indicative NAQ Facilities will not be available in the current RCC.

AEMO will apply the 'prioritisation order' to resolve any tied facilities.

See the Explanatory Note to Step 6B regarding the intent with respect to processing and determining preliminary NAQs in groups, etc.

- Step 10A: Add the facilities referred to in (a), (b), (c) and (d) (each comprising a "group") in the order specified to the Network Access Quantity Model, except that before adding the next group of facilities to the Network Access Quantity Model, undertake Steps 10A(e), 10A(f) and 10A(g) for that group of facilities(except where the group of facilities comprises committed facilities in which case Steps 10A(f) and 10A(g) do not apply), and Step 10A(h) in respect to any other facilities referred to in Step 10A(h), before adding the next group of facilities, if required, and repeating Steps 10A(e), 10A(f) and 10A(g) (as applicable) for that subsequent group of facilities, and Step 10A(h) in respect of any other facilities referred to in Step 10A(h):
 - (a) committed Candidate Fixed Price Facilities; then
 - (b) any remaining facilities that are not Candidate Fixed Price Facilities associated with Availability Class 1; then
 - (c) facilities that are not Candidate Fixed Price Facilities associated with Availability Class 2; then
 - (d) Candidate Fixed Price Facilities that are not committed; then
 - (e) using the Network Access Quantity Model and, subject to the NAQ rules, determine the preliminary Network Access Quantity for each facility in that set of facilities; then
 - (f) select facilities from that set of facilities for which the preliminary Network

 Access Quantity is not less than the Minimum Capacity Credits Quantity for
 the facility (as specified under clause 4.10.1(c)((iv)) until the capacity
 requirement of Availability Class 2 is fully covered, applying the prioritisation
 order, if required, or until there are no facilities left to be selected; then
 - (g) using the Network Access Quantity Model and, subject to the NAQ rules, determine the preliminary Network Access Quantity for each such facility selected under Step 10A(f); then
 - (h) using the Network Access Quantity Model and, subject to the NAQ rules, adjust the preliminary Network Access Quantity determined for a facility under a prior step (other than a step in this Step 10A), or the Indicative Network Access Quantity for an Indicative NAQ Facility, where the facility's preliminary Network Access Quantity or the Indicative Network Access Quantity, as applicable, is impacted as a result of the preliminary Network Access Quantity determined for one or more facilities selected under Step 10A(f).

For the purposes of Step 12, only a facility that has been selected under Step 10A(f) will be treated as a facility for which a preliminary Network Access Quantity has been determined.

If the capacity requirement for Availability Class 2 has not yet been covered and any committed facilities that wish to be classified as a Fixed Price Facility were added at Step 6A, AEMO is required to add the following facilities in the following order and determine preliminary NAQ for each of those facilities until the capacity requirement is covered or there are no facilities left for which a preliminary NAQ has not been determined:

- any remaining proposed market price facilities for which a preliminary NAQ was not determined for the facility under a previous step to cover the capacity requirement for Availability Class 1; then
- proposed market price facilities associated with Availability Class 2; then
- proposed facilities that wish to be classified as a Fixed Price Facility.

Again, the Indicative Network Access Quantity for any Indicative NAQ Facility is excluded from the calculation testing whether the capacity requirement is met. This is because, the capacity for Indicative NAQ Facilities will not be available in the current RCC.

AEMO will apply the 'prioritisation order' to resolve any tied facilities.

See the Explanatory Note to Step 6B regarding the intent with respect to processing and determining preliminary NAQs in groups, etc.

- Step 10B: Add the facilities referred to in (a), (b) and (c) (each comprising a "group") in the order specified to the Network Access Quantity Model, except that before adding the next group of facilities to the Network Access Quantity Model, undertake Steps 10B(e) and 10(f) for each group of facilities, and Step 10B(g) in respect to any other facilities referred to in Step 10B(g), before adding the next group of facilities, if required, and repeating Steps 10B(e) and 10B(f) for that subsequent group of facilities, and Step 10B(g) in respect of any other facilities referred to in Step 10B(g):
 - (a) any remaining facilities that are not committed Candidate Fixed Price Facilities associated with Availability Class 1; then
 - (b) facilities that are not Candidate Fixed Price Facilities associated with Availability Class 2; then
 - (c) Candidate Fixed Price Facilities that are not committed; then
 - (d) run the Network Access Quantity Model and, subject to the NAQ rules, determine the preliminary Network Access Quantity for each facility in that set of facilities; then
 - (e) select facilities from that set of facilities for which the preliminary Network

 Access Quantity is not less than the Minimum Capacity Credits Quantity for
 the facility (as specified under clause 4.10.1(c)((iv)) until the capacity
 requirement of Availability Class 2 is fully covered, applying the prioritisation
 order, if required, or until there are no facilities left to be selected; then
 - (f) using the Network Access Quantity Model and, subject to the NAQ rules, determine the preliminary Network Access Quantity for each such facility selected under Step 10A(f); then

(g) using the Network Access Quantity Model and, subject to the NAQ rules, adjust the preliminary Network Access Quantity determined for a facility under a prior step (other than a step in this Step 10B) or Indicative Network Access Quantity for an Indicative NAQ Facility, where the facility's preliminary Network Access Quantity or Indicative Network Access Quantity, is impacted as a result of the preliminary Network Access Quantity determined for one or more facilities selected under Step 10B(e).

For the purposes of Step 12, only a facility that has been selected under Step 10B(e) will be treated as a facility for which a preliminary Network Access Quantity has been determined.

Explanatory Note

At Step 11 AEMO is required to determine whether there is a shortfall in the capacity requirement for Availability Class 2.

Step 11: If a preliminary Network Access Quantity (excluding any Indicative Network Access Quantities for any Indicative NAQ Facilities) has been determined for all facilities in the Network Access Quantity Model associated with Availability Class 1 and Availability Class 2 (except for any facilities that were not selected due to the preliminary Network Access Quantity determined for the facility being less than the Minimum Capacity Credits Quantity for the facility) but the capacity requirement of Availability Class 2 has not been covered, then record the difference as the capacity shortfall for Availability Class 2.

Explanatory Note

See Explanatory Note at Step 12, Part A.

Step 12: Record:

- (a) for an Indicative NAQ Facility, if the Indicative Network Access Quantity has been adjusted under this Part A, the adjusted Indicative Network Access Quantity; and
- (b) for each other facility, the preliminary Network Access Quantity determined under this Part A as the Final Network Access Quantity for each such facility.

Explanatory Note

See Explanatory Note at Step 13, Part A.

Step 13: For each Availability Class report the capacity shortfall, which indicates the amount to be procured through the Supplementary Reserve Capacity process in section 4.24.

Explanatory Note

AEMO will determine an Indicative NAQ for facilities for which an application for Early Certified Reserve Capacity has been made under section 4.28C in the current RCC for a future RCC. The Indicative NAQ must not exceed the quantity of Early Certified Reserve Capacity set for the facility in accordance with clause 4.28C.7

- Step 14: Add the facilities referred to in (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 Step 14(c) for that group of facilities before adding the next group of facilities and repeating Step 14(c) for that subsequent group of facilities:
 - new Early CRC Facilities that are also Network Augmentation Funding Facilities and all applicable Constraint Equations; then
 - (b) any other new Early CRC Facilities; then
 - (c) using the Network Access Quantity Model and, subject to the NAQ rules. determine the preliminary Network Access Quantity for each facility in that group of facilities.

Step 15: End.

This appendix describes a single algorithm which performs two functions. One version of the algorithm is used in Part A to prevent AEMO accepting bilateral trades (as defined in clause 4.14.2) that have insufficient availability to usefully address the Reserve Capacity Requirement. Another version of the algorithm is used in Part B in the conduct of the Reserve Capacity Auction as required by clause 4.19.1.

Part A. Testing of Bilateral Trades

The algorithm is applied in this Part A for testing of bilateral trades under clause 4.14.1(c) and for determining whether offers from Candidate Fixed Price Facilities will be accepted.

In this Part A:

- "offer" is the proposed transaction (as specified under clause 4.14.1(c) for each facility);
- Q[a] is the quantity associated with Availability Class "a" in clauses
 4.5.12(b) or 4.5.12(c);
- X[a] is the total quantity of:
 - Certified Reserve Capacity to be provided by facilities subject to Network Control Service Contracts during the period to which the Reserve Capacity Requirement applies; plus
 - the total number of Capacity Credits assigned under section 4.28C
 for the period to which the Reserve Capacity Requirement applies,

where the capacity is certified as belonging to Availability Class "a" and is not subject to a bilateral trade;

- Z is the total quantity of bilateral offers accepted for Availability Class 1;
- the "capacity requirement" of:
 - Availability Class 1 is CR[1] = max(0, Q[1] X[1]); and
- "prioritisation order" means, where two or more offers are tied with respect to the selection criteria such that accepting all but one of them would result in the total capacity selected exceeding the total capacity requirement of the Availability Class, then the tied offers are to be accepted according to the following rules until the tie is resolved:
 - offers are to be accepted in decreasing order of capacity offered;
 then
 - offers for capacity that was included in an Expression of Interest are to be accepted ahead of capacity that was not; then
 - offers are to be accepted in the order of the time the offers were received, with the earlier offer being taken first; and then

 offers are to be accepted in the order of the time the applications for Certified Reserve Capacity were received by AEMO, with the earlier application being taken first.

The algorithm is:

- where the set of active offers does not include any Candidate Fixed Price Facility offers, set out in section A1; and
- where the set of active offers includes a Candidate Fixed Price Facility
 Offer, set out in A2.

A1. No new Candidate Fixed Price Facility offers

- Step 1: Calculate the capacity requirement of Availability Class 1.
- Step 2: Let the set of active offers comprise all offers from Availability Class 1.
- Step 3: Accept active offers from:
 - facilities in operation; and
 - committed facilities,

and remove them from the set of active offers.

- Step 4: If the offers accepted under Step 3 do not fully cover the capacity requirement of Availability Class 1 then accept offers from the set of active offers applying the prioritisation order if required, until the capacity requirement of Availability Class 1 is fully covered or there are no such offers left unaccepted in the set of active offers; and remove the accepted offers from the set of active offers.
- Step 5: If all offers in the set of active offers have been accepted but the capacity requirement of Availability Class 1 has not been covered, then record the difference as the capacity shortfall for Availability Class 1.
- Step 6: Calculate the capacity requirement of Availability Class 2.
- Step 7: Add all offers from Availability Class 2 to the set of active offers.
- Step 8: Accept all active offers for:
 - facilities in operation; and
 - committed facilities.

and remove them from the set of active offers.

Step 9: If the offers accepted under Step 8 do not fully cover the capacity requirement of Availability Class 2 then accept offers from the set of active offers in the order of decreasing availability, applying the prioritisation order if required, until the capacity requirement of Availability Class 2 is fully covered or there are no such

- offers left unaccepted; and remove the accepted offers from the set of active offers.
- Step 10: If all offers in the set of active offers have been accepted but the capacity requirement of Availability Class 2 has not been covered, then record the difference as the capacity shortfall for Availability Class 2.
- Step 11: Report the offers accepted.
- Step 12: For each Availability Class report the capacity shortfall, which indicates the amount to be procured in the auction.
- Step 13: End.

A2. New Candidate Fixed Price Facility offers

- Step 1: Calculate the capacity requirement of Availability Class 1.
- Step 2: Let the set of active offers comprise all offers from Availability Class 1.
- Step 3: Accept all active offers from:
 - facilities in operation; and
 - committed facilities that are not Candidate Fixed Price Facilities, and remove them from the set of active offers.
- Step 4: Add all offers from Availability Class 2 to the set of active offers.
- Step 5: Accept all active offers from:
 - · facilities in operation; and
 - committed facilities that are not Candidate Fixed Price Facilities, and remove them from the set of active offers.
- Step 6: If the offers accepted at Step 3 and Step 5 are:
 - less than the Reserve Capacity Requirement plus 3%, then go to Step 7A;
 or
 - equal to or more than the Reserve Capacity Requirement plus 3%, then go to Step 7C.
- Step 7A: Accept offers from committed Candidate Fixed Price Facilities and remove them from the set of active offers.
- Step 7B: If the offers accepted at Step 3 and Step 7A do not fully cover the capacity requirement of Availability Class 1, accept active offers in the following order, applying the prioritisation order if required, until the capacity requirement of Availability Class 1 is fully covered or there are no such offers left unaccepted in

the set of active offers; and remove the accepted offers from the set of active offers:

- facilities associated with Availability Class 1 that are not Candidate Fixed Price Facilities; then
- Candidate Fixed Price Facilities that are not committed,

then go to Step 8.

- Step 7C: If the offers accepted at Step 3 do not fully cover the capacity requirement of Availability Class 1, accept active offers in the following order, applying the prioritisation order if required, until the capacity requirement of Availability Class 1 is fully covered or there are no such offers left unaccepted in the set of active offers; and remove the accepted offers from the set of active offers:
 - facilities associated with Availability Class 1 that are not Candidate Fixed Price Facilities; then
 - committed Candidate Fixed Price Facilities; then
 - Candidate Fixed Price Facilities that are not committed.
- Step 8: If all offers in the set of active offers that are associated with Availability Class 1 have been accepted but the capacity requirement of Availability Class 1 has not been covered, then record the difference as the capacity shortfall for Availability Class 1.
- Step 9: Calculate the capacity requirement for Availability Class 2 and, based on the offers already accepted under the previous steps, determine if there is a shortfall. Go to Step 12 if there is no shortfall, otherwise go to:
 - Step 10A if no offers were accepted at Step 7A; or
 - Step 10B if offers were accepted at Step 7A.
- Step 10A: Accept active offers in the following order, applying the prioritisation order if required, until the capacity requirement of Availability Class 2 is fully covered or there are no such offers left unaccepted in the set of active offers; and remove the accepted offers from the set of active offers:
 - committed Candidate Fixed Price Facilities; then
 - facilities that are not Candidate Fixed Price Facilities in order of decreasing availability; then
 - Candidate Fixed Price Facilities that are not committed.
- Step 10B: Accept active offers in the following order, and applying the prioritisation order if required, until the capacity requirement of Availability Class 2 is fully covered or there are no such offers left unaccepted in the set of active offers; and remove the accepted offers from the set of active offers:

- facilities that are not Candidate Fixed Price Facilities in order of decreasing availability; then
- Candidate Fixed Price Facilities that are not committed.
- Step 11: If all offers in the set of active offers have been accepted but the capacity requirement of Availability Class 2 has not been covered, then record the difference as the capacity shortfall for Availability Class 2.
- Step 12: Report the offers accepted.
- Step 13: For each Availability Class report the capacity shortfall, which indicates the amount to be procured in the auction.

Step 14: End.

Explanatory Note

Part B is deleted as the Reserve Capacity Auction is being deleted from the WEM Rules. Any shortfall in Reserve Capacity will be procured through the Supplementary Reserve Capacity process in section 4.24.

Part B.Reserve Capacity Auction

The algorithm is applied in this Part B to conduct the Reserve Capacity Auction as required by clause 4.19.1.

In this Part B:

- "offer" is a "Reserve Capacity Offer";
- the "capacity requirements" of Availability Classes 1 and 2 are equal to the capacity shortfalls for the respective Availability Classes reported under Step 13 of Part A of this Appendix 3; and
- "prioritisation order" means, where two or more offers are tied with respect to the selection criteria such that accepting all but one of them would result in the total capacity selected exceeding the total "capacity requirement" of the Availability Class, then the tied offers are to be accepted according to the following rules until the tie is resolved:
 - offers are to be accepted in decreasing order of capacity offered;
 then
 - offers for capacity that was included in an Expression of Interest are to be accepted ahead of capacity that was not; then
 - offers are to be accepted in the order of the time the offers were received, with the earlier offer being taken first; and then
 - offers are to be accepted in the order of the time the application for Certified Reserve Capacity were received by AEMO, with the earlier application being taken first.

The algorithm is:

- Step 1: Calculate the capacity requirement of Availability Class 1.
- Step 2: Let the set of active offers comprise all offers from Availability Class 1.
- Step 3: Accept offers from the set of active offers in order of increasing price, applying the prioritisation order if required, until the capacity requirement of Availability Class 1 is fully covered or until there are no offers left unaccepted in the set of active offers; and remove the accepted offers from the set of active offers.
- Step 4: If all offers in the set of active offers have been accepted but the capacity requirement of Availability Class 1 has not been fully covered, then record the difference as the capacity shortfall for Availability Class 1.
- Step 5: Calculate the capacity requirement for Availability Class 2.
- Step 6: Add all offers from Availability Class 2 to the set of active offers.
- Step 7: Accept offers from the set of active offers in order of increasing price, applying the prioritisation order if required, until the capacity requirement of Availability Class 2 is fully covered or until there are no offers left unaccepted in the set of active offers; and remove the accepted offers from the set of active offers.
- Step 8: If all offers in the set of active offers have been accepted but the capacity requirement of Availability Class 2 has not been fully covered, then record the difference as the capacity shortfall for Availability Class 2.
- Step 9: The Reserve Capacity Price must equal the price of the highest priced offer accepted; and in the special case where the Reserve Capacity Price is zero and there are offers with a price of zero that have not been accepted, then accept those offers with zero price.
- Step 10: Report the offers accepted.
- Step 11: For each Availability Class report the capacity shortfall, which indicates the amount to be procured through supplementary capacity.
- Step 12: While leaving the Reserve Capacity Price unchanged, AEMO must exchange one or more offers not accepted for one or more offers accepted in the auction if:
 - the total capacity scheduled in the auction exceeds the Reserve Capacity
 Auction Requirement by more than 100 MW;
 - the Reserve Capacity Price exceeds zero;
 - the exchange produces the maximum possible reduction in the total value of offers accepted;
 - the exchange does not create an overall Reserve Capacity shortfall where none existed;

- in the event that a capacity shortfall exists in one or more Availability
 Classes, the exchange will not shift a shortfall from an Availability Class
 with low availability to an Availability Class with high availability;
- this would not result in a facility in operation or a committed facility being excluded; and
- this would not result in an offer being accepted from a facility that had an offer accepted under Part A of Appendix 3 at a different capacity price.

Step 13: End.

Appendix 5 is proposed to be amended so that the calculation of the IRCR for a Market Participant with an Electric Storage Resource does not include any Trading Intervals where AEMO has issued a direction under clause 7.7.5 in respect of the Electric Storage Resource.

Appendix 5: Individual Reserve Capacity Requirements

This Appendix presents the method that must be used by AEMO to determine, for a Trading Month n:

- Individual Reserve Capacity Requirement Contributions as required for the determination of Relevant Demands under clause 4.26.2CA;
- Indicative Individual Reserve Capacity Requirements as required under clause 4.28.6;
- Individual Reserve Capacity Requirements as required under clause 4.28.7; and
- revised Individual Reserve Capacity Requirements as required under clause 4.28.11A.

AEMO must perform Steps 1 to 10A to determine the Indicative Individual Reserve Capacity Requirements, Individual Reserve Capacity Requirements or revised Individual Reserve Capacity Requirements for Trading Month n.

AEMO must perform Step 11 as required to determine the Individual Reserve Capacity Requirement Contribution of an individual metered Associated Load for Trading Month n, using as input the relevant values calculated by AEMO when it determined the Indicative Individual Reserve Capacity Requirements for Trading Month n.

For the purpose of this Appendix:

- All references, apart from those in Step 5A, to meters are interval meters.
- The Notional Wholesale Meter is to be treated as a registered interval meter measuring Temperature Dependent Load. This meter is denoted by Temperature Dependent Load meter v=v*.
- The New Notional Wholesale Meter, determined in accordance with Step 5A, is to be treated as a registered interval meter measuring Temperature Dependent Load.
- The meter registration data to be used in the calculations is to be the most current complete set of meter registration data as at the time of commencing the calculations.

- The 12 Peak SWIS Trading Intervals to be used in the calculations are the 12 Peak SWIS Trading Intervals determined and published by AEMO under clause 4.1.23A for the Hot Season preceding the start of the Capacity Year in which Trading Month n falls (the "preceding Hot Season").
- The 4 Peak SWIS Trading Intervals for a Trading Month to be used in the calculations are the 4 Peak SWIS Trading Intervals determined and published by AEMO under clause 4.1.23B for that Trading Month.
- When calculating the Indicative Individual Reserve Capacity Requirements it
 is assumed that all meters registered to a Market-Customer Participant on
 the day of calculation will remain registered to that Market-Customer
 Participant for the entirety of Trading Month n.
- Where AEMO issues a direction under clause 7.7.5 in respect of an Electric
 Storage Resource, each Trading Interval in which a Dispatch Interval to
 which the direction relates falls, is to be excluded when calculating the
 Indicative Individual Reserve Capacity Requirement and the Individual
 Reserve Capacity Requirement for the Market Participant to which the
 Electric Storage Resource is registered.

Step 1: Calculate:

 $RR = min(RCR, CC - DSM_CC)$ $FL = FL_RCR \times RR / RCR$

where:

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

CC is the total number of Capacity Credits assigned for Trading Month n at the time of the calculation

DSM_CC is the total number of DSM Capacity Credits assigned for Trading Month n at the time of the calculation

FL_RCR is the peak demand associated with the Reserve Capacity Requirement for the relevant Reserve Capacity Cycle as specified in clause 4.6.2

Step 2: For each meter, u, measuring Non-Temperature Dependent Load that was registered with AEMO for all of the 12 Peak SWIS Trading Intervals determine NTDL(u), where:

NTDL(u) is the contribution to the system peak load of meter u during the preceding Hot Season where this contribution is double the median value of the metered consumption during the 12 Peak SWIS Trading Intervals

Step 3: For each meter, v, measuring Temperature Dependent Load that was registered with AEMO for all of the 12 Peak SWIS Trading Intervals determine TDL(v), where:

TDL(v) is the contribution to the system peak load of meter v during the preceding Hot Season where this contribution is double the median value of the metered consumption during the 12 Peak SWIS Trading Intervals

Step 4: For each Intermittent Load meter w set its Individual Intermittent Load Reserve Capacity Requirement, IILRCR(w), to equal the amount defined in accordance with Appendix 4A.

Step 5: Identify meters that were not registered with AEMO during one or more of the 12 Peak SWIS Trading Intervals but which were registered by the end of Trading Month n.

For a new meter u that measures Non-Temperature Dependent Load set NMNTCR(u) to be 1.1 times the MW figure formed by doubling the median value of the metered consumption for that meter during the 4 Peak SWIS Trading Intervals of Trading Month n-3.

For a new meter v that measures Temperature Dependent Load set NMTDCR(v) to be 1.3 times the MW figure formed by doubling the median value of the metered consumption for that meter during the 4 Peak SWIS Trading Intervals of Trading Month n-3.

Step 5A:

Find the MW figure formed by doubling the median value of the metered consumption for the Notional Wholesale Meter v*, during the 4 Peak SWIS Trading Intervals of Trading Month n-3 ("Median Notional Wholesale Meter").

Divide the Median Notional Wholesale Meter by the number of non-interval or accumulation meters that existed at the end of Trading Month n-3 ("Average Non-Interval Meter").

Subtract the number of non-interval or accumulation meters disconnected between the end of the preceding Hot Season and the end of Trading Month n-3 from the number of non-interval or accumulation meters connected between the end of the preceding Hot Season and the end of Trading Month n-3 ("Non-Interval Meter Growth").

Multiply the Non-Interval Meter Growth and the Average Non-Interval Meter. ("New Notional Wholesale Meter").

For the New Notional Wholesale Meter set NMTDCR(v) equal to be 1.3 times the New Notional Wholesale Meter.

Step 6: Calculate the values of d(u,i) for Non-Temperature Dependent Load, d(v,i) for Temperature Dependent Loads and d(w,i) for Intermittent Loads such that:

 d(u,i) has a value of zero if meter u measures Intermittent Load or was not registered to Market-Customer Participant i during Trading Month n, otherwise it has a value equal to the number of full Trading Days the meter was registered to Market-Customer Participant i in Trading Month n divided by the number of days in Trading Month n.

- d(v,i) has a value of zero if meter v measures Intermittent Load or was not registered to Market-Customer Participant i during Trading Month n, otherwise it has a value equal to the number of full Trading Days the meter was registered to Market-Customer Participant i in Trading Month n divided by the number of days in Trading Month n.
- d(w,i) has a value of zero if meter w was not registered to Market Customer Participant i during Trading Month n, otherwise it has a value of one if Market Customer Participant i nominated capacity for the Intermittent Load measured by meter w in accordance with clauses 4.28.8(c) or 4.28.8A, with the exception that if the Intermittent Load was for Load at a meter registered to Market Customer Participant i for only part of Trading Month n, then it has a value equal to the number of full Trading Days that meter was registered to Market Customer Participant i in Trading Month n divided by the number of days in Trading Month n.

Step 7: Identify the set NM of all those new meters v that measured consumption that was measured by meter $v=v^*$ during the preceding Hot Season and set TDLn(v) for meter $v=v^*$ to equal:

```
TDLn(v^*) = TDL(v^*) - Sum(v \in NM, NMTDCR(v))
```

Step 8: For each Market Customer Participant i, calculate:

```
ILRCR(i) = Sum(w, IILRCR(w) \times d(w,i))
```

Step 8A: Calculate:

```
NRR = RR - Sum(i, ILRCR(i))

NTDL_Ratio = NRR / FL
```

Step 8B: For each Market Customer Participant i, calculate:

```
NTDLRCR(i) = Sum(u, NTDL(u) \times d(u,i)) \times NTDL_Ratio
```

Step 8C: Calculate:

```
\begin{split} TDL\_Ratio &= (NRR - Sum(i, NTDLRCR(i))) \, / \\ Sum(i, Sum(v, MTDL(v) \times d(v,i)) - DSM(i)) \end{split}
```

where

```
MTDL(v) = TDL(v) for all v except v* and MTDL(v) = TDLn(v^*) for v=v^*
```

DSM(i) is the MW quantity of additional Demand Side Management demonstrated and agreed by AEMO to be available by the next Hot Season

Step 8D: For each Market Customer Participant i, calculate:

```
TDLRCR(i) = (Sum(v, MTDL(v) \times d(v,i)) - DSM(i)) \times TDL_Ratio
```

Step 9: For each Market-Customer Participant i, calculate

$$X(i) = Sum(i, ILRCR(i) + NTDLRCR(i) + TDLRCR(i)) + Sum(u, NMNTCR(u) \times d(u,i)) + Sum(v, NMTDCR(v) \times d(v,i))$$

Step 10: Calculate:

$$Total_Ratio = RR / Sum(i, X(i))$$

Step 10A: For each Market-Customer Participant i, set the Indicative Individual Reserve Capacity Requirement or Individual Reserve Capacity Requirement, as applicable, for Trading Month n to:

$$X(i) \times Total_Ratio$$

Step 11: The Individual Reserve Capacity Requirement Contribution of an individual metered Associated Load for Trading Month n of a Capacity Year is determined as follows:

- (a) for meter u at a connection point measuring Non-Temperature Dependent Load that was registered with AEMO for all of the 12 Peak SWIS Trading Intervals equals (NTDL(u) x NTDL_Ratio x Total_Ratio);
- (b) for meter v at a connection point measuring Temperature Dependent Load that was registered with AEMO for all of the 12 Peak SWIS Trading Intervals equals (TDL(v) x TDL_Ratio x Total_Ratio);
- (c) for meter u at a new connection point identified in Step 5 measuring Non-Temperature Dependent Load equals (NMNTCR(u) x Total_Ratio); and
- (d) for meter v at a new connection point identified in Step 5 measuring Temperature Dependent Load equals (NMTDCR(v) x Total_Ratio).

Appendix 9: Relevant Level Determination

This Appendix presents the methodology for determining the Relevant Levels for Facilities that have applied for certification of Reserve Capacity under clause 4.11.2(b) for a given Reserve Capacity Cycle ("Candidate Facility").

Explanatory Note

Appendix 9 is proposed to be amended so that, where an upgrade comprising an Electric Storage Resource is in-service but is not being certified for Reserve Capacity using the Relevant Level Methodology, the 'Full Operation Date' for the Facility remains unaffected.

For the purposes of the Relevant Level determination in this Appendix 9:

- the full operation date of a Candidate Facility for the Reserve Capacity Cycle ("Full Operation Date") is:
 - the date provided under clause 4.10.1(c)(iii)(7) or revised in accordance with clause 4.27.11A, where at the time the application for certification of Reserve Capacity is made the Facility, or part of the Facility (as applicable) is yet to enter service (excluding a part of a Facility that is an Electric Storage Resource for which certified Reserve Capacity is not being assessed in accordance with the methodology in this Appendix 9); or
 - the date most recently provided for a Reserve Capacity Cycle under clause 4.10.1(k) otherwise; and
- a Candidate Facility will be considered to be:
 - a new candidate Facility, if the five year period identified in step 1(a) of this Appendix commenced before 8:00 AM on the Full Operation Date for the Facility ("New Candidate Facility"); or
 - an existing Candidate Facility ("Existing Candidate Facility"), otherwise.

AEMO must perform the following steps to determine the Relevant Level for each Candidate Facility:

Determining Existing Facility Load for Scheduled Generation

Step 1: Identify:

- (a) the five year period ending at 8:00 AM on 1 April of Capacity Year 1 of the relevant Reserve Capacity Cycle;
- (b) any 12 month period, from 1 April to 31 March, occurring during the five year period identified in step 1(a), where the 12 Trading Intervals with the highest Existing Facility Load for Scheduled Generation in that 12 month period have not previously been determined under this Appendix 9; and

- (c) any 12 month period, from 1 April to 31 March, occurring during the five year period identified in step 1(a), where the 12 Trading Intervals with the highest Existing Facility Load for Scheduled Generation in that 12 month period have previously been determined under this Appendix 9.
- Step 2: Determine the quantity of electricity (in MWh) sent out by each Candidate Facility using Meter Data Submissions for each of the Trading Intervals in the period identified in step 1(b), which, for a Candidate Facility containing an Electric Storage Resource, must exclude any generation or consumption measured by the Electric Storage Resource Metering required to be installed in accordance with clause 2.29.5BA.

AEMO will continue to estimate facility output for the purposes of the Relevant Level Methodology. For some facilities, AEMO will have access to SCADA feeds for aspects of facility operation. This information can be used in the preparation of the estimate.

Different treatment for the Balancing Portfolio is no longer required, as each facility will be represented separately in a Real-Time Market Submission.

The proposed changes to Step 3 are contained in the Tranche 2 Amending Rules.

- Step 3: For each Candidate Facility, identify any Trading Intervals in the period identified in step 1(b) where the Facility was directed to restrict its Injection under a Dispatch Instruction with a Dispatch Cap or Dispatch Target as published under clause [7.13.1x3(a)].÷
 - (a) the Facility, other than a Facility in the Balancing Portfolio, was directed to restrict its output under a Dispatch Instruction as provided in a schedule under clause 7.13.1(c); or
 - (b) the Facility, if in the Balancing Portfolio, was instructed by System

 Management to deviate from its Dispatch Plan or change its commitment
 or output as provided in a schedule under clause 7.13.1C(d); or
 - (c) was affected by a Consequential Outage as notified by System Management to AEMO under clause 7.13.1A.

Explanatory Note

Step 4 reflects the proposed amendments contained in the Tranche 2 Amending Rules with further modifications.

- Step 4: For each Candidate Facility and Trading Interval identified in step <u>3 identify the higher of:</u>
 - (a) the quantity determined in step 2; and identify the actual quantity as determined in step 2 if:

- System Management has made a revised estimate of the maximum quantity in accordance with clause 7.7.5A(c) and the Power System Operation Procedure specified in clause 7.7.5A; and
- ii. the revised estimate of the maximum quantity is lower than the actual quantity as determined in step 2;
- (b) if AEMO made a revised estimate under clause 7.13.7 that estimate, otherwise AEMO's estimate made under clause 7.13.6, which for either of these estimates must exclude any generation or consumption measured by the meter required to be installed in accordance with clause 2.29.5BA for a Candidate Facility containing an Electric Storage Resource. identify the actual quantity as determined in step 2 if:
 - i. step 4(a) does not apply; and
 - ii. the estimated maximum quantity determined by System

 Management under clause 7.13.1(eF) is lower than the actual
 quantity (as specified in a Meter Data Submission covering the
 Facility and the Trading Interval); and
- (c) if steps 4(a) and (b) do not apply:

Trading Interval.

- identify the revised estimate of the maximum quantity determined by System Management in accordance with the Power System Operation Procedure specified in clause 7.7.5A; or
- ii. if there is no revised estimate, identify the estimate determined by System Management under clause 7.13.1(eF).
- Step 5: [Blank] For each Candidate Facility and Trading Interval identified in step 3(b) use:
 - (a) the estimate recorded by System Management under clause 7.13.1C(e); and
 - (b) the quantity determined for the Facility and Trading Interval in step 2, to estimate the quantity of energy (in MWh) that would have been sent out by the Facility had it not complied with System Management's instruction to change its commitment or output during the Trading Interval.
- Step 6: [Blank] For each Candidate Facility and Trading Interval identified in step 3(c) use:
 - (a) the schedule of Consequential Outages determined by System Management under clause 7.13.1A;
 - (b) the quantity determined for the Facility and Trading Interval in step 2; and
 - (c) the information recorded by System Management under clause 7.13.1C(a), to estimate the quantity of energy (in MWh) that would have been sent out by the Facility had it not been affected by the notified Consequential Outage during the

Step 6A: [Blank]For each Candidate Facility and Trading Interval identified in step 3(d) use:

- (a) the schedule of Operating Instructions determined by System Management under clause 7.13.1(cC);
- (b) the quantity determined for the Facility and Trading Interval in step 2; and
- (c) the information recorded by System Management under clause 7.13.1C(a),

to estimate the quantity of energy (in MWh) that would have been sent out by the Facility had it not been subject to an Operating Instruction during the Trading Interval.

Step 7: Determine for each Trading Interval in each 12 month period identified in step 1(b) the Existing Facility Load for Scheduled Generation (in MWh) as:

(Total_Generation + DSP_Reduction + Interruptible_Reduction + Involuntary_Reduction) - CF_Generation

where

Total_Generation is the total sent out generation of all Facilities, as determined from Meter Data Submissions:

DSP_Reduction is the total quantity of Deemed DSM Dispatch for all Demand Side Programmes for that Trading Interval;

Explanatory Note

Interruptible Loads will use the standard dispatch process, and not special contracts.

Interruptible_Reduction is the total quantity by which all Interruptible Loads reduced the magnitude of their-consumption Withdrawal in accordance with the terms of an Ancillary Service Contract_Essential System Service provision, as recorded by System Management AEMO under clause 7.13.1C(c);

Involuntary_Reduction is the total quantity of energy not served due to involuntary load shedding (manual and automatic), as recorded by System Management under clause 7.13.1C(b); and

CF_Generation is the total sent out generation of all Candidate Facilities, as determined in step 2 or estimated in steps_step 4, 5, 6 or 6A as applicable.

- Step 8: Determine for each 12 month period identified in step 1(b) the 12 Trading Intervals, occurring on separate Trading Days, with the highest Existing Facility Load for Scheduled Generation.
- Step 9: Identify, for each 12 month period identified in step 1(c), the following:
 - (a) the Existing Facility Load for Scheduled Generation previously determined under this Appendix 9 for each Trading Interval in the 12 month period;
 - (b) subject to step 9A, the sent out generation (in MWh) for each Candidate Facility and for each Trading Interval in that 12 month period, where that

- sent out generation was used to determine the CF_Generation (which is one of the variables used to determine the Existing Facility Load for Scheduled Generation in step 7) for that Trading Interval; and
- (c) the 12 Trading Intervals occurring on separate Trading Days that were previously determined to have the highest Existing Facility Load for Scheduled Generation in the 12 month period.

Step 9A: For the purposes of step 9(b), if:

- (a) <u>AEMOSystem Management</u> has determined a revised estimate <u>under</u> <u>clause 7.13.7</u> of the maximum quantity in accordance with the Power System Operation Procedure specified in clause 7.7.5A;
- (b) the revised estimate relates to a Candidate Facility and a Trading Interval in a 12 month period identified in step 1(c); and
- (c) AEMO determined the sent out generation for that Candidate Facility and for that Trading Interval in accordance with step 4 before it revised the estimate.

then AEMO must redetermine the sent out generation for that Candidate Facility and that Trading Interval in accordance with step 4.

Determining New Facility Load for Scheduled Generation

- Step 10: For each New Candidate Facility determine, for each Trading Interval in the period identified in step 1(a) that falls before 8:00 AM on the Full Operation Date for the Facility, an estimate of the quantity of energy (in MWh) that would have been sent out by the Facility in the Trading Interval, if it had been in operation with the configuration proposed under clause 4.10.1(dA) in the relevant application for certification of Reserve Capacity. The estimates must reflect the estimates in the expert report provided for the Facility under clause 4.10.3, unless AEMO reasonably considers the estimates in the expert report to be inaccurate.
- Step11: For each New Candidate Facility determine, for each Trading Interval in the period identified in step 1(a), the New Facility Load for Scheduled Generation (in MWh) as:
 - (a) if the Trading Interval falls before 8:00 AM on the Full Operation Date for the Facility:

EFLSG + Actual_CF_Generation – Estimated_CF_Generation where

EFLSG is the Existing Facility Load for Scheduled Generation for the Trading Interval, determined in step 7 or identified in step 9(a) as applicable;

Actual_CF_Generation is the sent out generation of the New Candidate Facility for the Trading Interval, as identified in step 9(b),

determined in step 2 or estimated in steps step 4, 5,6 or 6A as applicable; and

Estimated_CF_Generation is the quantity determined for the New Candidate Facility and the Trading Interval in step 10;

or

- (b) the Existing Facility Load for Scheduled Generation for the Trading Interval, otherwise.
- Step 12: For each New Candidate Facility determine, for each 12 month period identified in step 1(a), the 12 Trading Intervals, occurring on separate Trading Days, with the highest New Facility Load for Scheduled Generation.

Determining the Facility Average Performance Level

- Step 13: For each Existing Candidate Facility, determine the 60 quantities comprising:
 - (a) the MWh quantities determined in step 2 or estimated in steps step 4, 5,6 or 6A as applicable, for each of the Trading Intervals determined in step 8, multiplied by 2 to convert to units of MW; and
 - (b) the MWh quantities determined in step 9(b) for each of the Trading Intervals identified in step 9(c), multiplied by 2 to convert to units of MW.
- Step 14: For each New Candidate Facility, determine the 60 quantities comprising:
 - (a) the MWh quantities identified in step 9(b), determined in step 2 or estimated in steps step 4, 5, 6 or 6A as applicable, for each of the Trading Intervals identified in step 12 that fall after 8:00 AM on the Full Operation Date for the Facility, multiplied by 2 to convert to units of MW; and
 - (b) the MWh quantities determined in step 10 for each of the Trading Intervals identified in step 12 that fall before 8:00 AM on the Full Operation Date of the Facility, multiplied by 2 to convert to units of MW.
- Step 15: Determine the average performance level (in MW) for each Candidate Facility f ("Facility Average Performance Level") as the mean of the 60 quantities determined for Facility f in step 13 or step 14 as applicable.

Determine the Facility Adjustment Factor

- Step 16: Determine the variance (in MW) for each Candidate Facility f ("Facility Variance") as the variance of the MW quantities determined for Facility f in step 13 or step 14 as applicable.
- Step 17: Determine the facility adjustment factor (in MW) for each Candidate Facility f ("Facility Adjustment Factor") in accordance with the following formula:

 Facility Adjustment Factor = min(G x Facility Variance (f), Facility Average Performance Level (f) / 3 + K x Facility Variance (f))

Where

G = K + U / Facility Average Performance Level (f)

K is determined in accordance with the following table:

Reserve Capacity Cycle	Capacity Year	K value
2012	2014/15	0.001
2013	2015/16	0.002
2014	2016/17	0.003
2015 onwards	From 2017/18 onwards	To be determined by the Economic Regulation Authority in accordance with clause 4.11.3C.

U is determined in accordance with the following table:

Reserve Capacity Cycle	Capacity Year	U
2012	2014/15	0.211
2013	2015/16	0.422
2014	2016/17	0.635
2015 onwards	From 2017/18 onwards	To be determined by the Economic Regulation Authority in accordance with clause 4.11.3C.

Determining the Relevant Level for a Facility

Step 18: Determine the Relevant Level for each Candidate Facility f (in MW) in accordance with the following formula:

Relevant Level (f) = max(0, Facility Average Performance Level (f) - Facility Adjustment Factor (f))

Publication of information

- Step 19: Publish on the WEM Website by 1 June of Year 1 of the relevant Reserve Capacity Cycle on a provisional basis:
 - (a) a forecast of the Trading Intervals that may be identified in step 8; and
 - (b) a forecast of the Existing Facility Load for Scheduled Generation quantities that may be determined in step 7.

- Step 20: Publish on the WEM Website within three Business Days after the date specified in clause 4.1.11 (as modified or extended) for the relevant Reserve Capacity Cycle:
 - (a) the Trading Intervals identified in step 8; and
- (b) the Existing Facility Load for Scheduled Generation quantities determined in step 7.

Appendix 11 is proposed to be deleted as consequence of the Constrained Access Entitlement regime no longer applying from the 2021 Reserve Capacity Cycle.

APPENDIX 11: DETERMINATION OF CONSTRAINED ACCESS ENTITLEMENT[Blank]

This Appendix presents the method for determining the Constrained Access Entitlement for a Constrained Access Facility in accordance with clause 4.10A.

Terms defined in this Appendix 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.

- Item 1. The Network Operator must, for each relevant Constrained Access Facility, determine the Constrained Access Entitlement as the MW level of network access expected to be available to the Facility for at least 95% of the generation dispatch scenarios that could, applying the matters in items 2.3.1 and 2.6.1 of this Appendix (as applicable), occur to meet the Peak Demand on the SWIS for the relevant Capacity Year.
- Item 2. In making its determination under item 1, the Network Operator must apply the following—
 - 2.1. Assume that all major transmission network elements are in service, except those which are normally configured to be out of service under peak demand conditions.
 - 2.2. Assume peak demand is equal to the value calculated under clause 4.5.10(a)(iv) and used in the calculation of the Reserve Capacity Requirement for the relevant Capacity Year (**Peak Demand**).
 - 2.3. Develop in its sole discretion and in accordance with item 2.3.1, a range of generation dispatch scenarios that describe how Facilities could be dispatched at the time of the Peak Demand in order to identify possible network limitations (Constraint Identification Dispatch Scenarios).
 - 2.3.1. The Constraint Identification Dispatch Scenarios must-
 - (a) include, as determined by the Network Operator in its sole discretion, variations in the combination of Facilities dispatched to meet the Peak Demand;
 - (b) only include Facilities that have made a valid application for certification of Reserve Capacity for the relevant Capacity Year and Registered Facilities that have historically generated at peak times and, as determined by the Network

- Operator in its sole discretion, are likely to generate in the relevant Capacity Year at the Peak Demand;
- (c) include, as determined by the Network Operator in its sole discretion, variations in the output of all generation systems in the Constraint Identification Dispatch Scenarios, limited, where applicable, to the maximum sent out capacity available from each Facility at 41 degrees Celsius (as indicated in Standing Data or the relevant application for certification of Reserve Capacity); and
- (d) in accordance with the dispatch priorities in clause 7.6.1D, assume Demand Side Management is not dispatched until all generation systems are dispatched.
- 2.4. Applying only the Constraint Identification Dispatch Scenarios, identify network limitations that the Network Operator, in its sole discretion, considers could limit the output of a Constrained Access Facility, in order to maintain a Satisfactory Normal Operating State, assuming—assuming:
 - (a) all transmission network augmentations which the Network
 Operator is committed to commissioning prior to the relevant
 Capacity Year are accounted for as at the time it makes the
 determination in this Appendix 11:
 - (b) as determined by the Network Operator in its sole discretion, the distribution of the location of Peak Demand; and
 - (c) transmission equipment thermal ratings are at the normal operational rating at 41 degrees Celsius.
- 2.5. Using the network limitations identified in item 2.4, prepare a consolidated list of network limitations (**Network Constraint List**).
- 2.6. Develop, in accordance with item 2.6.1, a range of generation dispatch scenarios that describe how Facilities could be dispatched at Peak Demand (Entitlement Identification Dispatch Scenarios).
 - 2.6.1. The Entitlement Identification Dispatch Scenarios—
 - (a) are not required to include the dispatch of Constrained
 Access Facilities if the methodology employed by the
 Network Operator in item 2.7 does not require those
 Facilities to be included:
 - (b) must include, as determined by the Network Operator in its sole discretion, variations in the output of Scheduled Generators that are not Constrained Access Facilities, limited to—
 - . where the Facility has previously been assigned Capacity Credits, the MW equivalent of the most recently assigned Capacity Credits; or

- ii. where the Facility has not previously been assigned
 Capacity Credits, the maximum sent out capacity
 available from the Facility at 41 degrees Celsius (as
 indicated in Standing Data or the relevant application
 for certification of Reserve Capacity);
- (c) must assume the output of Non-Scheduled Generators that are not Constrained Access Facilities is equal to—
 - . where the Facility has previously been assigned Capacity Credits, the MW equivalent of the most recently assigned Capacity Credits;
 - ii. where the Facility has not previously been assigned Capacity Credits—
 - 1. where the applicant for Certified Reserve
 Capacity in respect of the Facility has
 nominated under clause 4.10.1(i) for the
 Facility to be assessed under clause 4.11.2(b)
 (and AEMO has not rejected such nomination
 under clause 4.11.2(a)), the value determined
 in accordance with Appendix 9; or
 - otherwise, the level of Certified Reserve
 Capacity the applicant has applied for in respect of the Facility under clause 4.10; or
- (d) otherwise, the Network Operator must determine in its sole discretion, the likely output of the generation system at the time of Peak Demand in the same manner as set out in items 2.3.1(a), (b) and (d).
- 2.7. Subject to item 2.8, only consider the MW level of network access available, as determined in the Network Operator's sole discretion, to each Constrained Access Facility in each relevant Entitlement Identification Dispatch Scenario applying the constraints in the Network Constraint List.
- 2.8. In determining the network access available under item 2.7, the Network Operator must assume each Constrained Access Facility—
 - (a) is constrained in a manner consistent with any relevant
 Arrangement for Access (including any Network Control
 Service Contract); and
 - (b) would, unless a Constrained Access Facility is required to operate at a lower level due to the application of limitations in the Network Constraint List or in accordance with item 2.8(a), operate at—
 - where the Facility has previously been assigned Capacity Credits, the MW equivalent of the most recently assigned Capacity Credits; or

- ii. where the Facility has not previously been assigned Capacity Credits—
 - 1. where the applicant for Certified Reserve
 Capacity in respect of the Facility has
 nominated under clause 4.10.1(i) for the
 Facility to be assessed under clause 4.11.2(b)
 (and AEMO has not rejected such nomination
 under clause 4.11.2(a)), the value determined
 in accordance with Appendix 9; or
 - 2. otherwise, the level of Certified Reserve
 Capacity the applicant has applied for in
 respect of the Facility under clause 4.10.

...