CAPABILITY CLASS 2 TECHNOLGOIES REVIEW: EXPOSURE DRAFT

PROPOSED ELECTRICITY SYSTEM AND MARKET (ESM) AMENDING RULES

Explanatory Note for Exposure Draft of the Proposed ESM Amending Rules to implement the outcomes of the Capability Class 2 Technologies Review:

This Exposure Draft contains proposed Amending Rules to:

- allow AEMO to measure the total energy delivered in a Reserve Capacity Test to assess Electric Storage Resource (ESR) performance.
- change Demand Side Programme (DSP) availability obligation intervals to 8:00am to 12:00pm (noon) and 2:00pm to 10:00pm on all Business Days.
- allow a DSP participant to choose only the 2:00pm to 10:00pm window option and receive the Reserve Capacity Price derated by 8/12 to reflect the reduction of the DSP availability.
- require that any DSP participant that chooses only the 2:00pm to 10:00pm option trades its Capacity Credits through AEMO.
- remove the option for DSPs to offer availability outside the availability obligation intervals.
- allow a DSP to associate different loads within its portfolio to the morning and the evening availability obligation intervals (for every Trading Day) no later than 3 weeks before the effective date.
- empower AEMO to conduct Reserve Capacity Tests in the availability windows selected by the DSP.
- determine settlement refunds for dispatch and loads associations shortfalls for DSPs
- allow a DSP participant to have the Capacity Credits associated with a single load reduced and a corresponding portion of the Reserve Capacity Security returned, provided that:
    - an Associated Load equal or greater than 5 megawatt (MW) ceases operations permanently or for the entirety of a Capacity Year in which the relevant DSP has Reserve Capacity obligations for that load;
    - the DSP participant notifies AEMO no later than 1 April in Year 3 of the Reserve Capacity Cycle; and
    - in the notification, the relevant Market Participant provides sufficient evidence that the load has ceased operations.
- empower AEMO to incorporate a Lack of Reserve – State of Charge (LOR-SOC) condition that applies to ESR with a Peak Capacity Credits into the Low Reserve Condition Framework.
- provide that, on a Trading Day when an LOR-SOC condition is in effect, AEMO must:
    - apply Constraint Equations to prevent ESRs from being dispatched for Injection in the lead up to the relevant ESR Obligation Intervals; and
    - apply Constraint Equations to prevent ESRs from being dispatched for withdrawal during the relevant ESR Obligation Intervals.
- introduce a multiplier to the current refund mechanism in settlement for ESRs when an LOR-SOC mandate applies.

This exposure draft is divided into five schedules:

1. Amending Rules to commence on gazettal;
2. Amending Rules to commence on 1 April 2027;
3. Amending Rules to commence on 1 October 2027;
4. Amending Rules to commence on 1 April 2029; and
5. Amending Rules to commence on 1 October 2029.

Following industry consultation, the proposed Amending Rules in this exposure draft will be submitted to the Minister for Energy and Decarbonisation for making and gazettal.

The Department of Energy and Economic Diversification (DEED) is seeking stakeholder feedback on this exposure draft by **5:00 PM (WST) on 10 December 2026**. Feedback can be sent to energymarkets@deed.wa.gov.au.

Mark-up Colour guide:

Text in black	Text in black Rules assumed to be in force at the time the Amending Rules in the relevant schedule are proposed to commence (based on confirmed commencement dates for Amending Rules made by the Minister and the Amending Rules in prior schedules of this exposure draft)
Text in red - underlined ~~and strikethrough~~	Amendments proposed in these Amending Rules

Schedule 1: Amending Rules to commence on gazettal

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Explanatory Note

Section 1.75 introduces transitional provisions for the implementation of the WEM Procedure under clause 4.13A.23. The transitional provisions ensure that AEMO has sufficient time to develop and publish the WEM Procedure that outlines the evidence related to clause 2.25.4B.

1.75. Specific Transitional Provisions for the WEM Procedures affected by the Capability Class 2 Technologies Review Amending Rules

1.75.1. In this section 1.75:

Capability Class 2 Technologies Review Amending Rules (Schedule 1): means the Amending Rules in Schedule 1 of the Electricity System and Market Amendment (Capability Class 2 Technologies Review) Rules 2026.

1.75.2. Notwithstanding clauses 2.9.2A and 2.9.3, AEMO is not required to amend or develop any WEM Procedures to reflect the Capability Class 2 Technologies Review Amending Rules (Schedule 1) until 1 February 2027.

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

Explanatory Note

Clause 4.3.1(d) has been amended to reflect that Capacity Credits may either be traded bilaterally or supplied to AEMO, to align with the options for a DSP to choose only one of the DSP Availability Periods.

4.3.1. A Request for Expression of Interest for a Reserve Capacity Cycle must include the following information:

(a) a request for a response by interested parties not later than the relevant time specified in clause 4.1.5;

(b) the preliminary Reserve Capacity Requirements for the Reserve Capacity Cycle determined in accordance with section 4.6;

(c) for each of the three previous Reserve Capacity Cycles (if applicable):

i. the Reserve Capacity Requirements determined in accordance with clauses 4.6.1 and clause 4.6.1A;

ii. the Availability Curve referred to in clause 4.5.10(e) applicable to that Reserve Capacity Cycle;

iii. each Entity Daily Flexible Reserve Capacity Price that applied to a Facility or Separately Certified Component;

iv. the number of Peak Capacity Credits and Flexible Capacity Credits acquired by AEMO;

v. the Benchmark Reserve Capacity Prices;

vi. the Reserve Capacity Prices;

vii. each Entity Daily Peak Reserve Capacity Price that applied to a Facility; and

viii. the aggregate quantity of MW of Peak Capacity Credits and Flexible Capacity Credits assigned to Facilities or Separately Certified Components at each of the prices referred to in clauses 4.3.1(c)(iii), 4.3.1(c)(vi) and 4.3.1(c)(vii);

(d) the number of Peak Capacity Credits and Flexible Capacity Credits which AEMO expects to be traded bilaterally or supplied to AEMO in accordance with clause 4.14.1(a) and clause 4.14.1(c);

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4.5. Long Term Projected Assessment of System Adequacy

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Explanatory Note

Clause 4.5.12(g)(i) has been amended to move the rounding requirement to the end of the calculation. This ensures the Peak Demand Side Programme Dispatch Requirement is determined using the full calculation result before being rounded to the nearest whole number of Trading Intervals.

This amendment aligns the Peak Demand Side Programme Dispatch Requirement with the availability periods in the ESM Rules. This ensures that DSPs are not required to operate outside of their Availability Period.

4.5.12. For the third Capacity Year of the Long Term PASA Study Horizon, AEMO must determine the following information:

(a) [Blank]

(b) [Blank]

(c) [Blank]

(d) the ESR Duration Requirement, which is the Availability Duration Gap for the relevant Capacity Year plus the ESR Duration Requirement for the previous Reserve Capacity Cycle;

(e) the Availability Duration Gap and ESR Duration Requirement Uplift as calculated in accordance with Appendix 11;

(f) the MW peak demand in the load scenario described in clause 4.5.10(a)(iii) less the number of Peak Capacity Credits issued to Demand Side Programmes in the Reserve Capacity Cycle immediately prior to this Reserve Capacity Cycle (“**Indicative Demand Side Programme Dispatch Threshold**”);

(g) the Peak Demand Side Programme Dispatch Requirement, which is:

i. the number of Trading Intervals in the reference demand profile determined under step B.2.5 of Appendix 9 in which the MW demand exceeds the Indicative Demand Side Programme Dispatch Threshold ~~rounded up to the nearest whole number of Trading Intervals~~; divided by

ii. the number of Capacity Years in the reference demand profile~~;~~, rounded up to the nearest whole number of Trading Intervals;

(h) the Flexible Demand Side Programme Dispatch Requirement, which is the minimum number of Trading Intervals in the applicable Capacity Year in which a Demand Side Programme with Flexible Capacity Credits can be dispatched in addition to its Peak Demand Side Programme Dispatch Requirement and is the greater of eight and the Peak Demand Side Programme Dispatch Requirement; and

(i) if anticipated installed capacity does not satisfy clause 4.5.9(b) under the load scenario described in clause 4.5.10(a)(iv), the minimum additional capacity required to be provided by Capability Class 1 and Capability Class 3 capacity if clause 4.5.9(b) is to be satisfied, using an appropriate mix of Capability Class 1 and Capability Class 3 capacity.

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4.13A. DSP Reserve Capacity Security

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Explanatory Note

Clause 4.13A.2(b) is amended to apply an alternative Reserve Capacity Security calculation where AEMO reduces a Demand Side Programme's Capacity Credits due to a large Non-Dispatchable Load that is not expected to operate for the Capacity Year.

If AEMO reduces a DSP's Reserve Capacity Security under clause 4.25.4C for a Demand Side Programme referred to in clause 4.25.4B(b)(ii), the Market Participant may request a recalculation under clause 4.13A.8. AEMO must then apply the formula in clause 4.13A.2(b) to determine whether any Reserve Capacity Security can be released, subject to its obligation under clause 4.13A.4 to retain sufficient DSP Reserve Capacity Security.

4.13A.2. For the purposes of this section 4.13A, the amount of DSP Reserve Capacity Security is:

(a) 25 percent of the Peak Benchmark Reserve Capacity Price included in the Request for Expressions of Interest issued for the relevant Reserve Capacity Cycle, expressed in $/MW per year, multiplied by an amount equal to:

i. the Peak Certified Reserve Capacity assigned to the Demand Side Programme; less

ii. the total of any Peak Certified Reserve Capacity amount specified in accordance with clause 4.14.1(d) or referred to in clause 4.14.7(c)(ii); or

~~(b) 25 percent of the Peak Benchmark Reserve Capacity Price included in the Request for Expressions of Interest issued for the relevant Reserve Capacity Cycle, expressed in $/MW per year, multiplied by an amount equal to the total number of Peak Capacity Credits assigned to the Demand Side Programme under clause 4.20.5A.~~

(b) from the time and date referred to in clause 4.1.21:

$$\text{DSPRCS}(f) = 0.25 \times PBRCP \times PCC(f)$$

where:

i. DSPRCS(f) is the DSP Reserve Capacity Security calculated for Demand Side Programme f under this clause;

ii. PBRCP is the Peak Benchmark Reserve Capacity Price included in the Request for Expressions of Interest issued for the relevant Reserve Capacity Cycle, expressed in $/MW per year; and

iii. PCC(f) is:

1. where AEMO has accepted an application under clause 4.25.4A in respect of a Demand Side Programme referred to in clause 4.25.4B(b)(iii) and reduced Capacity Credits assigned to that Demand Side Programme in accordance with clause 4.25.4C, the Peak Capacity Credits assigned to the Demand Side Programme following the Capacity Credit reduction under clause 4.25.4C;

2. otherwise, the Peak Capacity Credits assigned to the Demand Side Programme under clause 4.20.5A.

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Explanatory Note

Clause 4.13A.23 has been amended to require the relevant WEM Procedure to specify the evidence a Market Participant must provide in support of an application under clause 4.25.4A for a Demand Side Programme referred to in clause 4.25.4B(b)(iii), including evidence that an expected Non-Dispatchable Load will not be operational for the entirety of the relevant Capacity Year.

4.13A.23. AEMO must document in a WEM Procedure the processes relating to:

(a) determining DSP Reserve Capacity Security;

(b) assessing persons against the Acceptable Credit Criteria;

(c) DSP Reserve Capacity Security arrangements, including:

i. the form of acceptable guarantees and bank undertakings;

ii. where and how it will hold Security Deposits and how the costs and fees of holding Security Deposits will be met;

iii. the circumstances that may require DSP Reserve Capacity Security to be replaced for the purposes of clause 4.13A.12; and

iv. the application of monies drawn from DSP Reserve Capacity Security in respect of amounts payable by the relevant Market Participant to AEMO under clause 4.13A.16; and

(d) requests under clause 4.13A.18, including:

i. how AEMO will make a determination on whether to accept or decline a request under clause 4.13A.19;

ii. the matters AEMO may take into account;

iii. the evidence a Market Participant will be required to provide in support of a request; and

iv. if AEMO declines a request, that AEMO will be required to provide reasons to the relevant Market Participant; and

(e) any other matters relating to this section 4.13A~~.~~; and

(f) applications under clause 4.25.4A relating to a Demand Side Programme referred to in clause 4.25.4B(b)(iii), including evidence a Market Participant will be required to provide in support of an application.

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4.25. Reserve Capacity Testing

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Explanatory Note

- Clause 4.25.4B(b)(ii) has been amended to remove the requirement for a Demand Side Programme to be in Commercial Operation to qualify for a voluntary Capacity Credit reduction. As Commercial Operation status does not change when Associated Loads are added to or removed from a Demand Side Programme, the clause now requires that the Demand Side Programme was subject to a DSP Dispatch Event for which AEMO determined a zero Peak DSP Event Shortfall.
- Clause 4.25.4B(b)(iii) has been created to allow a Demand Side Programme to qualify for a voluntary Capacity Credit reduction where a Non-Dispatchable Load with an expected Peak Capacity of at least 5 MW will not be operational for the entirety of the relevant Capacity Year.
- New clause 4.25.4BA is intended to deter gaming by a Demand Side Programme where the Associated Load resumes operation after the Security Deposit has been refunded. To support compliance, the clause will be designated as a civil penalty provision.
- Clause 4.25.4CA has been amended to consolidate the circumstances in which AEMO must not approve an application for a voluntary Capacity Credit reduction. This includes where the application relates to a Demand Side Programme referred to in clause 4.25.4B(b)(iii) and AEMO is not satisfied that sufficient evidence has been provided demonstrating their intent to associate the Non-Dispatchable Load and that the Non-Dispatchable Load and will not be operational for the entirety of the relevant Capacity Year.
- Clause 4.25.4CB has been amended to exempt a Market Participant from the requirement under clause 4.25.4CD where AEMO has approved a voluntary Capacity Credit reduction application for a Demand Side Programme referred to in clause 4.25.4B(b)(iii) and reduced the Capacity Credits assigned to that Demand Side Programme.

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~~ An application under clause 4.25.4A ~~to be assessed by AEMO, it~~ must:

(a) be in writing;

(b) relate to:

i. a Facility (other than a Demand Side Programme) for which AEMO has notified the Market Participant, in accordance with clause 4.13.14, of its determination that the need to maintain the Reserve Capacity Security for that Facility has ceased; or

ii. a Demand Side Programme that was subject to a DSP Dispatch Event during the Capacity Year in which the application relates, and AEMO determined a zero Peak DSP Event Shortfall under clause 4.26.1AD for that DSP Dispatch Event~~AEMO has determined is in Commercial Operation~~; or

iii. a Demand Side Programme that:

1. was not subject to clause 4.10.1B in Year 1 of the relevant Reserve Capacity Cycle;

2. the application under clause 4.25.4A was submitted no later than 1 April in Year 3 of the relevant Reserve Capacity Cycle; and

3. includes sufficient evidence that a Non-Dispatchable Load identified under clause 4.10.1(f) of the Demand Side Programmes application for certification of Reserve Capacity had an expected quantity of Peak Capacity of at least 5 MW and that the Non-Dispatchable Load will not be operational for the entirety of the Capacity Year to which the application relates;

(bA) indicate whether the application relates to Peak Capacity Credits, or both Peak Capacity Credits and Flexible Capacity Credits;

(c) detail the reasons for the reduction in the number of Capacity Credits;

(cA) if the Facility contains multiple Separately Certified Components:

i. specify how the reduction in the number of Capacity Credits relates to each Separately Certified Component; and

ii. ensure that the number of Flexible Capacity Credits associated with the Separately Certified Component is less than or equal to the number of Peak Capacity Credits associated with the Separately Certified Component;

(cB) ensure that the number of Flexible Capacity Credits associated with the Facility is less than or equal to the number of Peak Capacity Credits associated with the Facility; and

(d) indicate whether the application relates only to the current Capacity Year or includes subsequent Capacity Years.

4.25.4BA. Where AEMO accepts an application received under clause 4.25.4A in respect of a Demand Side Programme referred to in clause 4.25.4B(b)(iii) and reduces Capacity Credits assigned to that Demand Side Programme in accordance with clause 4.25.4C, the relevant Market Participant must ensure that the Non-Dispatchable Load remains non-operational for the entirety of the relevant Capacity Year.

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 determining whether the application meets the requirements of either clause 4.25.4B(b)(i), 4.25.4B(b)(ii) or 4.25.4B(b)(iii);

(b) within 10 Business Days of receiving the application inform the Market Participant of its decision whether to reduce the Capacity Credits and the reasons for its decision; and

(c) if applicable and in AEMO's sole discretion, reduce the quantity of Capacity Credits held by the Market Participant in respect of the Facility, or Separately Certified Component of the Facility, to which the application relates, from a Trading Day that is no earlier than the Trading Day commencing on the day that is two days after the day AEMO informed the Market Participant of its decision under clause 4.25.4C(b).

~~4.25.4CA. AEMO must not approve an application received under clause 4.25.4A if the reduction of Peak Capacity Credits for the relevant Facility would result in the number of Peak Capacity Credits for the Facility allocated by the relevant Market Participant in Capacity Credit Allocations for a Trading Day exceeding the number of Peak Capacity Credits for the Facility held for that Trading Day by the Market Participant that are able to be traded bilaterally under the ESM Rules.~~

4.25.4CA. AEMO must not approve an application received under clause 4.25.4A if:

(a) the reduction of Peak Capacity Credits for the relevant Facility would result in the number of Peak Capacity Credits for the Facility allocated by the relevant Market Participant in Capacity Credit Allocations for a Trading Day exceeding the number of Peak Capacity Credits for the Facility held for that Trading Day by the Market Participant that are able to be traded bilaterally under the ESM Rules;

(b) the reduction of Flexible Capacity Credits for the relevant Facility would result in the number of Flexible Capacity Credits for the Facility allocated by the relevant Market Participant in Capacity Credit Allocations for a Trading Day exceeding the number of Flexible Capacity Credits for the Facility held for that Trading Day by the Market Participant that are able to be traded bilaterally under the ESM Rules; or

(c) the application relates to a Demand Side Programme referred to in clause 4.25.4B(b)(iii) and AEMO is not satisfied that:

i. information previously provided under clause 4.10.1(f) demonstrates the Market Participants intended to associate the Non-Dispatchable Load to the Demand Side Programme for the Capacity Year; and

ii. evidence provided under clause 4.25.4B(b)(iii)(3) demonstrates that the Non-Dispatchable Load had an expected quantity of Peak Capacity of at least 5 MW and will not be operational for the entirety of the Capacity Year to which the application relates.

~~4.25.4CB. AEMO must not approve an application received under clause 4.25.4A if the reduction of Flexible Capacity Credits for the relevant Facility would result in the number of Flexible Capacity Credits for the Facility allocated by the relevant Market Participant in Capacity Credit Allocations for a Trading Day exceeding the number of Flexible Capacity Credits for the Facility held for that Trading Day by the Market Participant that are able to be traded bilaterally under the ESM Rules.~~

4.25.4CB. Where AEMO accepts an application received under clause 4.25.4A in respect of a Demand Side Programme referred to in clause 4.25.4B(b)(iii) and reduces Capacity Credits assigned to that Demand Side Programme in accordance with clause 4.25.4C, the relevant Market Participant is exempt from the requirement under clause 4.25.4CD.

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Schedule 2: Amending Rules to commence on 1 April 2027

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4.1. The Reserve Capacity Cycle

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Explanatory Note

Clause 4.1.27 has been amended to remove the requirement for AEMO to publish the derated DSP Floating Daily Flexible Reserve Capacity Price for Demand Side Programmes that are available only from 2:00 PM to 10:00 PM on Business Days where the Flexible Reserve Capacity Price is less than or equal to the Peak Reserve Capacity Price. In these circumstances, the derated DSP Floating Daily Flexible Reserve Capacity Price is zero and publication is unnecessary.

4.1.27. For a Reserve Capacity Cycle from the 2026 Reserve Capacity Cycle onwards, if the Flexible Reserve Capacity Price is less than or equal to the Peak Reserve Capacity Price then in respect of the relevant Capacity Year:

(a) Market Participants are not required to fulfil any further obligations relating to Flexible Capacity Credits;

(b) AEMO must not procure supplementary Flexible Capacity under section 4.24;

(c) AEMO must not procure Non-Co-optimised Essential System Services relating to Flexible Capacity;

(d) AEMO must not consider Flexible Capacity Outage Capability or the availability of Flexible Capacity when conducting Outage Evaluations under section 3.18E;

(e) subject to clause 4.1.27(g), AEMO is not required to determine or publish:

i. [Blank]

ii. [Blank]

iii. [Blank]

iv. Entity Daily Flexible Reserve Capacity Prices under clause 4.29.1E and the Floating Daily Flexible Reserve Capacity Price under clause 4.29.1F;

v. [Blank]

vi. [Blank]

vii. [Blank]

viii. the Transitional Daily Flexible Reserve Capacity Price under clause 4.29.1G and Fixed Daily Flexible Reserve Capacity Prices under clause 4.29.1H; and

ix. the values described in clauses 4.20.5A(b)(iiiA), ~~and~~ 4.20.5A(b)(v) and 4.20.5A(b)(vii);

(f) a standard form Supplementary Capacity Contract is not required to specify aspects relating to supplementary Flexible Capacity outlined under clauses 4.24.13(g) and 4.24.13(h)(i)(2); and

(g) AEMO must determine and publish:

i. the forecast highest Four-Hour Demand Increase as required by sections 7.3 and 3.16; and

ii. the Flexible Reserve Capacity Price under clause 4.29.1(b)(ii).

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4.10. Information Required for the Certification of Reserve Capacity

Explanatory Note

- Clause 4.10.1(f)(i) and 4.10.1(f)(iA) has been amended to prompt Market Participants to provide additional non-mandatory information regarding the Non-Dispatchable Loads the Market Participants intends to associate. This information may be used under AEMO's assessment in clause 4.25.4CA.
- Clause 4.10.1(f)(vi) has been amended to reflect the revised DSP availability windows. A Market Participant must nominate the Demand Side Programme to be available either from 2:00 PM to 10:00 PM, or from 8:00 AM to 12:00 PM and 2:00 PM to 10:00 PM, on Business Days.
- Clauses 4.10.1(f)(ii), and (iii) have been amended because availability can no longer be nominated outside the availability windows after the 2027 Reserve Capacity Cycle, but these clauses are required to calculate Peak Capacity requirements until 2029. Additional amendments to the Reserve Capacity Obligation Quantity provisions will be made to reflect this change.
- Clauses 4.10.1(f) (iiA) and (iv) have been removed because availability can no longer be nominated outside the availability windows and the removal of these clauses is not expected to have any impact on the determined of Flexibility Capacity requirements. Consequently, a Demand Side Programme cannot nominate additional daily or annual availability hours. Additional amendments to the Reserve Capacity Obligation Quantity provisions will be made to reflect this change.

4.10.1. Each Market Participant must ensure that information submitted to AEMO with an application for certification of Reserve Capacity pertains to the Reserve Capacity Cycle to which the certification relates, and is supported by documented evidence and includes, if applicable, except to the extent that it is already accurately provided in Standing Data:

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(f) for Demand Side Programmes:

i. if the Demand Side Programme has, or is expected to have, a single Associated Load:

1. the quantity of Peak Capacity the Market Participant expects to make available from the Facility; ~~and~~

2. the expected Minimum Consumption of the Non-Dispatchable Load in units of MW; and

3. any supporting information regarding the Non-Dispatchable Load that the Market Participant wishes to provide, which must include:

i. the NMI for the Non-Dispatchable Load, if one has been assigned;

iA. if the Demand Side Programme has, or is expected to have more than one Associated Load, the quantity of Peak Capacity that the Market Participant nominates to apply for the Demand Side Programme and any supporting information regarding the Non-Dispatchable Loads that the Market Participant wishes to provide which may include the NMI;

iB. if the Demand Side Programme has, or is expected to have, a single Associated Load, the quantity of Flexible Capacity the Market Participant expects to make available from the Facility;

iC. if the Demand Side Programme has, or is expected to have more than one Associated Load, the quantity of Flexible Capacity that the Market Participant nominates to apply for the Demand Side Programme;

ii. ~~if the application relates to Peak Capacity, the maximum number of Trading Intervals that the Demand Side Programme will be available to provide Peak Capacity during a Capacity Year, which must be at least the Peak Demand Side Programme Dispatch Requirement for that Reserve Capacity Cycle;~~ if the application relates to Peak Capacity, the maximum number of Trading Intervals that the Demand Side Programme will be available to provide Peak Capacity during a Capacity Year:

1. for a Reserve Capacity Cycle up to and including the 2026 Reserve Capacity Cycle must be at least the minimum Peak Demand Side Programme Dispatch Requirement for that Reserve Capacity Cycle; and; ~~and~~

2. from the 2027 Reserve Capacity Cycle must be equal to the Peak Demand Side Programme Dispatch Requirement for that Reserve Capacity Cycle;

iiA. [Blank]~~if the application includes Flexible Capacity, the maximum number of Trading Intervals, in addition to the number of Trading Intervals specified under clause 4.10.1(f)(ii), that the Demand Side Programme will be available to provide Reserve Capacity during a Capacity Year if it provides both Peak Capacity and Flexible Capacity, which must be at least the Flexible Demand Side Programme Dispatch Requirement for that Reserve Capacity Cycle~~;

iii. ~~the maximum number of Trading Intervals per Trading Day that the Facility will be available to provide Peak Capacity if issued a Dispatch Instruction, where this must be at least twenty four Trading Intervals;~~ the number of Trading Intervals per Trading Day that the Facility will be available to provide must be:

1. for a Reserve Capacity Cycle up to and including the 2026 Reserve Capacity Cycle, at least twenty four Trading Intervals; and ~~and~~
2. from the 2027 Reserve Capacity Cycle, no greater than the Peak Demand Side Programme Dispatch Requirement for that Reserve Capacity Cycle;

iv. [Blank]~~if the application includes Flexible Capacity, the maximum number of Trading Intervals per Trading Day that the Facility will be available to provide Flexible Capacity if issued a Dispatch Instruction, where this must be at least eight Trading Intervals~~;

ivA. if the application includes Flexible Capacity, how the Demand Side Programme plans to meet its Reserve Capacity Obligations for Flexible Capacity, including the technologies it plans to use;

v. the minimum notice period required for dispatch under clause 7.6.15 of the Facility, which must be no more than:

1. if the application is only for Peak Capacity, two hours; and
2. if the application includes both Peak Capacity and Flexible Capacity, five minutes;

vi. the Facility can be dispatched during the following periods:

1. For a Reserve Capacity Cycle up to and including the 2026 Reserve Capacity Cycle, must include the period between 8:00 AM and 8:00 PM on all Business Days; and
2. From the 2027 Reserve Capacity Cycle, the period:
   i. must include the period between 2:00 PM and 10:00 PM on each Business Day; and
   ii. may include the period between 8:00 AM and 12:00 PM on each Business Day;

~~the periods when the Facility can be dispatched, which must include the period between 8:00 AM and 8:00 PM on all Business Days; and~~

vii. [Blank]

viii. the single Transmission Node Identifier for the Facility;

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4.13A. DSP Reserve Capacity Security

Explanatory Note

- Clause 4.13A.2 is amended to implement a derated Reserve Capacity Security calculation for a Demand Side Programmes that is only available for 8 hours between 2:00 PM to 10:00 PM on Business Days, as opposed to 12 hours, between 8:00 AM to 12:00 PM and 2:00 PM to 10:00 PM on Business Days. A new defined term, DSP Availability Period Ratio, has been created to reference the 8/12 ratio.
- Clause 4.13A.2(b) is amended to apply an alternative Reserve Capacity Security calculation where AEMO reduces a Demand Side Programme's Capacity Credits due to a large Non-Dispatchable Load that is not expected to operate for the Capacity Year.

If AEMO reduces a DSP's Reserve Capacity Security under clause 4.25.4C for a Demand Side Programme referred to in clause 4.25.4B(b)(ii), the Market Participant may request a recalculation under clause 4.13A.8. AEMO must then apply the formula in clause 4.13A.2(b) to determine whether any Reserve Capacity Security can be released, subject to its obligation under clause 4.13A.4 to retain sufficient DSP Reserve Capacity Security.

4.13A.1. If AEMO assigns Certified Reserve Capacity to a Demand Side Programme, the relevant Market Participant must ensure that AEMO holds the benefit of DSP Reserve Capacity Security that is:

(a) if:

i. clause 4.1.13 applies, for an amount determined under clause 4.13A.2(a) by the date and time referred to in clause 4.1.13; or

ii. clause 4.1.21 applies, for an amount determined under clause 4.13A.2(b) by the date and time referred to in clause 4.1.21; and

(b) in the form specified in clause 4.13A.6.

~~4.13A.2. For the purposes of this section 4.13A, the amount of DSP Reserve Capacity Security is:~~

~~(a) 25 percent of the Peak Benchmark Reserve Capacity Price included in the Request for Expressions of Interest issued for the relevant Reserve Capacity Cycle, expressed in $/MW per year, multiplied by an amount equal to:~~

~~i. the Peak Certified Reserve Capacity assigned to the Demand Side Programme; less~~

~~ii. the total of any Peak Certified Reserve Capacity amount specified in accordance with clause 4.14.1(d) or referred to in clause 4.14.7(c)(ii); or~~

~~(b) from the time and date referred to in clause 4.1.21:~~

~~$DSPRCS(f) = 0.25 \times PBRCP \times PCC(f)$~~

~~where:~~

~~iv. DSPRCS(f) is the DSP Reserve Capacity Security calculated for Demand Side Programme f under this clause;~~

~~v. PBRCP is the Peak Benchmark Reserve Capacity Price included in the Request for Expressions of Interest issued for the relevant Reserve Capacity Cycle, expressed in $/MW per year; and~~

~~vi. PCC(f) is:~~

~~3. where AEMO has accepted an application under clause 4.25.4A in respect of a Demand Side Programme referred to in clause 4.25.4B(b)(iii) and reduced Capacity Credits assigned to that Demand Side Programme in accordance with clause 4.25.4C, the Peak Capacity Credits assigned to the Demand Side Programme following the Capacity Credit reduction under clause 4.25.4C;~~

~~4. otherwise, the Peak Capacity Credits assigned to the Demand Side Programme under clause 4.20.5A.~~

4.13A.2. For the purposes of this section 4.13A, the amount of DSP Reserve Capacity Security is:

(a) from the time and date referred to in clause 4.1.13, continuing until such time as 4.13A.2(b) applies:

$$DSPRCS(f) = M \times 0.25 \times PBRCP \times PCRC(f)$$

where:

i. DSPRCS(f) is the DSP Reserve Capacity Security calculated for Demand Side Programme f under this clause;

ii. M is:

1. for a Reserve Capacity Cycle up to and including the 2026 Reserve Capacity Cycle, 1; and
2. From the 2027 Reserve Capacity Cycle:
   i. the DSP Availability Period Ratio, for a Demand Side Programme that is only available for DSP Availability Period 1; or
   ii. 1, for a Demand Side Programme that is available for DSP Availability Period 1 and DSP Availability Period 2.

iii. PBRCP is the Peak Benchmark Reserve Capacity Price included in the Request for Expressions of Interest issued for the relevant Reserve Capacity Cycle, expressed in $/MW per year; and

iv. PCRC(f) is the Peak Certified Reserve Capacity assigned to the Demand Side Programme less any amount specified in accordance with clause 4.14.1(d) or referred to in clause 4.14.7(c)(ii); or

(b) from the time and date referred to in clause 4.1.21:

$$DSPRCS(f) = M \times 0.25 \times PBRCP \times PCC(f)$$

where:

i. DSPRCS(f) is the DSP Reserve Capacity Security calculated for Demand Side Programme f under this clause;

ii. M is:

1. for a Reserve Capacity Cycle up to and including the 2026 Reserve Capacity Cycle, 1; and
2. From the 2027 Reserve Capacity Cycle:
   i. the DSP Availability Period Ratio, for a Demand Side Programme that is only available for DSP Availability Period 1; or
   ii. 1, for a Demand Side Programme that is available for DSP Availability Period 1 and DSP Availability Period 2.

iii. PBRCP is the Peak Benchmark Reserve Capacity Price included in the Request for Expressions of Interest issued for the relevant Reserve Capacity Cycle, expressed in $/MW per year; and

iv. PCC(f) is:

1. where AEMO has accepted an application under clause 4.25.4A in respect of a Demand Side Programme referred to in clause 4.25.4B(b)(iii) and reduced Capacity Credits assigned to that Demand Side Programme in accordance with clause 4.25.4C, the Peak Capacity Credits assigned to the Demand Side Programme following the Capacity Credit reduction under clause 4.25.4C;
2. otherwise, the Peak Capacity Credits assigned to the Demand Side Programme under clause 4.20.5A.

…

4.13A.4. Subject to clause 4.13A.5, if a Market Participant is required to ensure that AEMO holds the benefit of DSP Reserve Capacity Security for more than one Reserve Capacity Cycle, the total amount of the DSP Reserve Capacity Security for all of those Reserve Capacity Cycles in aggregate is the highest amount determined under clause 4.13A.1.

…

4.14. Bilateral Trade Declaration

Explanatory Note

- Clause 4.14.1 has been amended to clarify that Capacity Credits may either be traded bilaterally or supplied to AEMO. A Demand Side Programme that is available only from 2:00 PM to 10:00 PM on Business Days receives a derated Reserve Capacity Price and cannot trade its Capacity Credits bilaterally. Instead, the Market Participant must nominate the quantity of Capacity Credits it intends to supply to AEMO. The amendment enables clause 4.14.1(a) and 4.14.1(c) to accommodate both arrangements while minimising consequential ESM Rule and system changes.
- Clause 4.14.9 has been amended to reflect that Capacity Credits may either be traded bilaterally or supplied to AEMO, to align with the changes to clause 4.14.1.

4.14.1. Subject to clause 4.14.1A and clause 4.14.3, each Market Participant holding Certified Reserve Capacity for the current Reserve Capacity Cycle must, by the date and time specified in clause 4.1.14 provide the following information to AEMO for each Facility and component of a Facility (expressed in MW to a precision of 0.001 MW):

(a) the total quantity of Flexible Certified Reserve Capacity the Market Participant intends to trade bilaterally or supply to AEMO;

(b) the total quantity of Flexible Certified Reserve Capacity that the Market Participant has decided will not be made available to the market;

(c) the total quantity of Peak Certified Reserve Capacity the Market Participant intends to trade bilaterally or supply to AEMO; and

(d) the total quantity of Peak Certified Reserve Capacity that the Market Participant has decided will not be made available to the market.

…

4.14.9. AEMO must notify each Market Participant that specified a non-zero amount under clause 4.14.1(a) or clause 4.14.1(c) by the date and time specified in clause 4.1.15 of the quantities of Peak Certified Reserve Capacity and Flexible Certified Reserve Capacity held by the Market Participant in respect of each Facility and component of a Facility that it can trade bilaterally, or supply to AEMO, where these quantities must exclude Certified Reserve Capacity to which clause 4.14.8 relates.

…

4.20. Capacity Credits

…

Explanatory Note

- Clause 4.20.5A is amended to require AEMO to publish the new derated DSP Floating Daily Peak Reserve Capacity Price and derated DSP Floating Daily Flexible Reserve

Capacity Price which is the price paid to Demand Side Programmes that are only available between 2:00 PM and 10:00 PM Business Days.

- Clauses 4.20.17 and 4.20.17A have been amended to reflect that Capacity Credits may either be traded bilaterally or supplied to AEMO, to align with the changes to clause 4.14.1.

4.20.5A. AEMO must:

(a) subject to clause 4.20.5C, assign a quantity of Peak Capacity Credits and a quantity of Flexible Capacity Credits to each Facility where the quantities are determined in accordance with clauses 4.20.5B and 4.20.5BA for the relevant Facility;

(b) publish, by the date and time specified in clause 4.1.16A:

i. for each Facility assigned Capacity Credits under clause 4.20.5A(a):

1. the quantity of Peak Capacity Credits assigned; and

2. the quantity of Flexible Capacity Credits assigned; and;

3. the Facility Class;

ii. the Peak Reserve Capacity Price for the Reserve Capacity Cycle;

iiA. the Flexible Reserve Capacity Price for the Reserve Capacity Cycle;

iii. if the Reserve Capacity Cycle is a Transitional Reserve Capacity Cycle, the Transitional Daily Peak Reserve Capacity Price for the Reserve Capacity Cycle multiplied by the number of Trading Days in the relevant Capacity Year for the Reserve Capacity Cycle;

iiiA. subject to clause clauses 1.63.10(e)(ix) and 4.1.27(e)(ix), if the Reserve Capacity Cycle is a Transitional Reserve Capacity Cycle, the Transitional Daily Flexible Reserve Capacity Price for the Reserve Capacity Cycle multiplied by the number of Trading Days in the relevant Capacity Year for the Reserve Capacity Cycle;

iv. each Fixed Daily Peak Reserve Capacity Price for each Facility and Separately Certified Component that is a Fixed Price Facility or Fixed Price Component for that Reserve Capacity Cycle multiplied by the number of Trading Days in the relevant Capacity Year for the Reserve Capacity Cycle; ~~and~~

v. subject to clause clauses 1.63.10(e)(ix) and 4.1.27(e)(ix), each Fixed Daily Flexible Reserve Capacity Price for each Facility and Separately Certified Component that is a Fixed Price Facility or Fixed Price Component for that Reserve Capacity Cycle multiplied by the number of Trading Days in the relevant Capacity Year for the Reserve Capacity Cycle~~.~~;

vi. the price determined under clause 4.29.1A(d)(vii) for each Demand Side Programme which is only available for DSP Availability Period

1 multiplied by the number of Trading Days in the relevant Capacity Year for the Reserve Capacity Cycle; and

vii. subject to clause 4.1.27(e)(ix), the price determined under clause 4.29.1E(b)(v) for each Demand Side Programme which is only available for DSP Availability Period 1 multiplied by the number of Trading Days in the relevant Capacity Year for the Reserve Capacity Cycle.

4.20.5AA. For each Reserve Capacity Cycle, if AEMO has assigned Capacity Credits to Facilities or Separately Certified Components at any of the prices required to be published under clause 4.20.5A(b), AEMO must, by the date and time specified in clause 4.1.22, publish a summary of the aggregate quantity of MW of Capacity Credits assigned to Facilities or Separately Certified Components at each price for the Reserve Capacity Cycle.

…

4.20.17. If AEMO has assigned Peak Capacity Credits to a Facility for a Capacity Year, AEMO must set the number of Peak Capacity Credits to be associated with each component of the Facility for the Capacity Year as:

(a) the number of Peak Capacity Credits the Market Participant nominated to trade bilaterally or supply to AEMO under clause 4.14.1(c); or

(b) where clause 4.20.16 applies, the number of Peak Capacity Credits notified to AEMO under that clause to be associated with each component of the Facility.

4.20.17A. If AEMO has assigned Flexible Capacity Credits to a Facility for a Capacity Year, AEMO must set the number of Flexible Capacity Credits to be associated with each component of the Facility for the Capacity Year as:

(a) the number of Flexible Capacity Credits the Market Participant nominated to trade bilaterally or supply to AEMO under clause 4.14.1(a); or

(b) if clause 4.20.16 or clause 4.20.16A applies, the number of Flexible Capacity Credits notified to AEMO under that clause to be associated with each component of the Facility.

...

4.29. Settlement Data

…

Explanatory Note

Clauses 4.29.1A, 4.29.1E and 4.29.5 are amended to apply a derated Floating Daily Peak Reserve Capacity Price and derated Floating Daily Flexible Reserve Capacity Price for a Demand Side Programme that is only available for 8 hours between 2:00 PM and 10:00 PM Business Days.

4.29.1A. AEMO must set:

…

(c) for a Reserve Capacity Cycle from the 2024 Reserve Capacity Cycle ~~onwards~~to the 2026 Reserve Capacity Cycle, the Entity Daily Peak Reserve Capacity Price to apply during the period specified in clause 4.1.29 for a Facility or a Separately Certified Component, which is equal to:

i. for a Non-Scheduled Facility that is a Transitional Facility during a Transitional Reserve Capacity Cycle, the Transitional Daily Peak Reserve Capacity Price;

ii. for a Non-Scheduled Facility that is a Fixed Price Facility during a Peak Fixed Price Reserve Capacity Cycle for that Non-Scheduled Facility, the Fixed Daily Peak Reserve Capacity Price for that Facility;

iii. for a Non-Scheduled Facility not covered by clause 4.29.1A(c)(i) or clause 4.29.1A(c)(ii), the Floating Daily Peak Reserve Capacity Price;

iv. for a Transitional Component during a Transitional Reserve Capacity Cycle, the Transitional Daily Peak Reserve Capacity Price;

v. for a Fixed Price Component during a Peak Fixed Price Reserve Capacity Cycle for that Fixed Price Component, the Fixed Daily Peak Reserve Capacity Price for that Fixed Price Component;

vi. for a Separately Certified Component not covered by clause 4.29.1A(c)(iv) or clause 4.29.1A(c)(v), the Floating Daily Peak Reserve Capacity Price; ~~and~~

vii. for all Demand Side Programmes, the Floating Daily Peak Reserve Capacity Price~~.~~;

(d) for a Reserve Capacity Cycle from the 2027 Reserve Capacity Cycle onwards, the Entity Daily Peak Reserve Capacity Price to apply during the period specified in clause 4.1.29 for a Facility or a Separately Certified Component, which is equal to:

i. for a Non-Scheduled Facility that is a Transitional Facility during a Transitional Reserve Capacity Cycle, the Transitional Daily Peak Reserve Capacity Price;

ii. for a Non-Scheduled Facility that is a Fixed Price Facility during a Peak Fixed Price Reserve Capacity Cycle for that Non-Scheduled Facility, the Fixed Daily Peak Reserve Capacity Price for that Facility;

iii. for a Non-Scheduled Facility not covered by clause 4.29.1A(c)(i) or clause 4.29.1A(c)(ii), the Floating Daily Peak Reserve Capacity Price;

iv. for a Transitional Component during a Transitional Reserve Capacity Cycle, the Transitional Daily Peak Reserve Capacity Price;

v. for a Fixed Price Component during a Peak Fixed Price Reserve Capacity Cycle for that Fixed Price Component, the Fixed Daily Peak Reserve Capacity Price for that Fixed Price Component;

vi. for a Separately Certified Component not covered by clause 4.29.1A(c)(iv) or clause 4.29.1A(c)(v), the Floating Daily Peak Reserve Capacity Price;

vii for a Demand Side Programme that is only available for DSP Availability Period 1 the Floating Daily Peak Reserve Capacity Price multiplied by the DSP Availability Period Ratio; and

viii for a Demand Side Programme that is available for DSP Availability Period 1 and DSP Availability Period 2 the Floating Daily Peak Reserve Capacity Price.

4.29.1AA. The Floating Daily Peak Reserve Capacity Price for a Reserve Capacity Cycle is the Peak Reserve Capacity Price divided by the number of Trading Days in the relevant Capacity Year for the Reserve Capacity Cycle.

…

~~4.29.1E. The Entity Daily Flexible Reserve Capacity Price for a Reserve Capacity Cycle to apply during the period specified in clause 4.1.29 for a Facility or a Separately Certified Component is:~~

~~(a) for a Transitional Component during a Transitional Reserve Capacity Cycle, the Transitional Daily Flexible Reserve Capacity Price;~~

~~(b) for a Fixed Price Component during a Flexible Fixed Price Reserve Capacity Cycle for that Fixed Price Component, the Fixed Daily Flexible Reserve Capacity Price for that Fixed Price Component;~~

~~(c) for a Fixed Price Component during a Peak Fixed Price Reserve Capacity Cycle, that is not assigned Flexible Capacity Credits in the same Reserve Capacity Cycle, the greater of:~~

~~i. zero, and~~

~~ii. the Floating Daily Flexible Reserve Capacity Price plus the Floating Daily Peak Reserve Capacity Price, less the Fixed Daily Peak Reserve Capacity Price for that Fixed Price Component;~~

~~(d) for all other Separately Certified Components, the Floating Daily Flexible Reserve Capacity Price; or~~

~~(e) for a Demand Side Programme the Floating Daily Flexible Reserve Capacity Price.~~

4.29.1E. AEMO must set:

(a) for the 2025 Reserve Capacity Cycle and 2026 Reserve Capacity Cycle, the Entity Daily Flexible Reserve Capacity Price to apply during the period specified in clause 4.1.29 for a Facility or a Separately Certified Component, which is equal to:

i for a Transitional Component during a Transitional Reserve Capacity Cycle, the Transitional Daily Flexible Reserve Capacity Price;

ii for a Fixed Price Component during a Flexible Fixed Price Reserve Capacity Cycle for that Fixed Price Component, the Fixed Daily Flexible Reserve Capacity Price for that Fixed Price Component;

iii for a Fixed Price Component during a Peak Fixed Price Reserve Capacity Cycle, that is not assigned Flexible Capacity Credits in the same Reserve Capacity Cycle, the greater of:

1 zero, and

2 the Floating Daily Flexible Reserve Capacity Price plus the Floating Daily Peak Reserve Capacity Price, less the Fixed Daily Peak Reserve Capacity Price for that Fixed Price Component;

iv for all other Separately Certified Components, the Floating Daily Flexible Reserve Capacity Price;

v for a Demand Side Programme the Floating Daily Flexible Reserve Capacity Price;

(b) for a Reserve Capacity Cycle from the 2027 Reserve Capacity Cycle onwards, the Entity Daily Flexible Reserve Capacity Price to apply during the period specified in clause 4.1.29 for a Facility or a Separately Certified Component, which is equal to:

i. for a Transitional Component during a Transitional Reserve Capacity Cycle, the Transitional Daily Flexible Reserve Capacity Price;

ii for a Fixed Price Component during a Flexible Fixed Price Reserve Capacity Cycle for that Fixed Price Component, the Fixed Daily Flexible Reserve Capacity Price for that Fixed Price Component;

iii for a Fixed Price Component during a Peak Fixed Price Reserve Capacity Cycle, that is not assigned Flexible Capacity Credits in the same Reserve Capacity Cycle, the greater of:

1 zero, and

2 the Floating Daily Flexible Reserve Capacity Price plus the Floating Daily Peak Reserve Capacity Price, less the Fixed Daily Peak Reserve Capacity Price for that Fixed Price Component;

iv for all other Separately Certified Components, the Floating Daily Flexible Reserve Capacity Price;

v for a Demand Side Programme that is only available for DSP Availability Period 1 the Floating Daily Flexible Reserve Capacity Price multiplied by the DSP Availability Period Ratio; and

vi for a Demand Side Programme that is available for DSP Availability Period 1 and DSP Availability Period 2 the Floating Daily Flexible Reserve Capacity Price.

4.29.1F. The Floating Daily Flexible Reserve Capacity Price for a Reserve Capacity Cycle is the greater of:

(a) zero; and

(b) the Flexible Reserve Capacity Price divided by the number of Trading Days in the relevant Capacity Year for the Reserve Capacity Cycle less the Floating Daily Peak Reserve Capacity Price.

…

4.29.5. If a Facility first enters service prior to 1 October of Year 3 of a Reserve Capacity Cycle and Reserve Capacity Obligations apply to the relevant Facility in accordance with clause 4.1.26, then for the period between commencement of the Reserve Capacity Obligations for the Facility and up to the start of the Trading Day on 1 October of Year 3 of that Reserve Capacity Cycle;

~~(a) the Entity Daily Peak Reserve Capacity Price for the Facility or a Separately Certified Component of the Facility for that period is equal to the Floating Daily Peak Reserve Capacity Price for the Capacity Year immediately preceding 1 October of Year 3 of that Reserve Capacity Cycle; and~~

~~(b) the Entity Daily Flexible Reserve Capacity Price for the Facility or a Separately Certified Component of the Facility for that period is equal to the Floating Daily Flexible Reserve Capacity Price for the Capacity Year immediately preceding 1 October of Year 3 of that Reserve Capacity Cycle.~~

(a) the Entity Daily Peak Reserve Capacity Price is equal to:

i. for a Separately Certified Component of a Scheduled Facility or Semi-Scheduled Facility, Non-Scheduled Facility, and Demand Side Programme available for DSP Availability Period 1 and DSP Availability Period 2 the Floating Daily Peak Reserve Capacity Price for the Capacity Year immediately preceding 1 October of Year 3 of that Reserve Capacity Cycle; and

ii for a Demand Side Programme only available for DSP Availability Period 1 the Floating Daily Peak Reserve Capacity Price for the Capacity Year immediately preceding 1 October of Year 3 of that Reserve Capacity Cycle multiplied by the DSP Availability Period Ratio; and

(b) the Entity Daily Flexible Reserve Capacity Price is equal to:

i. for a Separately Certified Component of a Scheduled Facility or Semi-Scheduled Facility, Non-Scheduled Facility, and Demand Side Programme available for DSP Availability Period 1 and DSP Availability Period 2 the Floating Daily Flexible Reserve Capacity Price for the Capacity Year immediately preceding 1 October of Year 3 of that Reserve Capacity Cycle; and

ii for a Demand Side Programme only available for DSP Availability Period 1 the Floating Daily Flexible Reserve Capacity Price for the Capacity Year immediately preceding 1 October of Year 3 of that Reserve Capacity Cycle multiplied by the DSP Availability Period Ratio.

…

11. Glossary

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DSP Availability Period Ratio: The number of Trading Intervals in DSP Availability Period 1 divided by the total number of Trading Intervals in DSP Availability Period 1 and DSP Availability Period 2.

…

DSP Availability Period 1: The period when a Demand Side Programme can be dispatched, being 2:00 PM to 10:00 PM on Business Days.

DSP Availability Period 2: The period when a Demand Side Programme can be dispatched, being 8:00 AM to 12:00 PM on Business Days.

Entity Daily Peak Reserve Capacity Price: In respect of a Reserve Capacity Cycle, the price per Peak Capacity Credit for a Trading Day calculated in accordance with clause 4.29.1A~~(c)~~ in respect of:

(a) a Non-Scheduled Facility;

(b) a Demand Side Programme;

(c) a Separately Certified Component of a Scheduled Facility; or

(d) a Separately Certified Component of a Semi-Scheduled Facility.

Schedule 3: Amending Rules to commence on 1 October 2027

…

3.17. Low Reserve Conditions

Explanatory Note

- Clause 3.17.1 is amended to add the risk of a SWIS-wide lack of Charge Level (i.e. a State of Charge Low Reserve Condition) as an explicit condition within the Low Reserve Condition definition.
- New clause 3.17.4A places on obligation on AEMO to publish an LOR-SOC by 8:00am to align with a Review Outcome. This ensures that ESR have sufficient time to adapt charging behaviour.
- Clause 3.17.5 is amended to require AEMO to include information about the State of Charge Mandate Percentage and timing related to the mandate and constraints when it publishes an LOR-SOC.
- Clause 3.17.11 is amended to require AEMO to define in a WEM Procedure how it considers insufficient total Charge Level when declaring a State of Charge Low Reserve Condition, and how it defines the State of Charge Mandate Percentage when it declares a State of Charge Low Reserve Condition. The WEM Procedure should specify the methodology AEMO uses to determine a State of Charge Low Reserve Condition, providing transparency and certainty for Market Participants.
- New clause 3.17.13 is required to implement the new refund under 4.26.1(c) to ensure ESR Facilities comply with the LOR-SOC.

3.17.1. Where AEMO considers that, in accordance with the WEM Procedure referred to in clause 3.17.11, and taking into account the requirements specified in the WEM Procedure referred to in clause 3.2.7, for a particular period of time there is a risk of:

(a) insufficient capacity to meet expected energy demand;

(b) load shedding in order to maintain Power System Security; ~~or~~

(c) an Essential System Service shortfall that compromises AEMO's ability to maintain Power System Security or Power System Reliability~~,~~; or

(d) insufficient total Charge Level across all Registered Facilities holding Peak Capacity Credits associated with Electric Storage Resources to meet expected energy demand during the Peak Electric Storage Resource Obligation Intervals,

AEMO may declare a Low Reserve Condition in relation to that period of time (**Low Reserve Condition Declaration**). To avoid doubt, AEMO may make a Low Reserve Condition Declaration in respect of any or all of the matters in this clause 3.17.1 for a period of time in the present or the future.

…

3.17.4. AEMO must as soon as reasonably practicable publish any Low Reserve Condition Declaration made.

3.17.4A. AEMO must publish a Low Reserve Condition Declaration under 3.17.1(d) by 8:00 AM for the declaration to be in effect for the Trading Day commencing at that time.

3.17.5. The publication of a Low Reserve Condition Declaration must, to the extent reasonably practicable, include:

(a) the nature and extent of the Low Reserve Condition;

(b) the time period over which the Low Reserve Condition Declaration applies;

(c) the circumstances that AEMO considers may require it to implement an AEMO Intervention Event in accordance with the WEM Procedure referred to in clause 3.17.11; ~~and~~

(d) if AEMO considers it may be required to implement an AEMO Intervention Event, an estimate of the latest time at which it would need to intervene through a AEMO Intervention Event if the response from the market would not remove the requirement to do so~~.~~; and

(e) if the Low Reserve Condition relates to State of Charge Low Reserve Condition:

(i) The State of Charge Mandate Percentage, which is the percentage of the remaining available Charge Level capability of an Electric Storage Resource (after accounting for Outages and excluding any minimum Charge Level) with a Peak Reserve Capacity Obligation Quantity that is required to be met or exceeded by the time specified by AEMO in the State of Charge Low Reserve Condition Declaration;

(ii) the time from which the State of Charge Mandate Percentage will apply, which must be from the start of the first Trading Interval of the longest ESR Duration Requirement determined under clause 4.5.12(d) for the relevant Trading Day; and

(iii) the time from which AEMO will apply Constraint Equations in accordance with 7.7.15.

…

3.17.11. AEMO must develop a WEM Procedure that sets out how AEMO will assess a Low Reserve Condition and make a Low Reserve Condition Declaration, which must:

(a) describe how AEMO assesses if available capacity has become insufficient to avoid load shedding given reasonably foreseeable conditions and events;

(b) describe how AEMO assesses the probability of accredited Essential System Service providers being insufficient to meet the Essential System Service Standards;

(c) specify at least three probability levels at which AEMO will make Low Reserve Condition Declaration in relation to a specified period of time,

indicating an increasing probability of load shedding (other than the reduction or disconnection of Interruptible Loads);

(d) describe how an assessment of the probability levels described in clause 3.17.11(c) applies in relation to different periods of time;

(e) describe the notification processes and timeframes AEMO will follow when making a Low Reserve Condition Declaration; ~~and~~

(f) describe the intervention process that AEMO will follow for resolving a Low Reserve Condition, including describing general intervention principles and the interaction with section 7.7~~.~~;

(g) describe how AEMO determines if a Low Reserve Condition is a State of Charge Low Reserve Condition; and

(h) describe how AEMO determines the State of Charge Mandate Percentage required as part of a State of Charge Low Reserve Condition Declaration.

…

3.17.13. AEMO must set the Low Reserve Condition State of Charge Flag for each Dispatch Interval to:

(a) one, if AEMO has declared a Low Reserve Condition State of Charge under clause 3.17.1(d) and the Dispatch Interval falls in the period between the time defined in clause 3.17.5(e)(ii) and the last Trading Interval of the longest currently active Peak Electric Storage Resource Obligation Duration; and

(b) zero, otherwise.

…

4.9. Process for Applying for Certification of Reserve Capacity

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Explanatory Note

Clause 4.9.10 has been amended to use the terminology of Available Charge Level to align with other amendments made in this Exposure Draft.

4.9.10. AEMO must document the following in a WEM Procedure:

(a) the procedures that Market Participants must follow when applying for Certified Reserve Capacity;

(b) the method that AEMO uses for determining Planned Outage rates and Forced Outage rates, which must treat Available Charge Level shortfalls for Electric Storage Resources, as calculated under clause 4.26.1E, as Forced Outages; and

(c) the procedures AEMO must follow when processing applications for Certified Reserve Capacity, including:

i. how Certified Reserve Capacity is assigned; and

ii. how AEMO will account for any degradation of an Electric Storage Resource, based on:

1. the performance standards and specifications for the Electric Storage Resource provided by the relevant manufacturer; and

2. the performance of the Electric Storage Resource in the Capacity Year at the time the application for certification of Reserve Capacity is required to be processed, if available; and

iii. how AEMO will assess whether a Facility Technology Type within a Facility is fuelled by Eligible Renewable Energy Sources based on:

1. fuel supply contracts, if the Market Participant proposes to purchase renewable fuel for use in a Non-Intermittent Generator it owns, controls or operates;

2. historical Intermittent Generator Output, if the Market Participant proposes to store renewable electricity generated by a Facility it owns, controls or operates in an Electric Storage Resource that it also owns, controls or operates;

3. energy supply contracts, if the Market Participant proposes to purchase renewable electricity from another Market Participant for use in an Electric Storage Resource it owns, controls or operates;

4. energy supply contracts, if the Market Participant is selling renewable energy to another Market Participant, so that it is not available for storage in an Electric Storage Resource that it owns, controls or operates; and

5. historical dispatch levels for an Energy Producing System.

…

4.12. Setting Reserve Capacity Obligations

…

Explanatory Note

Clause 4.12.5 has been amended to set an Electric Storage Resource's RCOQ to zero for the remainder of the Trading Day in which an AEMO direction issued to maintain Power System Security or Power System Reliability requires the resource to inject energy before the start of a LOR-SOC event and, as a result, the Electric Storage Resource is unable to achieve its required Available Charge Level or meet its Peak Reserve Capacity Obligation Quantity.

4.12.5. AEMO must determine the Peak Reserve Capacity Obligation Quantity for each Separately Certified Component of a Scheduled Facility or Semi-Scheduled Facility, for each Dispatch Interval for which the Separately Certified Component is assigned Peak Capacity Credits, as follows:

(a) the Peak Reserve Capacity Obligation Quantity for an Intermittent Generating System is equal to zero for each Dispatch Interval;

(b) subject to the exceptions specified in clauses 4.12.5(d) and 4.12.5(e), the Peak Reserve Capacity Obligation Quantity for a Non-Intermittent Generating System:

i. for a Dispatch Interval during a Trading Day where the maximum daily temperature at the site of the Non-Intermittent Generating System does not exceed 41 degrees Celsius, is equal to the number of Peak Capacity Credits assigned to the Non-Intermittent Generating System for the Dispatch Interval; and

ii. for a Dispatch Interval during a Trading Day where the maximum daily temperature at the site of the Non-Intermittent Generating System exceeds 41 degrees Celsius, is equal to:

$$PCC \times MSOC45 / MSOC41$$

where:

1. PCC is the number of Peak Capacity Credits assigned to the Non-Intermittent Generating System for the Dispatch Interval;

2. MSOC45 is the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from the Non-Intermittent Generating System when it is operated normally at an ambient temperature of 45 degrees Celsius, as specified in Standing Data; and

3. MSOC41 is the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from the Non-Intermittent Generating System when it is operated normally at an ambient temperature of 41 degrees Celsius, as specified in Standing Data;

(c) subject to the exceptions specified in clauses 4.12.5(d), 4.12.5(f), 4.12.5(g), ~~and~~ 4.12.5(h) and 4.12.5(i), the Peak Reserve Capacity Obligation Quantity for an Electric Storage Resource:

i. for a Dispatch Interval which does not fall within a Peak Electric Storage Resource Obligation Interval for that Electric Storage Resource, is equal to zero;

ii. for a Dispatch Interval which falls within a Peak Electric Storage Resource Obligation Interval for that Electric Storage Resource, during a Trading Day where the maximum daily temperature at the site of the Electric Storage Resource does not exceed 41 degrees Celsius, is equal to the number of Peak Capacity Credits assigned to the Electric Storage Resource for the Dispatch Interval; and

iii. for a Dispatch Interval which falls within a Peak Electric Storage Resource Obligation Interval for the Electric Storage Resource, during a Trading Day where the maximum daily temperature at the site of the Electric Storage Resource exceeds 41 degrees Celsius, is equal to:

$$\mathrm{PCC} \times \mathrm{MSOC45} / \mathrm{MSOC41}$$

where:

1. PCC is the number of Peak Capacity Credits assigned to the Electric Storage Resource for the Dispatch Interval;
2. MSOC45 is the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from the Electric Storage Resource when it is operated normally at an ambient temperature of 45 degrees Celsius, as specified in Standing Data; and
3. MSOC41 is the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from the Electric Storage Resource when it is operated normally at an ambient temperature of 41 degrees Celsius, as specified in Standing Data;

(d) if a Scheduled Facility or Semi-Scheduled Facility is subject to Commissioning Test Plan approved by AEMO in a Dispatch Interval, the Peak Reserve Capacity Obligation Quantity for each Separately Certified Component of the Registered Facility is equal to zero for the Dispatch Interval and clauses 4.12.5(e) and 4.12.5(f) do not apply;

(e) subject to clause 4.12.5(d), if a Separately Certified Component which is a Non-Intermittent Generating System is subject to a Planned Outage in a Dispatch Interval, the Peak Reserve Capacity Obligation Quantity of the Separately Certified Component for the Dispatch Interval is reduced from the value determined under clause 4.12.5(b) by the Peak Capacity Adjusted Planned Outage Quantity determined for the Separately Certified Component under clause 3.21.8;

(f) subject to clauses 4.12.5(d), 4.12.5(g), ~~and~~ 4.12.5(h) and 4.12.5(i) if a Separately Certified Component which is an Electric Storage Resource is subject to a Planned Outage in a Dispatch Interval, the Peak Reserve

Capacity Obligation Quantity of the Separately Certified Component for the Dispatch Interval is reduced from the value determined under clause 4.12.5(c) by the Peak Capacity Adjusted Planned Outage Quantity determined for the Separately Certified Component under clause 3.21.8;

(g) if:

i. AEMO issues a direction under clause 7.7.5 in respect of a Registered Facility containing a Separately Certified Component which is an Electric Storage Resource; and

ii. the direction requires the Registered Facility to operate at a level higher than its Peak Reserve Capacity Obligation Quantity in the Dispatch Interval to which the direction relates,

the Peak Reserve Capacity Obligation Quantity for the Electric Storage Resource is reduced to zero for all Dispatch Intervals subsequent to the Dispatch Interval in which the direction is issued in the relevant Trading Day and clause 4.12.5(f) does not apply for those Dispatch Intervals; and

(h) if:

i. AEMO issues a Dispatch Instruction to a Registered Facility containing an Electric Storage Resource which holds Flexible Capacity Credits; and

ii. the Dispatch Instruction requires the Registered Facility to Inject in a Dispatch Interval which is within a Flexible Electric Storage Resource Obligation Interval and not within a Peak Electric Storage Resource Obligation Interval for that Electric Storage Resource,

the Peak Reserve Capacity Obligation Quantity for the Electric Storage Resource is reduced to zero in all subsequent Dispatch Intervals in the relevant Trading Day which are not within a Flexible Electric Storage Resource Obligation Interval, and clause 4.12.5(f) does not apply for those Dispatch Intervals~~.~~; and

(i) If:

i. AEMO issues a direction in respect of a Facility containing a Separately Certified Component which is an Electric Storage Resource;

ii. the direction is issued following a Low Reserve Condition Declaration under 3.17.1(d) for the Trading Day;

iii. the direction requires Injection during a Dispatch Interval that is not within a Peak Electric Storage Resource Obligation Interval; and

iv. the Facility complies with the direction issued by AEMO,

the Peak Reserve Capacity Obligation Quantity for the Facility is reduced to zero for all remaining Dispatch Intervals in the relevant Trading Day from

and including the Dispatch Interval in which the direction is issued, and clause 4.12.5(f) does not apply for those Dispatch Intervals.

4.12.6. The Reserve Capacity Obligation Quantity for a Registered Facility f for a Trading Interval t is equal to:

$$\mathrm{RCOQ}(f,t) = \frac{\sum_{DI \in t} \mathrm{RCOQ}(f,DI)}{6}$$

where:

(a) DI∈t denotes all Dispatch Intervals DI in Trading Interval t; and

(b) RCOQ(f,DI) is the Reserve Capacity Obligation Quantity determined for Registered Facility f for Dispatch Interval DI under clause 4.12.4.

…

4.25. Reserve Capacity Testing

…

Explanatory Note

Currently, clause 4.25.2E(a) measures an Electric Storage Resource's performance during a Reserve Capacity Test based only on its performance during the Peak Electric Storage Resource Obligation Duration. This does not account for energy discharged while the Electric Storage Resource is ramping up to, or down from, its Required Level. The clause has been amended to include the Trading Intervals immediately before and after the Peak Electric Storage Resource Obligation Duration when assessing performance.

4.25.2E. AEMO must, in assessing the performance of a Facility or Separately Certified Component tested for Peak Capacity in accordance with clauses 4.25.2(a), 4.25.2(e), 4.25.4 or 4.25.6:

(a) in the case of an Electric Storage Resource, measure the average performance by dividing the total energy Injected during the period commencing one Trading Interval before and ending one Trading Interval after its Peak Electric Storage Resource Obligation Duration by the number of hours in the Peak Electric Storage Resource Obligation Duration ~~across its Peak Electric Storage Resource Obligation Duration based on the average performance across the Trading Intervals~~; and

(b) in the case of a Non-Intermittent Generating System, measure the maximum performance in each Trading Interval.

…

4.26. Financial Implications of Failure to Satisfy Reserve Capacity Obligations

…

Explanatory Note

- Clause 4.26.1 is amended to implement a flat multiplier of two to the Trading Interval Refund Rate for Facilities containing Electric Storage Resources, when a State of Charge Low Reserve Condition is in effect.
- Clause 4.26.1B is amended to incorporate a new calculation for State of Charge Low Reserve Condition Shortfall, which applies to Scheduled Facilities or Semi-Scheduled Facilities which contain a Separately Certified Component which is an Electric Storage Resource when a State of Charge Low Reserve Condition is declared, and the Facility fails to meet the required State of Charge Mandate Percentage by the start of the State of Charge Low Reserve Condition period.
- Clauses 4.26.1E and 4.26.1F are amended to use the terminology of Available Charge Level to align with other amendments made in this Exposure Draft.
- New clause 4.26.1K is required to introduce the State of Charge Low Reserve Condition Shortfall for the refund calculation per Trading Interval
- New clause 4.26.1L outlines how State of Charge Low Reserve Condition Shortfall is calculated per Dispatch Interval. Note that the "2" multiplier is required to convert from megawatt hours to megawatts for the purpose of Charge Level calculations.

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:

i. Trading Interval Refund Rate (f,t) is the Trading Interval Refund Rate for a Facility f in the Trading Interval t;

ii. RF(f,t) is the refund factor for a Facility f in the Trading Interval t and is calculated in accordance with clause 4.26.1(c); and

iii. Y(f,t) is the per Trading Interval capacity price associated with a Facility f in the Trading Interval t and is determined in accordance with clause 4.26.1(b).

(b) For a Facility f, for which a Market Participant holds Capacity Credits in Trading Interval t, Y(f,t) is determined as follows:

i. if Facility f is not a Registered Facility in Trading Interval t, Y(f,t) equals the Entity Daily Peak Reserve Capacity Price for the Facility in Trading Interval t divided by 48, or the highest Entity Daily Peak Reserve Capacity Price for any Separately Certified Component of the Facility in Trading Interval t divided by 48;

ii. if AEMO has determined that in Trading Interval t Facility f is not in Commercial Operation and is either a Scheduled Facility or Semi-Scheduled Facility:

$$Y(f,t) = \sum_{c \in f} \frac{CC(c,t)}{CC(f,t)} \times \frac{EDPRCP(c,t)}{48}$$

where:

1. c∈f denotes all Separately Certified Components c of Facility f;
2. CC(c,t) is the Capacity Credits associated with Separately Certified Component c in Trading Interval t;
3. CC(f,t) is the Capacity Credits associated with Facility f in Trading Interval t; and
4. EDPRCP(c,t) is the Entity Daily Peak Reserve Capacity Price for Separately Certified Component c in Trading Interval t;

iii. if AEMO has determined that in Trading Interval t Facility f is in Commercial Operation and is either a Scheduled Facility or Semi-Scheduled Facility:

$$Y(f,t) = \left(\sum_{c \in ESR(f,t)} \frac{PESROI(c,t) \times CC(c,t)}{CC(f,t)} \times \frac{EDPRCP(c,t)}{PESROD(c,t)} \right) + \left(\sum_{c \in NonESR(f,t)} \frac{CC(c,t)}{CC(f,t)} \times \frac{EDPRCP(c,t)}{48} \right)$$

where:

1. c∈ESR(f,t) refers to all Separately Certified Components c of Facility f in Trading Interval t that are Electric Storage Resources;
2. PESROI(c,t) is 1 if Trading Interval t is a Peak Electric Storage Resource Obligation Interval for Separately Certified Component c and 0 otherwise;
3. CC(c,t) is the Capacity Credits associated with Separately Certified Component c in Trading Interval t;
4. CC(f,t) is the Capacity Credits associated with Facility f in Trading Interval t;
5. EDPRCP(c,t) is the Entity Daily Peak Reserve Capacity Price for Separately Certified Component c in Trading Interval t;
6. PESROD(c,t) is the number of Trading Intervals in the Peak Electric Storage Resource Obligation Duration for Separately Certified Component c in the Trading Day containing Trading Interval t; and

7. c∈NonESR(f,t) refers to all Separately Certified Components c of Facility f in Trading Interval t that are not Electric Storage Resources;

iv. if Facility f is a Non-Scheduled Facility, Y(f,t) equals the Entity Daily Peak Reserve Capacity Price for the Facility divided by 48; and

v. if Facility f is a Demand Side Programme:

$$Y(f,t) = \frac{PRCP}{DSP_MIN_AV_TI \times QTY_BD_CY}$$

where:

1. PRCP is the Peak Reserve Capacity Price for the relevant Capacity Year;

2. DSP_MIN_AV_TI is the minimum number of Trading Intervals per Trading Day that a Demand Side Programme must nominate to be available to provide Peak Capacity if issued a Dispatch Instruction in accordance with clause 4.10.1(f)(iii); and

3. QTY_BD_CY is the number of Business Days in the relevant Capacity Year.

(c) The refund factor RF(f,t) for a Facility f in the Trading Interval t is:

i. if the Facility is a Scheduled Facility or Semi-Scheduled Facility which contains a Separately Certified Component holding Peak Capacity Credits associated with an Electric Storage Resource, and a State of Charge Low Reserve Condition Flag is one in any Dispatch Interval within the Trading Interval:

2 x min(6, max(RF dynamic(t), RFfloor(f,t))

where:

1 RF dynamic(t) is the dynamic refund factor as determined under clause 4.26.1(d); and

2 RFfloor(f,t) is the minimum refund factor as determined under clauses 4.26.1(f) or 4.26.1(g) as appropriate; or

ii. otherwise:

min(6, max(RF dynamic(t), RFfloor(f,t))

where:

1 RF dynamic(t) is the dynamic refund factor as determined under clause 4.26.1(d); and

2 RFfloor(f,t) is the minimum refund factor as determined under clauses 4.26.1(f) or 4.26.1(g) as appropriate.

~~The Peak Capacity refund factor PRF(f,t) for a Facility f in the Trading Interval t is the lesser of:~~

~~i. six; and~~

~~ii. the greater of the dynamic refund factor RF dynamic(t) as determined under clause 4.26.1(d) and the minimum refund factor RFfloor(f,t) as determined under clauses 4.26.1(f) or 4.26.1(g) as appropriate.~~

(d) The dynamic refund factor RF dynamic(t) in the Trading Interval t is determined as follows:

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

where:

i. F is the set of all Registered Facilities for which Market Participants hold Capacity Credits in the Trading Interval t and f is a Facility within that set; and

ii. Spare(f,t) is the available capacity related to the Registered Facility f, which is not dispatched in the Trading Interval t determined in accordance with clause 4.26.1(e).

…

…

4.26.1B. AEMO must calculate the Real-Time Market Reserve Capacity Deficit for each Scheduled Facility or Semi-Scheduled Facility f for each Trading Interval t in which AEMO considers the Facility to have been in Commercial Operation as:

$$RTMRCD(f,t) = min(PRCOQ(f,t), PCAFO(f,t) + PNISCRQ(f,t) + PESRCSF(f,t) + PRTMOSF(f,t) + \text{SOCLRCSF(f,t)})) + PNIMGRPPO(f,t) + PESRRPPO(f,t)$$

where:

(a) PRCOQ(f,t) is the Peak Reserve Capacity Obligation Quantity determined for Facility f in Trading Interval t;

(b) PCAFO(f,t) is the Peak Capacity Adjusted Forced Outage Quantity determined for Facility f in Trading Interval t under clause 3.21.7B;

(c) PNISCRQ(f,t) is the Peak Not In-Service Capacity Refund Quantity determined for Facility f in Trading Interval t under clause 4.26.1D;

(d) PESRCSF(f,t) is the Peak ESR Available Charge Shortfall determined for Facility f in Trading Interval t under clause 4.26.1E;

(e) PRTMOSF(f,t) is the Peak Real-Time Market Offer Shortfall determined for Facility f in Trading Interval t under clause 4.26.1G;

(f) PNIMGRPPO(f,t) is the total Peak Refund Payable Planned Outage Quantity determined for Separately Certified Components of Facility f which are Non-Intermittent Generating Systems in Trading Interval t under clause 4.26.1C; ~~and~~

(g) PESRRPPO(f,t) is the total Peak Refund Payable Planned Outage Quantity determined for Separately Certified Components of Facility f which are Electric Storage Resources in Trading Interval t under clause 4.26.1CA.~~.~~; and

(h) SOCLRCSF(f,t) is the State of Charge Low Reserve Condition Shortfall for Facility f in Trading Interval t under clause 4.26.1K.

…

4.26.1E. AEMO must calculate the Peak ESR Available Charge Shortfall for each Scheduled Facility or Semi-Scheduled Facility f for each Trading Interval t in which AEMO considers the Facility to have been in Commercial Operation as:

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

where:

(a) PESRCSF(c,DI) is the capacity shortfall in MW determined for Separately Certified Component c in Dispatch Interval DI under clause 4.26.1F;

(b) DI∈t denotes all Dispatch Intervals DI in Trading Interval t; and

(c) c∈f denotes all Separately Certified Components c of Facility f that are Electric Storage Resources.

4.26.1F. PESRCSF(c,DI) for Separately Certified Component c (which is an Electric Storage Resource) for Dispatch Interval DI is:

~~PESRCSF(c,DI)=~~

$$\begin{cases} 0, if\ RTMSuspFlag(DI) = 1, otherwise \\ \max(0, PRCOQ(c,DI) - PCAFO(c,DI) - 12 \times \max(0, CharleLevel(c,DI) - MinChargeLevel(c,DI))) \end{cases}$$

PESRCSF(c,DI)=

$$\begin{cases} 0, if\ RTMSuspFlag(DI) = 1, otherwise \\ \max(0, PRCOQ(c,DI) - PCAFO(c,DI) - 12 \times \max(0, AvailableChargeLevel(c,DI))) \end{cases}$$

where:

(a) PRCOQ(c,DI) is the Peak Reserve Capacity Obligation Quantity determined for Separately Certified Component c in Dispatch Interval DI;

(b) PCAFO(c,DI) is the Peak Capacity Adjusted Forced Outage Quantity determined for Separately Certified Component c in Dispatch Interval DI under clause 3.21.7;

(c) ~~ChargeLevel(c,DI) is the Charge Level in MWh, or alternative estimate from AEMO where the Charge Level is not available, of Separately Certified Component c determined at the start of Dispatch Interval DI;~~ AvailableChargeLevel(c,DI) is the Available Charge Level in MWh, or alternative estimate from AEMO where Available Charge Level is not available, of Separately Certified Component c determined at the start of Dispatch Interval DI; and

~~(d) MinChargeLevel(c,DI) is the minimum Charge Level capability in MWh as specified in Standing Data for Separately Certified Component c in Dispatch Interval DI; and~~

~~(e)~~ (d) RTMSuspFlag(DI) is the RTM Suspension Flag for Dispatch Interval DI.

…

4.26.1K. AEMO must calculate the State of Charge Low Reserve Condition Shortfall for each Scheduled Facility or Semi-Scheduled Facility f for each Trading Interval t in which AEMO considers the Facility to have been in Commercial Operation as:

(a) if a State of Charge Low Reserve Condition is in effect for Trading Interval t:

$$SOCLRCSF(f,t) = \sum_{DI \in t} \sum_{c \in f} SOCLRCSF(c,DI)$$

where:

(i) SOCLRCSF(c,DI) is the capacity shortfall in MW determined for Separately Certified Component c in Dispatch Interval DI under clause 4.26.1L;

(ii) c∈f denotes all Separately Certified Components c of Facility f that are Electric Storage Resources; and

(iii) DI∈t denotes all Dispatch Intervals DI in Trading Interval t;

(b) otherwise:

$$SOCLRCSF(f,t) = 0$$

4.26.1L. SOCLRCSF(c,DI) for Separately Certified Component c (which is an Electric Storage Resource) for Dispatch Interval DI is:

$$SOCLRCSF(c,DI) = \begin{cases} 0, if\ RTMSuspFlag(DI) = 1, \\ 0, if\ SOCLORFlag(DI) = 0, otherwise \\ 2 \times max\left(0, \left(\frac{\left(\frac{5}{60} \times (RCOQ(c,DI) - CAFO(c,DI)) \times PESROD(c,DI) \times SOCMPCT(d)\right) - SOCSTART(c,d)}{PESROD(c,DI)}\right)\right) \end{cases}$$

where:

(a) PRCOQ(c,DI) is the Peak Reserve Capacity Obligation Quantity determined for Separately Certified Component c in Dispatch Interval DI;

(b) PCAFO(c,DI) is the Peak Capacity Adjusted Forced Outage Quantity determined for Separately Certified Component c in Dispatch Interval DI under clause 3.21.7C;

(c) PESROD(c,DI) is the number of Dispatch Intervals in the Peak Electric Storage Resource Obligation Duration for Separately Certified Component c in the Trading Day containing Dispatch Interval DI;

(d) SOCMPCT(d) is the State of Charge Mandate Percentage specified in the State of Charge Low Reserve Condition Declaration for the Trading Day d;

(e) SOCSTART(c,d) is the Available Charge Level in MWh, or alternative estimate from AEMO where the Available Charge Level is not available, at the time specified in 3.17.5(e)(ii) for the Trading Day d of Separately Certified Component c; and

(f) SOCLORFlag(DI) is the State of Charge Low Reserve Condition Flag for the Dispatch Interval DI.

(f) RTMSuspFlag(DI) is the RTM Suspension Flag for Dispatch Interval DI.

…

7.2. Central Dispatch Process

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Explanatory Note

Clause 7.2.4. is amended to require the Dispatch Algorithm to include Constraint Equations developed under clauses 7.7.15 and 7.7.16, and as set out in a WEM Procedure as per clause 7.7.17. These Constraint Equations are intended to assist in managing State of Charge Low Reserve Conditions.

7.2.4. Subject to clause 7.11D.5, the Dispatch Algorithm must seek to maximise the value of Real-Time Market trading by maximising:

(a) the value of dispatched Load based on Real-Time Market Bids; less

(b) the cost of dispatched energy and Frequency Co-optimised Essential System Services based on Real-Time Market Offers,

subject to:

…

(j) energy Injection and Withdrawal Capability as they vary by Available Charge Level;

…

(nA) taking into account the Largest Credible Load Contingency relative to the scheduled or dispatched quantity of Contingency Reserve Lower; ~~and~~

(o) arrangements for dispatch of tied Real-Time Market Bids and tied Real-Time Market Offers~~.~~; and

(p) meeting Power System Security and Power System Reliability as reflected in Constraint Equations developed by AEMO in accordance with the WEM Procedure referred to in clause 7.7.17.

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7.5. Dispatch Algorithm

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Storage Constraints

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Explanatory Note

Clause 7.5.10 is amended to use the terminology of Available Charge Level to align with other amendments made in this Exposure Draft.

7.5.10. If required by a Market Participant under Appendix 1(b)(xviA), AEMO must include Constraint Equations for a Scheduled Facility which comprises only an Electric Storage Resource relating to restrictions on the simultaneous dispatch of energy and Frequency Co-optimised Essential System Service, to ensure that Dispatch Targets and Essential System Service Enablement Quantities for the Scheduled Facility are able to be achieved based on the Available Charge Level, storage capacity, Injection capability and Withdrawal capability for the Scheduled Facility, accounting for relevant losses in the charging or discharging process.

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7.7. Scarcity and Intervention

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Explanatory Note

- New clause 7.7.15 provides for the Constraint Equations that are intended to prevent Injection from Electric Storage Resources ahead of peak demand, to assist in preserving Charge Level ahead of the period of highest system stress.
- New clause 7.7.16 provides the Constraint Equations that are intended to prevent Withdrawal from Electric Storage Resources during periods of system stress, to avoid 'siphoning' of energy between two Electric Storage Resources.
- New clause 7.7.17 requires AEMO to document the methodology for the Constraint Equations under new clauses 7.7.15 and 7.7.16 to provides transparency to Market Participants.

7.7.15. If AEMO has issued a State of Charge Low Reserve Condition Declaration, AEMO must, for the period:

(a) starting from the time defined in clause 3.17.5(e)(iii); and

(b) ending at the time defined in clause 3.17.5(e)(ii),

apply Constraint Equations to prevent Injection from Registered Facilities holding Peak Capacity Credits associated with Electric Storage Resources that would reduce the actual or projected Available Charge Level of the Electric Storage Resources below a level equivalent to the State of Charge Mandate Percentage.

7.7.16. If AEMO has issued a State of Charge Low Reserve Condition Declaration, AEMO must apply Constraint Equations that prevent Withdrawal from Registered Facilities holding Peak Capacity Credits associated with Electric Storage Resources during the period defined in clause 3.17.5(b).

7.7.17. AEMO must document in a WEM Procedure:

(a) the methodology AEMO will use to develop and apply Constraint Equations developed under clauses 7.7.15 and 7.7.16; and

(b) the methodology AEMO will use to determine the Dispatch Intervals that the Constraint Equations developed under clause 7.7.15 will be applied to.

…

Settlement and Monitoring Data

7.13. Settlement and Monitoring Data

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Explanatory Note

Clause 7.13.1E is amended to use the terminology of Available Charge Level to align with other amendments made in this Exposure Draft.

7.13.1E. AEMO must prepare and publish on the WEM Website the following data for a Trading Day by noon on the first Business Day following the day on which the Trading Day ends:

(a) the following SCADA data for each Dispatch Interval of the Trading Day:

i. an estimate of the MWh Injection or Withdrawal of each Scheduled Facility, Semi-Scheduled Facility or Non-Scheduled Facility monitored by AEMO's SCADA system;

ii. [Blank]

iii. where it was available to AEMO for use in the Dispatch Algorithm for the purposes of the Central Dispatch Process, data that has been used to adjust Essential System Service submissions for each Facility;

iv. the Available Charge Level immediately prior to the start of the Dispatch Interval of each Electric Storage Resource that is part of a Semi-Scheduled Facility or Scheduled Facility and monitored by AEMO's SCADA system;

…

…

11. Glossary

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Available Charge Level: An Equipment Limit indicating the level of stored energy in MWh in an Electric Storage Resource that is available to be injected at a point in time, excluding any

minimum Charge Level of the Electric Storage Resource, as provided to AEMO in a real-time data feed in accordance with section 2.36A.

…

Charge Level: An Equipment Limit indicating the ~~current~~ level of stored energy in MWh in an Electric Storage Resource., ~~as provided to AEMO in a real-time data feed in accordance with section 2.36A.~~

…

Energy Storage Constraints: limitations on the Injection or Withdrawal capability of a Registered Facility based on the Available Charge Level of associated Electric Storage Resources.

…

ESR Charge Shortfall: The MW quantity of capacity of a Scheduled Facility or Semi-Scheduled Facility that is subject to a capacity refund in a Trading Interval due to the inadequate Available Charge Level of an Electric Storage Resource, calculated in accordance with clause 4.26.1E.

…

Low Reserve Condition: Means each of the conditions of the power system described in clause 3.17.1(a) to 3.17.1~~(c)~~(d) which may result in a Low Reserve Condition Declaration.

…

State of Charge Low Reserve Condition: Means a Low Reserve Condition to which the power system conditions described in clause 3.17.1(d) apply.

State of Charge Low Reserve Condition Declaration: Means a Low Reserve Condition Declaration for a State of Charge Low Reserve Condition.

State of Charge Low Reserve Condition Flag: A flag indicating whether a State of Charge Low Reserve Condition is in effect for a Dispatch Interval, determined in accordance with clause 3.17.12.

State of Charge Mandate Percentage: Has the meaning given in clause 3.17.5(e)(i).

…

Schedule 4: Amending Rules to commence on 1 April 2029

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Non-Dispatchable Loads and the association and disassociation with Demand Side Programmes and Interruptible Loads

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Explanatory Note

- Clause 2.29.5AB is amended to clarify that a Market Participant must associate sufficient Non-Dispatchable Loads for the periods in which they have nominated to be available (either 2:00 PM to 10:00 PM, or 8:00 AM to 12:00 PM and 2:00 PM to 10:00 PM).
- Clauses 2.29.5AM and 2.29.5AN are amended to confirm the association shortfall when a Demand Side Programme has insufficient Associated Loads for both the 8:00 AM to 12:00 PM and 2:00 PM to 10:00 PM availability windows.
- New clause 2.29.5AP has been created to clarify that a Demand Side Programme allocated Capacity Credits under clause 2.29.5AB(a)(i) must be available during the same periods as the certified DSP.
- Clause 2.29.5B is amended to require a Market Participant to specify the periods during which a Non-Dispatchable Load is associated with a Demand Side Programme. This allows different Non-Dispatchable Loads to be associated with different availability periods during the same Trading Day for the Demand Side Programme.
- Clause 2.29.5E has been amended to reflect that the ESM Rules do not recognise a "passed" Reserve Capacity Test. Instead, compliance is determined through the calculation of a Peak DSP Event Shortfall. Where a Reserve Capacity Test results in a zero Peak DSP Event Shortfall, indicating that the Demand Side Programme satisfied the requirements of the test, an Associated Load cannot be transferred to another Demand Side Programme.
- Clause 2.29.5G has been amended to clarify that the Association Period of an Associated Load for a Demand Side Programme, comprises both the period between the applicable start and end dates and the availability periods nominated under clause 2.29.5B. The clause has also been amended to require that the start date of an Association Period be at least three weeks after the date on which the association application is submitted. This is intended to prevent gaming of the Relevant Demand calculation, which considers Associated Load Injections and Withdrawals over the preceding 10 Business Days.
- Clause 2.29.5K is amended to implement the Review Outcome of allowing DSPs associate different loads within its portfolio no later than 3 weeks before the effective date.

2.29.5AB. A Market Participant who was assigned Peak Capacity Credits or Flexible Capacity Credits for a certified Demand Side Programme must no later than three months before the start of the Capacity Year:

(a) if the Demand Side Programme was subject to clause 4.10.1B in Year 1 of the Reserve Capacity Cycle:

i. notify AEMO of the number of Capacity Credits that are to be allocated to one or more Demand Side Programmes that are registered; and

ii. in accordance with clause 2.29.5B, apply to associate Non-Dispatchable Loads with each registered Demand Side Programme that is to be allocated Capacity Credits under clause 2.29.5AB(a)(i) such that:

1. the date of association for the Associated Loads of the Demand Side Programme is no later than 1 December of the relevant Capacity Year; and

2. for each period which the Demand Side Programme is available under clause 4.10.1(f)(vi) or is required to be available under clause 2.29.5AP, the sum of the MW quantities by which each Associated Load is expected to reduce its Withdrawal or increase its Injection, as provided under clause 2.29.5B for the Associated Loads, equals at least the Capacity Credits allocated to the Demand Side Programme ~~that was subject to clause 4.10.1B~~; or

(b) if the Demand Side Programme was not subject to clause 4.10.1B in Year 1 of the Reserve Capacity Cycle, in accordance with clause 2.29.5B, apply to associate Non-Dispatchable Loads to the registered Demand Side Programme such that:

i. the date of association for the Associated Loads of the Demand Side Programme is no later than 1 December of the relevant Capacity Year; and

ii. for each period the Demand Side Programme is available under clause 4.10.1(f)(vi), the sum of the MW quantities by which each Associated Load is expected to reduce its Withdrawal or increase its Injection, as provided under clause 2.29.5B for the Associated Loads, equals at least the Capacity Credits assigned to the Demand Side Programme.

For the avoidance of doubt, the requirement to associate Non-Dispatchable Loads to Demand Side Programmes under this clause does not preclude a Market Participant from associating additional Non-Dispatchable Loads to their Demand Side Programmes during the Capacity Year.

…

2.29.5AM. If a Market Participant fails to associate enough Non-Dispatchable Loads to a Demand Side Programme to satisfy the criteria under clauses 2.29.5AB(a)(ii) or 2.29.5AB(b), as applicable, AEMO must reduce the level of Peak Capacity Credits assigned to the Demand Side Programme by the association shortfall calculated as:

$$max\left(0, PCC(f) - AssocLoadCapacity(f)\right)$$

where:

(a) PCC(f) is the total of Peak Capacity Credits assigned to the Facility; and

(b) AssocLoadCapacity(f) is:

i. where the Demand Side Programme is only available for DSP Availability Period 1:

$$AssocLoadCapacity(f) = \sum_{l \in AL(f)} MW1_{(l,p)}$$

where:

1. l∈AL(f) is the set of Associated Loads for Demand Side Programme f and l is an Associated Load within that set;
2. MW1(l,p) is the MW quantity by which Associated Load l is expected to reduce its Withdrawal or increase its Injection during DSP Availability Period 1 p, as provided under clause 2.29.5B; or

ii. where the Demand Side Programme is available for DSP Availability Period 1 and DSP Availability Period 2,

$$AssocLoadCapacity(f) = \min\left(\sum_{l \in AL(f)} MW1_{(l,p)}, \sum_{l \in AL(f)} MW2_{(l,p)}\right)$$

where:

1. l∈AL(f) is the set of Associated Loads for Demand Side Programme f and l is an Associated Load within that set;
2. MW1(l,p) is the MW quantity by which Associated Load l is expected to reduce its Withdrawal or increase its Injection during DSP Availability Period 1 p, as provided under clause 2.29.5B; and
3. MW2(l,p) is the MW quantity by which Associated Load l is expected to reduce its Withdrawal or increase its Injection during DSP Availability Period 2 p, as provided under clause 2.29.5B.

~~(b) AssocLoadCapacity(f) is the sum of the MW quantities by which each Associated Load is expected to reduce its Withdrawal or increase its Injection, provided under clause 2.29.5B for the Associated Loads of the Demand Side Programme.~~

2.29.5AN. If a Market Participant fails to associate enough Non-Dispatchable Loads to a Demand Side Programme to satisfy the requirements under clause 2.29.5AB(a)(ii) or 2.29.5AB(b), as applicable, AEMO must reduce the level of Flexible Capacity Credits assigned to the Demand Side Programme by the association shortfall calculated as:

$$max\big(0, FCC(f) - AssocLoadCapacity(f)\big)$$

where:

(a) FCC(f) is the total of Flexible Capacity Credits assigned to the Facility; and

(b) AssocLoadCapacity(f) is:

i. where the Demand Side Programme is only available for DSP Availability Period 1:

$$AssocLoadCapacity(f) = \sum_{l \in AL(f)} MW1_{(l,p)}$$

where:

1. l∈AL(f) is the set of Associated Loads for Demand Side Programme f and l is an Associated Load within that set;

2. MW1(l,p) is the MW quantity by which Associated Load l is expected to reduce its Withdrawal or increase its Injection during DSP Availability Period 1 p, as provided under clause 2.29.5B; or

ii. where the Demand Side Programme is available for DSP Availability Period 1 and DSP Availability Period 2,

$$AssocLoadCapacity(f) = \min\left(\sum_{l \in AL(f)} MW1_{(l,p)}, \sum_{l \in AL(f)} MW2_{(l,p)}\right)$$

where:

4. l∈AL(f) is the set of Associated Loads for Demand Side Programme f and l is an Associated Load within that set;

5. MW1(l,p) is the MW quantity by which Associated Load l is expected to reduce its Withdrawal or increase its Injection during DSP Availability Period 1 p, as provided under clause 2.29.5B; and

6. MW2(l,p) is the MW quantity by which Associated Load l is expected to reduce its Withdrawal or increase its Injection during DSP Availability Period 2 p, as provided under clause 2.29.5B.

~~(b) AssocLoadCapacity(f) is the sum of the MW quantities by which each Associated Load is expected to reduce its Withdrawal or increase its Injection, provided under clause 2.29.5B for the Associated Loads of the Demand Side Programme.~~

…

2.29.5AP. A Demand Side Programme allocated Capacity Credits under clause 2.29.5AB(a)(i) must be available during the same periods as specified under clause 4.10.1(f)(vi) for the relevant Demand Side Programme that was subject to clause 4.10.1B.

~~as the certified Demand Side Programme that was subject to clause 4.10.1B is available as specified under clause 4.10.1(f)(vi).~~

…

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

(a) if applicable, details acceptable to AEMO together with supporting evidence that the Market Participant owns the Non-Dispatchable Load or has entered into a contract with the person who owns, operates or controls the Non-Dispatchable Load to reduce its Withdrawal or increase its Injection on request by the Market Participant, and that the Non-Dispatchable Load will not be subject to a contract or arrangement to reduce Withdrawal or increase Injection during one or more Trading Intervals in Year 3 of the relevant Reserve Capacity Cycle for the purpose of reducing Peak Capacity Purchaser Payments and Flexible Capacity Purchaser Payments determined under clause 9.8.2;

(b) the network Measurement Point of the Non-Dispatchable Load;

(bA) the Transmission Node Identifier for the Non-Dispatchable Load;

(c) if the Demand Side Programme contains a Single Associated Load, the expected Minimum Consumption of the Non-Dispatchable Load in units of MW;

(d) if the Market Participant requesting the association owns, controls or operates the relevant Non-Dispatchable Load, then:

i. the start date of the Non-Dispatchable Load association;

ii. the end date of the Non-Dispatchable Load association; and

iii. the intended reduction of Withdrawal and/or increase in Injection, in MW, of the Non-Dispatchable Load, for each period specified under clause 2.29.5B(d)(iv), if relevant;

iv. if the association relates to a Demand Side Programme, the periods ~~during the Trading Day when~~ for which the Non-Dispatchable Load association applies, being one or both of:

1. DSP Availability Period 1; or

2. DSP Availability Period 2;

(e) if the Market Participant requesting the association has entered into a contract with a person who owns, controls or operates the relevant Non-Dispatchable Load, then:

i. the contract start date of the Non-Dispatchable Load association;

ii. the contract end date of the Non-Dispatchable Load association; and

iii. the contracted reduction of Withdrawal and/or increase in Injection, in MW, of the Non-Dispatchable Load, for each period specified under clause 2.29.5B(e)(iv), if relevant; ~~and~~

iv. if the association relates to a Demand Side Programme, the periods for which the Non-Dispatchable Load association applies, being one or both of:

1. DSP Availability Period 1; or

2. DSP Availability Period 2; and

(f) if the Non-Dispatchable Load is associated with a Non-Contestable Customer, details acceptable to AEMO together with supporting evidence that the Network Operator has installed an Interval Meter at the Measurement Point of the relevant Non-Dispatchable Load.

…

2.29.5E. AEMO must accept an application submitted under clause 2.29.5B unless:

(a) AEMO considers that the information provided by the Market Participant under clauses 2.29.5B and 2.29.5C is not satisfactory;

(b) [Blank]

(c) AEMO considers that the application does not comply with clauses 2.29.5AC or 2.29.5AK;

(d) for an application relating to a Demand Side Programme, the relevant Non-Dispatchable Load is registered as an Intermittent Load for any part of the proposed Association Period;

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

(f) during the same Capacity Year, the relevant Non-Dispatchable Load was an Associated Load of another Demand Side Programme and, while it was so associated:

i. the other Demand Side Programme ~~passed a Reserve Capacity Test~~ was subject to a DSP Dispatch Event and AEMO determined a zero Peak DSP Event Shortfall under clause 4.26.1AD for the DSP Dispatch Event; or

ii. any part of DSP Reserve Capacity Security associated with the other Demand Side Programme was returned or relinquished under:

1. clause 4.13A.19 by operation of clause 4.13A.18; or

2. clause 4.13A.24;

(g) the Transmission Node Identifier for the relevant Non-Dispatchable Load does not match the single Transmission Node Identifier for the Demand Side Programme; or

(h) the application relates to a Non-Dispatchable Load behind a Connection Point, and:

i. there are Separate Facilities behind the Connection Point; and

ii. the registered Market Participant for the Separate Facilities differs from the Market Participant submitting the application.

…

2.29.5G If AEMO accepts an application submitted under clause 2.29.5B then AEMO must associate the relevant Non-Dispatchable Load ("**Associated Load**") with the Demand Side Programme or Interruptible Load, as applicable, for the period ("**Association Period**") comprising ~~between~~:

~~(a) the start date, which is the latest of:~~

~~i. if the Market Participant making the application owns, controls or operates the relevant Non-Dispatchable Load, the start of the Trading Day commencing on the start date provided under clause 2.29.5B(d); or~~

~~ii. if the Market Participant making the application has entered into contract with the person who owns, controls or operates the relevant Non-Dispatchable Load, the contract start date provided under clause 2.29.5B(e); or~~

~~iii. the start of the Trading Day occurring 21 days following the day that AEMO notifies the applicant of its decision under clause 2.29.5D to accept the application submitted under clause 2.29.5B; and~~

~~(b) the end date is:~~

~~i. if the Market Participant making the application owns, controls or operates the relevant Non-Dispatchable Load, the end of the Trading Day for the end date provided under clause 2.29.5B(d); or~~

~~ii. if the Market Participant making the application has entered into a contract with the person who owns, controls or operates the relevant Non-Dispatchable Load, the end of the Trading Day for the contract end date provided under clause 2.29.5B(e).~~

(a) the Trading Days between:

i. the start date, which is the latest of:

1. if the Market Participant making the application owns, controls or operates the relevant Non-Dispatchable Load, the start of the Trading Day commencing on the start date provided under clause 2.29.5B(d); or

2. the Market Participant making the application has entered into contract with the person who owns, controls or operates the relevant Non-Dispatchable Load, the contract start date provided under clause 2.29.5B(e); or

3. the start of the Trading Day following the day that AEMO notifies the applicant of its decision under clause 2.29.5D to accept the application submitted under clause 2.29.5B; or

4. if the association relates to a Demand Side Programme, the start of the Trading Day occurring 21 days following the date of receipt of the application under clause 2.29.5B; and

i. the end date, being:

1. if the Market Participant making the application owns, controls or operates the relevant Non-Dispatchable Load, the end of the Trading Day for the end date provided under clause 2.29.5B(d); or

2. the Market Participant making the application has entered into a contract with the person who owns, controls or operates the relevant Non-Dispatchable Load, the end of the Trading Day for the contract end date provided under clause 2.29.5B(e); and

(b) if the association relates to a Demand Side Programme, the period during each Trading Day specified under clause 2.29.5B(d)(iv) or clause 2.29.5B(e)(iv), as applicable.

…

2.29.5K. AEMO must determine whether to accept or reject an application submitted under clause 2.29.5I and notify the applicant of its decision within two Business Days of the receipt of the application. AEMO must accept the application unless the proposed change would affect the association of the relevant Non-Dispatchable Load affecting: ~~Demand Side Programme or Interruptible Load, as applicable, during any period before the Trading Day commencing on the third Business Day after the receipt of the application.~~

(a) the Demand Side Programme during any period before the Trading Day commencing 21 days following the receipt of the application; or

(b) the Interruptible Load during any period before the Trading Day commencing on the third Business Day after the receipt of the application.

…

4.10. Information Required for the Certification of Reserve Capacity

…

Explanatory Note

Clauses 4.10.1(f)(ii), and (iii) have been removed because these clauses are no longer required to calculate Peak Capacity requirements from before the 2027 Reserve Capacity Cycle.

4.10.1. Each Market Participant must ensure that information submitted to AEMO with an application for certification of Reserve Capacity pertains to the Reserve Capacity Cycle to which the certification relates, and is supported by documented evidence and includes, if applicable, except to the extent that it is already accurately provided in Standing Data:

…

(f) for Demand Side Programmes:

i. if the Demand Side Programme has, or is expected to have, a single Associated Load:

1. the quantity of Peak Capacity the Market Participant expects to make available from the Facility;

2. the expected Minimum Consumption of the Non-Dispatchable Load in units of MW; and

3. any supporting information regarding the Non-Dispatchable Load that the Market Participant wishes to provide which may include the NMI;

iA. if the Demand Side Programme has, or is expected to have more than one Associated Load, the quantity of Peak Capacity that the Market Participant nominates to apply for the Demand Side Programme and any supporting information regarding the Non-Dispatchable Loads that the Market Participant wishes to provide which may include the NMI;

iB. if the Demand Side Programme has, or is expected to have, a single Associated Load, the quantity of Flexible Capacity the Market Participant expects to make available from the Facility;

iC. if the Demand Side Programme has, or is expected to have more than one Associated Load, the quantity of Flexible Capacity that the Market Participant nominates to apply for the Demand Side Programme;

ii. [Blank];~~if the application relates to Peak Capacity, the maximum number of Trading Intervals that the Demand Side Programme will be available to provide Peak Capacity during a Capacity Year:~~

1. ~~for a Reserve Capacity Cycle up to and including the 2026 Reserve Capacity Cycle must be at least the minimum Peak Demand Side Programme Dispatch Requirement for that Reserve Capacity Cycle; and; and~~

2. ~~from the 2027 Reserve Capacity Cycle must be equal to the Peak Demand Side Programme Dispatch Requirement for that Reserve Capacity Cycle;~~

iiA. [Blank];

iii. [Blank];~~the number of Trading Intervals per Trading Day that the Facility will be available to provide must be:~~

1. ~~for a Reserve Capacity Cycle up to and including the 2026 Reserve Capacity Cycle, at least twenty four Trading Intervals; and; and~~

2. ~~from the 2027 Reserve Capacity Cycle, no greater than the Peak Demand Side Programme Dispatch Requirement for that Reserve Capacity Cycle;~~

iv. [Blank];

ivA. if the application includes Flexible Capacity, how the Demand Side Programme plans to meet its Reserve Capacity Obligations for Flexible Capacity, including the technologies it plans to use;

v. the minimum notice period required for dispatch under clause 7.6.15 of the Facility, which must be no more than:

1. if the application is only for Peak Capacity, two hours; and

2. if the application includes both Peak Capacity and Flexible Capacity, five minutes;

vi. the Facility can be dispatched during the following periods:

1. For a Reserve Capacity Cycle up to and including the 2026 Reserve Capacity Cycle, must include the period between 8:00 AM and 8:00 PM on all Business Days; and

2. From the 2027 Reserve Capacity Cycle, the period:

i. must include the period between 2:00 PM and 10:00 PM on each Business Day; and

ii. may include the period between 8:00AM and 12:00 PM on each Business Day;

vii. [Blank]

viii. the single Transmission Node Identifier for the Facility;

…

…

4.13A. DSP Reserve Capacity Security

…

Explanatory Note

Clause 4.13A.15A has been amended to reflect that a Demand Side Programme that is available only from 2:00 PM to 10:00 PM on Business Days receives a derated DSP Reserve Capacity Security amount relative to a Demand Side Programme that is available from 8:00 AM to 12:00 PM and 2:00 PM to 10:00 PM on Business Days. Consistent with the reduced DSP Reserve Capacity Security requirement, the amount payable to AEMO following a Capacity Credit reduction is also reduced proportionately.

4.13A.15A. If a Demand Side Programme has its Capacity Credits reduced by AEMO under clauses 2.29.5AE, 2.29.5AF, 2.29.5AM or 2.29.5AN then, subject to clause 4.13A.16B, the Market Participant that provides the DSP Reserve Capacity Security for the Demand Side Programme must pay to AEMO, as compensation to the market, the greater of:

(a) if AEMO has reduced the level of Peak Capacity Credits under clauses 2.29.5AE or 2.29.5AM, an amount equal to ~~the product of~~:

$$M \times PBRCP \times PCCShortfall(f)$$

where:

i. M is:

1. DSP Availability Period Ratio for a Demand Side Programme that is only available for DSP Availability Period 1;or

2. 1 for a Demand Side Programme that is available for DSP Availability Period 1 and DSP Availability Period 2;

ii. PBRCP is the Peak Benchmark Reserve Capacity Price included in the Request for Expressions of Interest issued for the relevant Reserve Capacity Cycle, expressed in $/MW per year; and

iii. PCCShortfall(f) is the shortfall in Peak Capacity Credits calculated by AEMO under clauses 2.29.5AE or 2.29.5AM for Demand Side Programme f; and

~~i. the shortfall in Peak Capacity Credits calculated by AEMO under clauses 2.29.5AE or 2.29.5AM; and~~

~~ii. the Peak Benchmark Reserve Capacity Price included in the Request for Expressions of Interest issued for the relevant Reserve Capacity Cycle, expressed in $/MW per year; and~~

(b) if AEMO has reduced the level of Flexible Capacity Credits under clauses 2.29.5AF or 2.29.5AN, an amount equal to the product of:

$$M \times FBRCP \times FCCShortfall(f)$$

where:

i. M is:

1. DSP Availability Period Ratio for a Demand Side Programme that is only available for DSP Availability Period 1;or

2. 1 for a Demand Side Programme that is available for DSP Availability Period 1 and DSP Availability Period 2;

ii. FBRCP is the Flexible Benchmark Reserve Capacity Price included in the Request for Expressions of Interest issued for the relevant Reserve Capacity Cycle, expressed in $/MW per year; and

iii. FCCShortfall(f) is the shortfall in Flexible Capacity Credits calculated by AEMO under clauses 2.29.5AF or 2.29.5AN for Demand Side Programme f.

~~i. the shortfall in Flexible Capacity Credits calculated by AEMO under clauses 2.29.5AF or 2.29.5AN; and~~

~~ii. 25 percent of the Flexible Benchmark Reserve Capacity Price included in the Request for Expressions of Interest issued for the relevant Reserve Capacity Cycle, expressed in $/MW per year.~~

…

Schedule 5: Amending Rules to commence on 1 October 2029

…

4.12. Setting Reserve Capacity Obligations

…

Explanatory Note

- Clauses 4.12.4(c)(iii) has been amended to refer to the Peak DSP Dispatch Requirement as the maximum number of Trading Intervals in a Capacity Year during which a Demand Side Programme may be dispatched. These amendments are required following the removal of clauses 4.10.1(f)(ii) which previously allowed Market Participants to nominate availability beyond the applicable dispatch requirements.
- Clause 4.12.4(c)(iv) has been removed because Market Participants can no longer nominate availability outside the availability periods specified in clause 4.10.1(f)(vi). A Demand Side Programme nominated to be available from 2:00 PM to 10:00 PM will have a non-zero RCOQ for 8 hours per Trading Day, while a Demand Side Programme nominated to be available from 8:00 AM to 12:00 PM and 2:00 PM to 10:00 PM will have a non-zero RCOQ for 12 hours per Trading Day.

4.12.4. AEMO must determine the Peak Reserve Capacity Obligation Quantity for each Scheduled Facility, Semi-Scheduled Facility, Non-Scheduled Facility or Demand Side Programme for each Dispatch Interval as follows:

(a) the Peak Reserve Capacity Obligation Quantity for a Registered Facility is equal to zero for each Dispatch Interval in which no Peak Capacity Credits are assigned to the Registered Facility;

(b) the Peak Reserve Capacity Obligation Quantity for a Non-Scheduled Facility is equal to zero for each Dispatch Interval;

(c) the Peak Reserve Capacity Obligation Quantity for a Demand Side Programme:

i. for a Dispatch Interval that falls within a period specified for the Demand Side Programme under clause 4.10.1(f)(vi), is equal to the number of Peak Capacity Credits assigned to the Demand Side Programme for the Dispatch Interval, except if clauses 4.12.4(c)(iii) ~~or 4.12.4(c)(iv)~~ applies~~y~~;

ii. for a Dispatch Interval that falls outside the periods specified for the Demand Side Programme under clause 4.10.1(f)(vi), is equal to zero;

iii. will equal zero for the remainder of a Capacity Year once the capacity of the Demand Side Programme has been dispatched under clause 7.6.5A for the number of Trading Intervals in the Peak Demand Side Programme Dispatch Requirement~~per Capacity Year that is specified for the Demand Side Programme under clause 4.10.1(f)(ii)~~ plus, if the Demand Side Programme has Flexible Capacity Credits, the number of Trading Intervals in the Flexible Demand Side Programme Dispatch Requirement ~~per Capacity Year~~

~~that is specified for the Demand Side Programme under clause 4.10.1(f)(iiA)~~; and

iv. ~~will equal zero for the remainder of a Trading Day once the capacity of the Demand Side Programme has been dispatched under clause 7.6.5A for the number of Trading Intervals per Trading Day that is specified for the Demand Side Programme under clause 4.10.1(f)(iii); and~~

(d) the Peak Reserve Capacity Obligation Quantity for a Scheduled Facility or Semi-Scheduled Facility which is assigned Peak Capacity Credits for a Dispatch Interval is equal to the sum of the Peak Reserve Capacity Obligation Quantities determined under clause 4.12.5 for each Separately Certified Component of the Registered Facility for the relevant Dispatch Interval.

…

4.25. Reserve Capacity Testing

Explanatory Note

- Clause 4.25.1(c) and 4.25.2B(d) have been amended to reflect the introduction of DSP Availability Periods under clause 4.10.1(f)(vi). A Demand Side Programme is required to demonstrate its capability in each availability period for which it is available. A Demand Side Programme nominated to be available from 8:00 AM to 12:00 PM and 2:00 PM to 10:00 PM must therefore demonstrate its capability in each availability period at least once between 1 October and 31 March and at least once between 1 April and 30 September. Where a Demand Side Programme has not received a non-zero Dispatch Instruction in a nominated availability period by the relevant assessment date, AEMO must subject the Demand Side Programme to a Reserve Capacity Test for that availability period. For the avoidance of doubt, there is no requirement for DSP Dispatch Events in different availability periods to occur on the same Trading Day.
- Clauses 4.25.2BB and 4.25.2BC have been amended to require a requested Reserve Capacity Test following a DSP Dispatch Event to be undertaken during the same availability period and seasonal testing period as the DSP Dispatch Event. A Market Participant may request up to three Reserve Capacity Tests for each availability period nominated under clause 4.10.1(f)(vi) during each of the periods specified in clause 4.25.1(c).
- Clause 4.25.9 is amended to reflect the amendments in clauses 4.25.2B and 4.25.2BB.

4.25.1. AEMO must take steps to verify, in accordance with clause 4.25.2, that each Facility or Separately Certified Component of a Facility assigned Peak Capacity Credits can:

(a) in the case of a Non-Intermittent Generating System or an Electric Storage Resource, during the period the Reserve Capacity Obligations apply, operate at a level equivalent to its Required Level, adjusted to the level of Peak Capacity Credits currently held by the Facility or Separately Certified Component, as applicable, at least once during each of the following periods:

i. 1 October to 31 March; and

ii. 1 April to 30 September,

which for a Non-Intermittent Generating System, must be achieved on each type of fuel detailed under clause 4.10.1(e)(v)(1)(ii); and

(b) [Blank]

~~(c) in the case of a Demand Side Programme, during the period the Reserve Capacity Obligations apply, decrease its DSP Energy Level to operate at a level equivalent to its Required Level in that Trading Interval, adjusted to the level of Peak Capacity Credits currently held, at least once during each of the following periods:~~

~~i. 1 October to 31 March; and~~

~~ii. 1 April to 30 September.~~

(c) in the case of a Demand Side Programme, decrease its DSP Energy Level to operate at a level equivalent to its Required Level in that Trading Interval, adjusted to the level of Peak Capacity Credits currently held, at least once:

i. for a Demand Side Programme which is available for DSP Availability Period 1, between 2:00 PM to 10:00 PM; and

ii. for a Demand Side Programme which is available for DSP Availability Period 2, between 8:00 AM to 12:00 PM;

during each of the following periods:

iii. 1 October to 31 March; and

iv. 1 April to 30 September.

…

4.25.2B. AEMO must subject a Facility or Separately Certified Component to a Reserve Capacity Test under clauses 4.25.2(a)(ii), ~~4.25.2(b),~~ 4.25.2(b)(ii) or 4.25.2(e)(ii) if:

(a) the Market Participant for the Facility, has not provided meter data, recorded by the Facility Sub-Metering to AEMO, if applicable, in accordance with and by the time specified in clause 4.25.2A;

(b) AEMO has determined, in accordance with clauses 4.25.2(a)(i) or 4.25.2(e)(i), that the Facility or Separately Certified Component of the Facility, as applicable, did not operate at the level specified in clause 4.25.1(a) by:

i. 31 January, in respect of the immediately preceding period 1 October to 31 January; and

ii. 31 July, in respect of the immediately preceding period 1 April to 31 July;

(c) AEMO is conducting a re-test in accordance with~~:~~

~~i. clauses~~ 4.25.4~~, or 4.25.6(b)(i); or~~

~~ii. clauses~~ 4.25.6(a)(i) ~~and/~~or 4.25.6(c)(i); or

~~(d) AEMO has not issued the Demand Side Programme with a non-zero Dispatch Instruction, by:~~

~~i. 31 January, in respect of the immediately preceding period 1 October to 31 January; and~~

~~ii. 31 July, in respect of the immediately preceding period 1 April to 31 July.~~

(d) AEMO has not issued the Demand Side Programme with a non-zero Dispatch Instruction between:

i. 2:00 PM to 10:00 PM, for a Demand Side Programme which is available for DSP Availability Period 1, and

ii. 8:00 AM to 12:00 PM, for a Demand Side Programme which is available for DSP Availability Period 2,

by:

i. 31 January, in respect of the immediately preceding period 1 October to 31 January; and

ii. 31 July, in respect of the immediately preceding period 1 April to 31 July.

4.25.2BB. Subject to clause 4.25.2BC, ~~in each period outlined in clauses 4.25.1(c)(i) and 4.25.1(c)(ii),~~ at any time after a DSP Dispatch Event for a Demand Side Programme ~~in that period~~, the relevant Market Participant may request that AEMO conduct a Reserve Capacity Test of that Demand Side Programme for the same availability period specified in clauses 4.25.1(c)(i) or 4.25.1(c)(ii) ~~and during the same period specified in clauses 4.25.1(c)(iii) or 4.25.1(c)(iv)~~ as the DSP Dispatch Event.

4.25.2BC. A Market Participant must not request more than three Reserve Capacity Tests for the same Demand Side Programme for the same availability period specified in clauses 4.25.1(c)(i) or 4.25.1(c)(ii) during the same period specified in clauses 4.25.1(c)(iii) or 4.25.1(c)(iv) under clause 4.25.2BB ~~in each period outlined in clauses 4.25.1(c)(i) and 4.25.1(c)(ii)~~.

…

4.25.9. In conducting a Reserve Capacity Test, AEMO must:

(a) subject to clauses 4.25.9(b), 4.25.9(c) and 4.25.9(dA), endeavour to conduct the Reserve Capacity Test without warning;

(b) allow sufficient time for the Market Participant to schedule fuel that is not required under these ESM Rules to be stored on-site;

(c) allow sufficient time for switching a Facility from one fuel to an alternative fuel if operation using the alternative fuel is being tested;

(cA) in the case of a Demand Side Programme and a test under clause 4.25.2(b)(ii), clause 4.25.2B(d)~~4.25.4~~ or clause 4.25.2BB~~4.25.6(b)(i)~~, as far as possible conduct the Reserve Capacity Test under power system conditions similar to those that AEMO expects to apply at times of high demand;

(d) in the case of a Demand Side Programme and a test under clause 4.25.1C(b), clause 4.25.3F or clause 4.25.6(b)(ii), as far as possible conduct the Reserve Capacity Test under power system conditions similar to those that AEMO expects to apply at times of high system ramp rates;

(dA) in the case of a Demand Side Programme and a test under clause 4.25.2(b)(ii), clause 4.25.2B(d)~~4.25.4~~ or clause 4.25.2BB~~4.25.6(b)(i)~~, give at least two hours' and no more than three hours' notice to allow for arrangements to be made for the Facility to be triggered;

(e) deem the Reserve Capacity Test to be cancelled and discard the results if:

i. the Facility is constrained during the test period because of an outage of an item of equipment that is part of a Network; or

ii. AEMO determines that the Reserve Capacity Test was invalid in accordance with the WEM Procedure referred to in clause 4.25.14;

(f) maintain adequate records of the Reserve Capacity Test to allow independent verification of the test results including the level of Injection or Withdrawal, ramp rate, and response time required during the Reserve Capacity Test; and

(g) [Blank]

(h) notify the Market Participant of:

i. the time that the Reserve Capacity Test must be performed;

ii. the level of output required by the Separately Certified Component or level of Injection or Withdrawal required by the Facility for the Reserve Capacity Test, as applicable;

iii. the ramp rate required; and

iv. in the case of a test under clause 4.25.1C, 4.25.3F or 4.25.5, a test plan which details the requirements of the Reserve Capacity Test.

…

4.26. Financial Implications of Failure to Satisfy Reserve Capacity Obligations

Explanatory Note

Clauses 4.26.1 and 4.26.1A are amended to reflect that the Peak Capacity refund factor for a Demand Side Programme has been revised to accommodate the required changes to implement the different availability periods and Reserve Capacity Prices available to DSPs.

4.26.1. If a Market Participant holding Capacity Credits associated with a Facility fails to comply with its Reserve Capacity Obligations applicable to any given Trading Interval then the Market Participant must pay a refund to AEMO calculated in accordance with the following provisions.

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

Peak Trading Interval Refund Rate(f,t)=PRF(f,t) × PY(f,t)

where:

i. Peak Trading Interval Refund Rate (f,t) is the Peak Trading Interval Refund Rate for Facility f in Trading Interval t;

ii. PRF(f,t) is the Peak Capacity refund factor for Facility f in Trading Interval t and is calculated in accordance with clause 4.26.1(c); and

iii. PY(f,t) is the per Trading Interval price for Peak Capacity associated with Facility f in Trading Interval t and is determined in accordance with clause 4.26.1(b).

(b) For a Facility f, for which a Market Participant holds Peak Capacity Credits, in the Trading Interval t, PY(f,t) is determined as follows:

i. if Facility f is not a Registered Facility in Trading Interval t, PY(f,t) equals the Entity Daily Peak Reserve Capacity Price for the Facility, or the highest Entity Daily Peak Reserve Capacity Price for any component of the Facility, in Trading Interval t divided by 48;

…

v. if Facility f is a Demand Side Programme:

~~$Y(f,t) = \frac{PRCP}{DSP_MIN_AV_TI \times QTY_BD_CY}$~~

$$PY(f,t) = \frac{EDPRCP_{(f,t)} \times TDCY_{(cy)}}{DSP_AV_TI_{(f,t)} \times QTY_BD_CY_{(cy)}}$$

where:

1. EDPRCP(f,t) is the Entity Daily Peak Reserve Capacity Price for Facility f in Trading Interval t; and

2. TDCY(cy) is the number of Trading Days in the Capacity Year; and

3. DSP_AV_TI(f,t) is the number of Trading Intervals per Trading Day that the Demand Side Programme has nominated to be available in accordance with clause 4.10.1(f)(vi); and

4. QTY_BD_CY(cy) is the number of Business Days in the relevant Capacity Year.

1. ~~PRCP is the Peak Reserve Capacity Price for the relevant Capacity Year;~~

2. ~~DSP_MIN_AV_TI is the minimum number of Trading Intervals per Trading Day that a Demand Side Programme must nominate to be available to provide Peak Capacity if issued a Dispatch Instruction which must be at least twenty-four Trading Intervals ; and~~

3. ~~QTY_BD_CY is the number of Business Days in the relevant Capacity Year.~~

…

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

(a) the product of:

i. the Peak Trading Interval Refund Rate, calculated under clause 4.26.1(a), applicable to Facility f in Trading Interval t; and

ii. the Peak Reserve Capacity Deficit for Facility f in Trading Interval t, where the Peak Reserve Capacity Deficit for Facility f in Trading Interval t is equal to whichever of the following applies:

…

5. if Facility f is a Demand Side Programme:

$$max\left(0, min\left(PRCOQ_{(f,t)}, max\left(\text{PDSPAP1SF}_{(f,t)}, \text{PDSPAP2SF}_{(f,t)}\right)\right)\right)$$

where:

i. PRCOQ(f,t) is the Peak Reserve Capacity Obligation Quantity determined for Facility f in Trading Interval t;

ii. PDSPAP1SF(f,t) is the Peak DSP Availability Period Shortfall for Availability Period 1 as determined in clause 4.26.1AA(a); and

iii. PDSPAP2SF(f,t) is the Peak DSP Availability Period Shortfall for Availability Period 2 as determined in clause 4.26.1AA(b); and

~~the Peak DSP Association Shortfall calculated by AEMO under clause 4.26.1AB, or zero if AEMO has not determined a Peak DSP Association Shortfall for the Trading Interval; and~~

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

Explanatory Note

Clause 4.26.1AA is amended to reflect that the Peak DSP Delivery Shortfall calculation has been revised to calculate refunds applicable to the different DSP Availability Periods:

- For each Trading Interval in each Availability Period, AEMO must determine the shortfall in capacity delivered by the DSP in the DSP Dispatch Event;
- The capacity shortfall continues to be determined as the lowest shortfall (excluding a zero shortfall) during any of the relevant Trading Intervals. This is now specific to each DSP Availability Period;
- The determined shortfall value will apply for the DSP Availability Period until the next DSP Dispatch Event in that period, at which point the shortfall value will be reassessed and new shortfall calculated if applicable;
- The DSP Delivery Shortfall, applicable to any Trading Interval for which Peak RCOQ is not zero, is the maximum shortfall determined from the most recent dispatch event in either Availability Period 1 or Availability Period 2.
- The shortfall will only apply during periods where the RCOQ is not zero and will ensure that capacity shortfall does not exceed Peak RCOQ.

4.26.1AA. AEMO must determine the Peak DSP Availability Period Shortfall for a Demand Side Programme f for each Trading Interval t as:

(a) If Trading Interval t is in Availability Period 1:

(i) and the Demand Side Programme f is subject to a DSP Dispatch Event in the Trading Interval, the Peak DSP Event Shortfall for the DSP Dispatch Event e as determined in clause 4.26.1AD(a);

(ii) otherwise, the Peak DSP Event Shortfall for the most recent DSP Dispatch Event e-1 in the current Capacity Year as determined in clause 4.26.1AD(a);

(b) If Trading Interval t is in Availability Period 2:

(i) and the Demand Side Programme f is subject to a DSP Dispatch Event in the Trading Interval, the Peak DSP Event Shortfall for the DSP Dispatch Event e as determined in clause 4.26.1AD(b);

(ii) otherwise, the Peak DSP Event Shortfall for the most recent DSP Dispatch Event e-1 in the current Capacity Year as determined in clause 4.26.1AD(b);

(c) otherwise, zero.

~~AEMO must determine the Peak DSP Delivery Shortfall for a Demand Side Programme for all Trading Intervals t from the first Trading Interval of DSP Dispatch Event e for the Demand Side Programme up to but excluding the~~

~~first Trading Interval of the next DSP Dispatch Event e+1 for the Demand Side Programme as the minimum of:~~

~~(a) the number of Peak Capacity Credits held by the Market Participant for the Demand Side Programme for Trading Interval t; and~~

~~(b) the Peak DSP Event Shortfall determined under clause 4.26.1AD for the Demand Side Programme for DSP Dispatch Event e.~~

Explanatory Note

- Clause 4.26.1AB is amended to reflect that the Peak DSP Association Shortfall has been revised to now consider any Trading Interval throughout the Capacity Year in which the DSP does not have sufficient contracted capacity to meet its Peak RCOQ. For DSPs which are available in both DSP Availability Periods the Peak DSP Association Shortfall for all Trading Intervals, with a Peak RCOQ greater than zero, will be the maximum shortfall determined from either period.
- Clause 4.26.1AD is amended to reflect the Review Outcome of different DSP Availability Periods and to ensure AEMO refund calculations operate normally.

These changes are a consequence of allowing a DSP aggregator to change load associations for specific trading days and periods.

4.26.1AB. AEMO must calculate the Daily Peak DSP Association Shortfall for each Demand Side Programme for each Trading Interval t in the Trading Day as: ~~from the start of the Capacity Year until the Trading Interval t-1 before the first Trading Interval t, in which one of the following applies:~~

~~(a) the Demand Side Programme is subject to a Dispatch Instruction issued under clause 7.6.5A with a non-zero dispatch quantity determined under clause 7.13.5; or~~

~~(b) the Demand Side Programme is undergoing a Reserve Capacity Test under section 4.25.~~

$$DPDSPAS(f,t) = \min(\mathrm{PRCOQ(f,t)}, \max(\mathrm{AV1PDSPAS(f,t)}, \mathrm{AV2}PDSPAS(f,t)))$$

where:

(a) PRCOQ(f,t) is the Peak Reserve Capacity Obligation Quantity determined for Facility f in Trading Interval t;

(b) AV1PDSPAS(f,t) is:

i. If the Demand Side Programme is available for DSP Availability Period 1, the greatest Peak DSP Association Shortfall for Demand Side Program f determined in any Trading Interval t during DSP Availability Period 1;

ii. otherwise zero;

(c) AV2PDSPAS(f,t) is:

i. If the Demand Side Programme is available for DSP Availability Period 2 the greatest Peak DSP Association

Shortfall for Demand Side Program f determined in any Trading Interval t during DSP Availability Period 2; and

ii. otherwise zero.

4.26.1AC. For the purpose of clause 4.26.1AB, AEMO must calculate the Peak DSP Association Shortfall for Demand Side Programme f in Trading Interval t as:

$$PDSPAS(f,t) = max\left(0, PRCOQ(f,t) - AssocLoadCapacity(f,t)\right)$$

where:

(a) PRCOQ(f,t) is the Peak Reserve Capacity Obligation Quantity determined for Facility f in Trading Interval t; and

(b) AssocLoadCapacity(f,t) is the sum of the MW quantities by which each Associated Load in Facility f is expected to reduce its Withdrawal or increase its Injection, provided under clause 2.29.5B for the Associated Loads for Trading Interval t.

4.26.1AD. AEMO must calculate the Peak DSP Event Shortfall for each Demand Side Programme f in DSP Dispatch Event e as follows:

(a) if the DSP Dispatch Event e occurred during DSP Availability Period 1 then the Availability Period 1 Capacity Shortfall is determined as:

i. if the Capacity Shortfall is determined under clause 4.26.2D for each Trading Interval in e is zero, the Availability Period 1 DSP Event Shortfall for e is zero; and

ii. otherwise, the Availability Period 1 DSP Event Shortfall equals the lowest, non-zero, Capacity Shortfall of all Trading Intervals in e;

(b) otherwise, if the DSP Dispatch Event e occurred during DSP Availability Period 2 then the Availability Period 2 Capacity Shortfall is determined as:

i. if the Capacity Shortfall is determined under clause 4.26.2D for each Trading Interval in e is zero, the Availability Period 2 DSP Event Shortfall for e is zero; and

ii. otherwise, the Availability Period 2 DSP Event Shortfall equals the lowest, non-zero, Capacity Shortfall of all Trading Intervals in e.

~~AEMO must calculate the Peak DSP Event Shortfall for each DSP Dispatch Event e as follows:~~

~~(a) if the Capacity Shortfall determined under clause 4.26.2D for each Trading Interval in e is zero, the DSP Event Shortfall for e is zero; and~~

~~(b) otherwise, the DSP Event Shortfall equals the lowest, non-zero, Capacity Shortfall of all Trading Intervals in e.~~

…

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

(a) if Trading Interval t falls within a DSP Dispatch Event for Demand Side Programme f:

$$max\Big(0, min\big(PRCOQ(f,t), DIMW(f,t)\big) - max\big(0, RD(f,t) - DSPLMW(f,t)\big)\Big)$$

where:

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

ii. DIMW(f,t) is the quantity by which the Demand Side Programme f was instructed by AEMO to amend its DSP Energy Level in Trading Interval t as specified by AEMO in accordance with clause 7.13.5;

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

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

(b) zero, otherwise.

4.26.2E. For each Market Participant holding Capacity Credits, AEMO must determine the amount of the refund ("**Capacity Cost Refund**") to be applied for Trading Day d as the sum of the Trading Interval Capacity Cost Refunds of every Trading Interval in the Trading Day d, as calculated in accordance with clause 4.26.2F.

4.26.2F. The Trading Interval Capacity Cost Refund for Market Participant p and Trading Interval t is the sum of:

(a) either:

i. where Market Participant p holds Capacity Credits associated with an Energy Producing System, the Generation Capacity Cost Refund for Market Participant p for Trading Interval t, determined in accordance with clause 4.26.3; or

ii. zero, otherwise; and

(b) the sum of the Demand Side Programme Capacity Cost Refunds for Trading Interval t for each Facility with a Facility Class (or, for an unregistered Facility, an indicative Facility Class) of Demand Side Programme for which Market Participant p holds Capacity Credits in Trading Interval t.

…

Explanatory Note

Clause 4.26.3A is amended to reflect that the Demand Side Programme Capacity Cost Refund has been revised to incorporate the revised calculations for Peak DSP Delivery Shortfall and the Daily Peak DSP Association Shortfall as calculated in clauses 4.26.1A(a)(ii)(5) and 4.26.1AB respectively.

4.26.3A. The Peak Demand Side Programme Capacity Cost Refund for Trading Interval t for a Facility f with a Facility Class (or, for an unregistered Facility, an indicative Facility Class) of Demand Side Programme is equal to ~~the lesser of~~:

$$DSPCCR(f,t) = \min\left(\text{MaxFacilityRefund}(f, \text{CY}) - \sum_{\text{pt} \in PT} \text{DSPCCR}\,(f, pt),\ \max\left(\text{PFRCDR}(f,t),\ \text{PIRR}(f,t) \times \text{DPDSPAS}(f,t)\right)\right)$$

where:

i. PT is the set of previous Trading Intervals from the start of the Capacity Year up to but excluding Trading Interval t and pt is a Trading Interval within that set;

ii. DSPCCR(f,t) is the Demand Side Programme Capacity Cost Refund for Facility f in Trading Interval t;

iii. MaxFacilityRefund(f,CY) is the Maximum Facility Refund for Facility f in the Capacity Year;

iv. PFRCDR(f,t) is the Peak Facility Reserve Capacity Deficit Refund for Facility f in Trading Interval t, determined in accordance with clause 4.26.1A;

v. PIRR(f,t) is the Peak Trading Interval Refund Rate for Facility f in Trading Interval t; and

vi. DPDSPAS(f,t) is the Daily Peak DSP Association Shortfall for Facility f in Trading Interval t determined in accordance with clause 4.26.1AB.

~~(a) the Maximum Facility Refund for Facility f in the Capacity Year the Trading Interval t falls in, less all Demand Side Programme Capacity Cost Refunds applicable to the Facility in previous Trading Intervals falling in the same Capacity Year; and~~

~~(b) the sum of:~~

~~i. either:~~

~~1. if Facility f is a Registered Facility:~~

~~$TIRR(f,t) \times min(PDSPDS(f,t), RCOQ(f,t))$~~

~~where:~~

~~i. TIRR(f,t) is the Trading Interval Refund Rate for Facility f in Trading Interval t;~~

~~ii. PDSPDS(f,t) is the Peak DSP Delivery Shortfall in MW determined in accordance with clause 4.26.1AA in Trading Interval t, and~~

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

~~2. otherwise, zero; and~~

~~ii. the Facility Reserve Capacity Deficit Refund for Trading Interval t for Facility f, determined in accordance with clause 4.26.1A.~~

…

4.30. Daily Capacity Credit Allocation Process

Explanatory Note

A Demand Side Programme that is available only during the period from 2:00 PM to 10:00 PM receives a derated Peak Reserve Capacity Price. As this capacity receives a different price to standard Capacity Credits, it must be traded through AEMO rather than bilaterally. Clause 4.30.1A has been created to prevent a Market Participant from submitting a Capacity Credit Allocation in respect of this capacity.

4.30.1. A Market Participant may submit one or more Capacity Credit Allocation Submissions in respect of a Facility or a Separately Certified Component that is registered to them on a Trading Day by 5:00PM on the Scheduling Day for that Trading Day.

4.30.1A. A Market Participant must not submit a Capacity Credit Allocation Submission in respect of a Demand Side Programme that is only available for DSP Availability Period 1 for the Trading Day.

…

Appendix 1: Standing Data

…

Explanatory Note

Appendix 1(f) has been amended to remove the requirement for Market Participants to specify dispatch hours and Trading Interval availability for a Demand Side Programme in their Standing Data. A Market Participant must nominate either the 2:00 PM to 10:00 PM, or both the 8:00 AM to 12:00 PM and 2:00 PM to 10:00 PM availability periods in their application for certification. The nominated availability periods for the relevant Capacity Year cannot be changed after Certified Reserve Capacity has been assigned.

(f) For a Demand Side Programme:

i. [Blank]~~the maximum number of hours per day that the Facility will be available to provide Reserve Capacity if issued a Dispatch Instruction~~;

ii. [Blank]~~the Trading Intervals where the Demand Side Programme can be curtailed~~;

iii. any restrictions on the availability of the Demand Side Programme;

iv. the minimum notice period required for dispatch under clause 7.6.15 of the Facility;

v. evidence that the communication and control systems required by clause 2.35 are in place and operational;

vi. details of the real-time telemetry Capability of the Facility; and

vii. the Transmission Node Identifier.

…

…

Appendix 10: Relevant Demand Determination

…

Explanatory Note

Appendix 10 has been amended to remove references to Non-Business Days, reflecting that a Demand Side Programme can no longer nominate to be available for dispatch on Non-Business Days. Accordingly, the baseline is now determined using the most recent Business Days within the Baseline Window.

The adjustment methodology has also been amended to calculate a separate Adjustment Window, Adjustment Window Energy, Average Unadjusted Baseline Energy and Baseline Adjustment for each DSP Dispatch Event, rather than for each Event Day. This ensures that, where multiple DSP Dispatch Events occur on the same Event Day, the Relevant Demand calculation reflects the circumstances immediately preceding the relevant DSP Dispatch Event, including where different Non-Dispatchable Loads are associated with different availability periods.

This Appendix sets out the methods for determining the Relevant Demand of a Demand Side Programme and the Associated Load Baseline Energy of an Associated Load of a Demand Side Programme in a Trading Interval in which one of the following applies:

- The Demand Side Programme is subject to a Dispatch Instruction issued under clause 7.6.5A with a non-zero dispatch quantity determined under clause 7.13.5; or
- The Demand Side Programme is undergoing a Reserve Capacity Test under section 4.25.

In this Appendix:

- a reference to a step is to the process step so numbered in this Appendix;
- steps are to be performed sequentially unless otherwise stated;
- an “Event Day” for a Demand Side Programme is a day in which one or more DSP Dispatch Events occur for that Demand Side Programme;
- the “Baseline Window” for a Demand Side Programme on an Event Day d is the 50 days from day d-50 to day d-1;
- “Selected Day” has the meaning given in step 1; and
- “Adjustment Window” has the meaning given in step 3.1.

AEMO must perform steps 1 to 4 to determine the Relevant Demand of a Demand Side Programme f for a Trading Interval t that occurs on Event Day d.

Step 1. Determine Selected Days

Determine the “Selected Days” for a Demand Side Programme f for Event Day d using the following steps:

~~If Event Day d is a Business Day:~~

1.1 Subject to clause 4.26.2CD, select the ten most recent days in Demand Side Programme f’s Baseline Window for Event Day d, that are a Business Day and not a previous Event Day. If fewer than ten days are identified, then select as many days that are Business Days and not previous Event Days as possible.

1.2 If between five and ten days (inclusive) have been selected, go to step 1.4.

1.3 If fewer than five days have been selected in step 1.1, then subject to clause 4.26.2CC(b), keep adding the next most recent day(s) in the Baseline Window that is (or are) a Business Day and a previous Event Day until five days have been selected.

1.4 Days selected under steps 1.2 or 1.3, as applicable, are the Selected Days for Demand Side Programme f on Event Day d.

~~If Event Day d is a Non-Business Day:~~

~~1.5 Select the four most recent days in Demand Side Programme f's Baseline Window for Event Day d that are Non-Business Days and not previous Event Days. If fewer than four days are identified, then select as many days that are Non-Business Days and not previous Event Days as possible.~~

~~1.6 If four days have been selected, go to step 1.8.~~

~~1.7 If fewer than four days have been selected in step 1.5, then keep adding the next most recent day(s) in the Baseline Window that is (or are) a Non-Business Day and an Event Day until a total of four days has been selected.~~

~~1.8 Days selected under steps 1.6 or 1.7, as applicable, are the Selected Days for Demand Side Programme f on Event Day d.~~

Step 2. Determine Unadjusted Baseline Energy

2.1 Calculate the UnadjustedBaselineEnergy(f, t) of Demand Side Programme f for Trading Interval t as:

$$UnadjustedBaselineEnergy(f,t) = \frac{1}{N(f,d)} \times \sum_{s \in SelectedDays(f,d)} \left(-1 \times \sum_{l \in AssocLoads(f,t)} SOMS\big(l, prevt(s,t)\big) \right)$$

where:

(a) N(f,d) is the number of Selected Days for Demand Side Programme f on Event Day d as determined in step 1.4 ~~or 1.8 as relevant~~;

(b) s∈SelectedDays(f,d) denotes the Selected Days for Demand Side Programme f on Event Day d as determined in steps 1.4 ~~or 1.8 as relevant~~;

(c) l∈AssocLoads(f,t) denotes the Associated Loads of Demand Side Programme f in Trading Interval t;

(d) prevt(s,t) is the Trading Interval in Selected Day s that commences at the same time of day as Trading Interval t; and

(e) SOMS(l,prevt(s,t)) is the Sent Out Metered Schedule of Associated Load l in Trading Interval prevt(s,t).

2.2 If AEMO is required to use the Unadjusted Baseline Method for Demand Side Programme f for Trading Interval t under clause 2.29.5AH, then go to step 4.

Step 3. Determine Adjusted Baseline Energy

3.1 Determine the "Adjustment Window" for Demand Side Programme f for DSP Dispatch Event e on Event Day d as the set of two Trading Intervals immediately preceding the Trading Interval in which AEMO either:

(a) issues the first Dispatch Instruction under clause 7.6.5A with a non-zero quantity to Demand Side Programme f; or

(b) notifies a Market Participant that Demand Side Programme f will be subject to a Reserve Capacity Test in accordance with clause 4.25.9(dA).

For avoidance of doubt, AEMO must determine a single Adjustment Window for a given DSP Dispatch Event ~~Event Day~~ for a given Demand Side Programme.

3.2 Calculate the AdjustmentWindowActualEnergy(f,t) for Demand Side Programme f for Trading Interval t as:

$$AdjustmentWindowActualEnergy(f,t) = \frac{1}{2} \times \sum_{awt \in AdjustmentWindow(f,e,\sout{d})} \left(-1 \times \sum_{l \in AssocLoads(f,t)} SOMS(l,awt) \right)$$

where:

(a) awt∈AdjustmentWindow(f, e,) denotes the Trading Intervals in the Adjustment Window for Demand Side Programme f for DSP Dispatch Event e on Event Day d as determined in step 3.1; and

(b) l∈AssocLoads(f,t) denotes the Associated Loads of Demand Side Programme f in Trading Interval t; and

(c) SOMS(l,awt) is the Sent Out Metered Schedule of Associated Load l in Trading Interval awt.

3.3 Calculate AdjustmentWindowBaselineEnergy(f,t) for Demand Side Programme f for Trading Interval t as:

$$AdjustmentWindowBaselineEnergy(f,t) = \frac{1}{2} \times \sum_{awt \in AdjustmentWindow(f,e,d)} \left(\frac{1}{N(f,d))} \times \sum_{s \in SelectedDays(f,d)} \left(-1 \times \sum_{l \in AssocLoads(f,t)} SOMS\big(l, prevt(s,awt)\big) \right) \right)$$

where:

(a) awt∈AdjustmentWindow(f, e, d) denotes the Trading Intervals in the Adjustment Window for Demand Side Programme f for DSP Dispatch Event e for Event Day d as determined in step 3.1;

(b) N(f,d)) is the number of Selected Days for Demand Side Programme f on Event Day d as determined in steps 1.4 ~~or 1.8 as relevant~~;

(c) s∈SelectedDays(f,d)) denotes the Selected Days for Demand Side Programme f on Event Day d as determined in steps 1.4 ~~or 1.8 as relevant~~;

(d) l∈AssocLoads(f,t) denotes the Associated Loads of Demand Side Programme f in Trading Interval t;

(e) prevt(s,awt) is the Trading Interval in Selected Day s that commences at the same time of day as Trading Interval awt; and

(f) SOMS(l,prevt(s,awt) is the Sent Out Metered Schedule of Associated Load l in the Trading Interval in Selected Day s that commences at the same time of day as Trading Interval awt.

3.4 Calculate the BaselineAdjustment(f,t) for Demand Side Programme f in Trading Interval t as:

$$BaselineAdjustment(f,t) = Min\left(Max\left(\begin{matrix} 0.2 \times |AdjustmentWindowBaselineEnergy((f,\mathrm{t}))|, \\ -2 \times |AdjustmentWindowBaselineEnergy(f,\mathrm{t}))|, \\ AdjustmentWindowActualEnergy(f,\mathrm{t})) - AdjustmentWindowBaselineEnergy(f,\mathrm{t}) \end{matrix} \right) \right)$$

where:

(a) AdjustmentWindowBaselineEnergy(f,t) is the quantity calculated for Demand Side Programme f as determined in step 3.3; and

(b) AdjustmentWindowActualEnergy(f,t) is the quantity calculated for Demand Side Programme f for Trading Interval t in step 3.2.

3.5 Calculate the AdjustedBaselinEnergy (f, t) for the Demand Side Programme f for Trading Interval t as:

$$AdjustedBaselineEnergy(f,t) = UnadjustedBaselineEnergy(f,t) + BaselineAdjustment(f,\mathrm{t})$$

where:

(a) UnadjustedBaselineEnergy(f,t) is the quantity calculated for Demand Side Programme f for Trading Interval t in step 2.1; and

(b) BaselineAdjustment(f,t) is the quantity calculated for Demand Side Programme f for Trading Interval t in step 3.4

Step 4. Calculate Relevant Demand

4.1 Calculate the Relevant Demand of Demand Side Programme f for Trading Interval t as:

(a) the AdjustedBaselineEnergy(f, t) calculated in step 3.5 multiplied by 2 to convert it to a MW quantity, if AEMO is required to use the Adjusted Baseline Method under clause 2.29.5AH; or

(b) the UnadjustedBaselineEnergy(f,t) calculated in step 2.1 multiplied by 2 to convert it to a MW quantity, if AEMO is required to use the Unadjusted

Baseline Method for Demand Side Programme f in Trading Interval t under clause 2.29.5AH.

Step 5. Determine Associated Load Baseline Energy

5.1 Calculate the Associated Load Baseline Energy of Associated Load l of Demand Side Programme f for Trading Interval t on Event Day d as:

$$AssociatedLoadBaselineEnergy(l,t) = \frac{1}{N(f,d)} \times \sum_{s \in SelectedDays(f,d)} SOMS\big(l, prevt(s,t)\big)$$

where:

(a) N(f, d) is the number of Selected Days for Demand Side Programme f on Event Day d as determined in step 1.4 ~~or 1.8 as relevant~~;

(b) s∈Selected Days(f,d) denotes the Selected Days for Demand Side Programme f on Event Day d as determined in steps 1.4 ~~or 1.8~~ as relevant;

(c) prevt(s,t) is the Trading Interval in Selected Day s that commences at the same time of day as Trading Interval t; and

(d) SOMS(l,prevt(s,t)) is the Sent Out Metered Schedule of Associated Load l in Trading Interval prevt(s,t).

…