Electricity Industry (Wholesale Electricity Market) Regulations 2004

Wholesale Electricity Market Amendment (Reserve Capacity Reform) Rules 2023

Commencement

- The amending rules set out in Schedule 1 come into operation at a time specified by the Minister in a notice published in the Gazette.

- The amending rules set out in Schedules 2, 3 and 4 come into operation at a time specified by the Minister in a notice published in the Gazette. Different days may be specified for different provisions.

Where there are market rules made by the Minister for Energy in accordance with regulation 7(5) of the Electricity Industry (Wholesale Electricity Market) Regulations 2004 prior to the date this Instrument is made which are specified to come into operation on the same day as the amending rules set out in this Instrument, the amending rules set out in this Instrument come into operation immediately after the commencement of those market rules.

Schedule 1

1.   Section 1.63 added

1.1   Insert the following new section 1.63:

1.63.   General Transitional Provisions – Operational Matters

1.63.1.   Notwithstanding clause 4.5.12(d), the ESR Duration Requirement for the 2024 Reserve Capacity Cycle is 8 Trading Intervals.

1.63.2.   Notwithstanding clause 4.16.1, the ERA is not required to publish a Flexible Benchmark Reserve Capacity Price for the 2024 Reserve Capacity Cycle.

2.   Clause 2.16.13B amended

2.1   Clause 2.16.13B(d) is amended by inserting 's' to the term 'Benchmark Reserve Capacity Price'.

3.   Section 2.26 amended

3.1   The heading for section 2.26 is amended by deleting the words 'and the Methodology for Setting the Benchmark Reserve Capacity Price'.

3.2   Delete clause 2.26.3.

3.3   Delete clause 2.26.3A.

3.4   Delete clause 2.26.4.

3.5   Delete clause 2.26.5.

4.   Clause 2.27A.7 amended

4.1   Clause 2.27A.7(aA) is amended by deleting the words ' Preliminary RCM Constraint Equations and'.

5.   Clause 2.29.5E amended

5.2   Clause 2.29.5E(f)(ii) is amended by deleting the word 'DSM' and replacing it with the word 'DSP'.

6.   Clause 3.11B.2 amended

6.1   Clause 3.11B.2(b) amended by deleting the words ' in a major Australian newspaper' and replacing them with the words 'on at least one major tender portal'.

7.   Clause 3.18.4 amended

7.1   Clause 3.18.4(f) is amended by deleting the word 'methodology' and replacing it with the word 'method'.

7.2   Clause 3.18.4(g) is amended by deleting the word 'methodology' and replacing it with the word 'method'.

8.   Clause 3.18E.8 amended

8.1   Clause 3.18E.8 is amended by inserting the words ',including Demand Side Programme capacity,' immediately after the words 'Network in service and capacity'.

9.   Section 4.1. amended

9.1   Clause 4.1.3(c) is amended by:

(a)   deleting the words 'the start of the first Trading Interval' and replacing it with the word '8:00 AM'; and

(b)   deleting the words ' the end of the last Trading Interval' and replacing it with the word '8:00 AM'.

9.2   Clause 4.1.8 is amended by deleting the words '17June' and replacing them with the words '10 June'.

9.3   Clause 4.1.10 is amended by deleting the words '17 June' and replacing them with the words '10 June'.

9.4   Clause 4.1.13 is amended by deleting the word 'DSM' and replacing it with the word 'DSP'.

9.5   Clause 4.1.15 is amended by deleting the word 'amount' and replacing it with the word 'quantity'.

9.6   Clause 4.1.19 is amended by inserting the letter 's' to the word 'Price'.

9.7   Clause 4.1.21(b) is amended by deleting the word 'DSM' and replacing it with the word 'DSP'.

10.   Section 4.1A. deleted

10.1   Delete section 4.1A.

11.   Section 4.2. amended

11.1   Clause 4.2.1 is amended by deleting the clause and replacing it with the following:

4.2.1.   The purpose of the Reserve Capacity Expression of Interest is for a person to notify AEMO of the amount of new Energy Producing System and Demand Side Programme capacity they intend to make available as Peak Capacity and Flexible Capacity in the Capacity Year to which the Expression of Interest relates.

11.2   Clause 4.2.4(b) is amended by deleting the words 'in local and national media which, in the opinion of AEMO, is likely to be seen by potential suppliers of Reserve Capacity' and replacing them with the words 'on at least one major tender portal'.

12.   Clause 4.3.1(i) amended

12.1   Clause 4.3.1(i)(iii) is amended by inserting the word 'and' after the semi-colon at the end of the clause.

12.2   Clause 4.3.1(i)(iv) is amended by deleting the words '; and' at the end of the clause and replacing them with a full stop.

12.3   Delete clause 4.3.1(i)(v).

13.   Section 4.4 amended

13.1   Clause 4.4.2 is amended by deleting the words 'clauses 4.2.7(b) and 4.4B.4' and replacing them with the words 'clause 4.2.7(b)'.

13.2   Clause 4.4.3 is amended by deleting the words 'clauses 4.2.7(b) and 4.4B.4' and replacing them with the words 'clause 4.2.7(b)'.

14.   Section 4.4A amended

14.1   Clause 4.4A.1 is amended by:

(a)   deleting the word 'Where' and replacing it with the word 'If';

(b)   deleting the words 'that is not' and replacing them with the words 'other than'; and

(c)   deleting the words ' with less than 10 MW of Capacity Credits assigned to the Demand Side Programme at the time the notice is given or required to be given under this clause 4.4A.1'.

14.2   Insert the following new clause 4.4A.1A:

4.4A.1A.   If a Market Participant holding Capacity Credits associated with a Demand Side Programme does not intend to apply for any Capacity Credits in a future Reserve Capacity Cycle, the Market Participant must:

(a)   notify AEMO of the date at which it expects its Reserve Capacity Obligations to cease; and

(b)   subject to clause 4.4A.5, ensure that the date given under clause 4.4A.1A(a) is not less than three years from the date the notice is given to AEMO.

14.3   Clause 4.4A.2 is amended by:

(a)   inserting the words 'or clause 4.4A.1A' immediately after the words 'under clause 4.4A.1'; and

(b)   inserting the words ',as applicable' immediately after the words 'WEM Website'.

14.4   Clause 4.4A.2(c) is amended by inserting the words 'Peak Capacity Credits and Flexible ' immediately before the words 'Capacity Credits'.

14.5   Clause 4.4A.2(e) is amended by inserting the words ' or the date that Reserve Capacity Obligations will cease' immediately after the words 'of the Facility'.

14.6   Clause 4.4A.3 is amended by:

(a)   inserting the words 'or the date that Reserve Capacity Obligations will cease' immediately after the words 'of a Facility'; and

(b)   inserting the words ' or clause 4.4A.1A' immediately after the words 'clause 4.4A.1'.

14.7   Clause 4.4A.4 is amended by inserting the words 'or the revised date that Reserve Capacity Obligations will cease' immediately after the words 'of the Facility'

14.8   Clause 4.4A.5 is amended by:

(a)   inserting the words 'or clause 4.4A.1A' after the words 'clause 4.4A.1';

(b)   deleting the words 'may specify an expected closure date of less than three years where' and replacing them with the words 'may specify an expected closure date or date that the Reserve Capacity Obligations will cease less than three years from the date the notice is given to AEMO if';

(c)   inserting the words ', or the Market Participant does not intend to apply for any Capacity Credits in relation to the Facility in a future Reserve Capacity Cycle' immediately after the words 'the Facility is to cease operation permanently'.

14.9   Clause 4.4A.6 is amended by deleting the words 'clause 4.4A.1' and replacing them with the words 'clause 4.4A.1 or clause 4.4A.1A'.

14.10 Clause 4.4A.7 is amended by deleting the words 'clause 4.4A.1' and replacing them with the words 'clause 4.4A.1 or clause 4.4A.1A'.

15.   Section 4.4B amended

15.1 Clause 4.4B.2 is amended by deleting the word 'March' and replacing it with the word 'May'.

15.2 Clause 4.4B.2(b) is amended by inserting the words ' or clause 4.4A.1A' immediately after the words 'under clause 4.4A.1'.

15.3 Clause 4.4B.2(c) is amended by deleting the word 'and' at the end of the clause.

15.4 Clause 4.4B.2(d) is amended by deleting the full stop at the end of the clause and replacing it with the words '; and'.

15.5 Insert the following new clause 4.4B.2(e):

(e)   preliminary forecasts of peak demand determined under clause 4.5.10(a)(iv) for the third Capacity Year of the Long Term PASA Study Horizon.

15.6 Clause 4.4B.3 is amended by deleting the words '15 April' and replacing them with the words '12 June'.

15.7 Clause 4.4B.4 is amended by deleting the words 'Preliminary RCM Constraint Equations and' in each of the three occasions they appear in the clause.

15.8 Clause 4.4B.4(b) is amended by deleting the word 'where' and replacing it with the word 'if'.

15.9 Clause 4.4B.4A is deleted.

15.10 Clause 4.4B.5 is amended by deleting the words '15 April' and replacing them with the words '12 June'.

15.11 Clause 4.4B.5(b) amended by inserting the word 'preliminary' immediately before the words 'estimate of the Thermal Network Limits'.

15.12 Clause 4.4B.5(d) amended by inserting the word 'preliminary' immediately before the words 'estimate of the configuration'.

15.13 Clause 4.4B.5(e) amended by inserting the words 'under clause 4.4B.5(d)', immediately after the words 'for the Reserve Capacity Cycle'.

15.14 Clause 4.4B.6 is amended by:

(a)   deleting the words '20 May' and replacing them with the words '19 June';

(b)   deleting the words 'the following information' and replacing them with the words 'the information provided by each Network Operator under clause 4.4B.5'; and

(c)   deleting subclauses (a) and (b) and replacing the semi-colon after the words 'for the Reserve Capacity Cycle' with a full stop.

15.15 Insert the following new clause 4.4B.7:

4.4B.7. By 5:00 PM on the fifth Business Day after the date specified in clause 4.1.11, AEMO must provide each Network Operator, in respect of its Network for the Reserve Capacity Cycle:

(a)   details of each Facility specified in an application for Certified Reserve Capacity submitted under clause 4.9.1 for the Reserve Capacity Cycle, including the information in clause 4.4.1;

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

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

(d)   details of any NCESS Contracts procured by AEMO which are expected to be in service by 1 October of Year 3 of the Reserve Capacity Cycle, and is expected to impact information provided by a Network Operator under clause 4.4B.9; and

(e)   forecasts of peak demand determined under clause 4.5.10(a)(iv) for the third Capacity Year of the Long Term PASA Study Horizon, as published in the Electricity Statement of Opportunities.

15.16   Insert the following new clause 4.4B.8:

4.4B.8. By 5:00 PM on the 25th Business Day after the date specified in clause 4.1.11, each Network Operator must, in respect of its Network, reasonably estimate the configuration at peak demand, and associated Thermal Network Limits of its Network:

(a)   by:

    i.   assuming an ambient temperature of 41 degrees Celsius;

    ii.   taking into account:

        1.   all new Network augmentations that will be in-service, including separate Thermal Network Limits for Facilities nominated to be classified as Network Augmentation Funding Facilities;

        2.   all transmission Network assets scheduled to be retired; and

        3.   all NCESS Contracts expected to be in-service,

        as at 1 October of Year 3 of the Reserve Capacity Cycle;

    iii.   including the connection of new Facilities notified by AEMO under clauses 4.4B.7(a) and 4.4B.7(b); and

iv.   including the impact of any Facilities notified by AEMO under clause 4.4B.7(b); and

(b)   in accordance with the WEM Procedure referred to in clause 2.27A.11(b)(i).

15.17   Insert the following new clause 4.4B.9:

4.4B.9. By 5:00 PM on the 25th Business Day after the date specified in clause 4.1.11, each Network Operator must provide the following information in respect of its Network to AEMO:

(a)   the estimated proportion of the peak demand of its Network as at 1 October of Year 3 of the Reserve Capacity Cycle determined under clause 4.4B.8 at each Electrical Location on its Network;

(b)   its estimate of the Thermal Network Limits of its Network taking into account all new Network augmentations that will be in-service by the relevant Capacity Year specified in applications for Early Certified Reserve Capacity under section 4.28C, including separate Thermal Network Limits for Facilities nominated to be classified as Network Augmentation Funding Facilities;

(c)   the Electrical Location and identity of any new load, or increase of an existing load, equal to or greater than 10 MW that the relevant Network Operator expects to be connected to its Network and in-service by 1 October of Year 3 of the Reserve Capacity Cycle;

(d)   in the form of RCM Limit Advice, its estimate of the configuration and associated Thermal Network Limits of its Network as at 1 October of Year 3 of the current Reserve Capacity Cycle determined under clause 4.4B.8; and

(e)   an explanation for any changes to the RCM Limit Advice provided to AEMO for the Reserve Capacity Cycle under clause 4.4B.9(d) from the RCM Limit Advice provided to AEMO for a previous Reserve Capacity Cycle.

16.   Section 4.5 amended

16.1   Clause 4.5.2(b) is amended by deleting the word 'Management' and replacing it with the word 'Programme'.

16.2   Clause 4.5.3A(b) is amended by deleting the word 'Contractual' and replacing it with the word 'Contract' in both times it appears in the clause.

16.3   Clause 4.5.6 is amended by deleting the word 'where' and replacing it with the word 'if'.

16.4   Clause 4.5.8 is amended by deleting the word 'Where' and replacing it with the word 'If'.

16.5   Clause 4.5.9(a)(i) is amended by:

(a)   deleting the words '7.6% of' at the beginning of the clause; and

(b)   inserting the words 'multiplied by the proportion of Capacity Credits expected to be unavailable at the time of peak demand due to Forced Outages based on Forced Outage rates calculated in accordance with the WEM Procedure specified in clause 4.9.10, excluding Forced Outages of Facilities to which clause 4.11.1A applies' immediately after the words '(including transmission losses and allowing for Intermittent Loads)'.

16.6   Clause 4.5.9(b) is amended by:

(a)   deleting the number '0.002' and replacing it with the number '0.0002'; and

(b)   deleting the words ' and taking into account transmission network capabilities including constraints'.

16.7   Clause 4.5.10 is amended by inserting the words 'under clauses 4.5.2, 4.5.2A, 4.5.4, 4.5.5, 4.5.6 and 4.5.8' immediately after the words 'information assembled'.

16.8   Clause 4.5.10(a) is amended by deleting the words 'assess the extent to which the anticipated installed capacity of the Energy Producing Systems and Demand Side Management capacity is capable of satisfying the Planning Criterion, identifying any capacity shortfalls' and replacing them with the words 'forecast the peak demand, annual energy, and demand in each Trading Interval'.

16.9   Insert the following new clause 4.5.10(aA):

(aA)   assess the extent to which the anticipated installed capacity of the Energy Producing Systems and Demand Side Programmes is capable of satisfying the Planning Criterion (taking into account network congestion), identifying any shortfalls in Peak Capacity in each Relevant Year in the Long Term PASA Study Horizon, for the scenario described in clause 4.5.10(a)(iv);

16.10   Clause 4.5.10(b) is amended by:

(a)   inserting the words 'expected peak demand and the corresponding Peak' immediately after the words 'forecast the'; and

(b)   deleting the words 'and corresponding expected peak demand'.

16.11   Clause 4.5.10(b)(i) is amended by:

(a)   inserting the word 'Peak' immediately before the words 'Reserve Capacity';

(b)   deleting the word 'capacity' and replacing it with the word 'Peak Capacity';

(c)   deleting the words 'the Planning Criterion' and replacing them with the words 'the requirements specified in clauses 4.5.9(a) and 4.5.9(b) assuming no network congestion'.

16.12   Clause 4.5.10(c) is amended by inserting the words 'and which cannot be addressed by additional Peak Capacity outside that sub-region' after the word 'factors'.

16.13   Clause 4.5.10(d) is amended by deleting the words '4.5.10(a)'and replacing it with the words '4.5.10(aA)'.

16.14   Clause 4.5.10(e) is amended by:

(a)   deleting the word 'capacity' before the word 'requirements' and replacing it with the words 'Peak Capacity';

(b)   deleting the word 'capacity' before the word 'requirement' and replacing it with the words 'Peak Capacity'.

16.15   Clause 4.5.10(e)(ii) is amended by inserting the word 'Peak' immediately before the words 'Reserve Capacity'.

16.16   Clause 4.5.12 is amended by deleting the words 'second and third Capacity Years' and replacing them with the words 'third Capacity Year'.

16.17   Clause 4.5.12(a) is amended by deleting the word '[Blank]' and replacing it with the following:

'the Availability Duration Gap Load Scenario, which is the load scenario described in clause 4.5.10(a)(iv), adjusted as if:

i.   each Electric Storage Resource which has Capacity Credits for any future Capacity Year was dispatched to discharge evenly across its Peak Electric Storage Resource Obligation Intervals, adjusted to reflect the Indicative Peak Electric Storage Resource Obligation Intervals for that Capacity Year;

ii.   all Demand Side Programmes with Capacity Credits for a future Capacity Year were activated during the Capacity Year so as to minimise the peak demand during that Capacity Year; and

iii.   any other Facility or Separately Certified Component that is expected to have a Peak Reserve Capacity Obligation Quantity of zero in some Trading Intervals and greater than zero in other Trading Intervals is activated during the Capacity Year so as to minimise the peak demand during that Capacity Year;'

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

(b)   the Indicative Peak Electric Storage Resource Obligation Intervals;

16.19   Clause 4.5.12(c) is deleted and replaced with the following:

(c)   Availability Duration Gap, which is the maximum number of Trading Intervals adjacent to the Indicative Peak Electric Storage Resource Obligation Intervals in any Trading Day in the Availability Duration Gap Load Scenario in which demand is greater than the maximum demand in any of the Indicative Peak Electric Storage Resource Obligation Intervals for that Trading Day;

16.20   Insert the following new clause 4.5.12(d):

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

16.21   Insert the following new clause 4.5.12(e):

(e)   the maximum over all Trading Days in the Availability Duration Gap Load Scenario of the greater of zero and:

  i.   the maximum consumption in MWh in a Trading Interval that is not an Indicative Peak Electric Storage Resource Obligation Interval in that Trading Day; less

  ii.   the maximum consumption in MWh in any Indicative Peak Electric Storage Resource Obligation Interval in that Trading Day,

multiplied by 2 to convert to MW;

16.22   Insert the following new clause 4.5.12(f):

(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**");

16.23   Insert the following new clause 4.5.12(g):

(g)   the Peak Demand Side Programme Dispatch Requirement;

16.24   Insert the following new clause 4.5.12(h):

(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

16.25   Insert the following new clause 4.5.12(i):

(i)   the minimum capacity required to be provided by Capability Class 1 and Capability Class 3 capacity if clause 4.5.9(b) is to be satisfied. This minimum capacity is to be set at a level such that if clauses 4.5.9(a) and 4.5.9(b) and the criteria for evaluating Outage Plans set out in clause 3.18E.8 were to be applied to the Availability Gap Load Scenario, then it would be possible to satisfy the Planning Criterion and the Outage Evaluation Criteria using, to the extent that the capacity is anticipated to provide Certified Reserve Capacity, the anticipated installed Capability Class 1 and Capability Class 3 capacity and to the extent that further Capability Class 1 and Capability Class 3 capacity would be required, an appropriate mix of Capability Class 1 and Capability Class 3 capacity to make up that shortfall.

16.26 Clause 4.5.13(a)(v) is amended by deleting the word 'Management' and replacing it with the word 'Programme'.

16.27 Clause 4.5.13(a)(vA) is amended by deleting the word 'Reserve' and replacing it with the word 'Peak'.

16.28 Clause 4.5.13(a)(vii) is amended by deleting the word 'methodology' and replacing it with the word 'method'.

16.29 Clause 4.5.13(c) is amended by deleting the word 'Management' and replacing it with the words 'Programme capability'.

16.30 Clause 4.5.13(d) is deleted and replaced with the following:

(d)   the sub-regions of the SWIS in which AEMO has identified capacity shortfalls under clause 4.5.10(c), the size of those shortfalls, and the expected energy not served in each sub-region for each Capacity Year and each demand growth scenario considered in the study;

16.31 Clause 4.5.13(e) is amended by deleting the words 'demand side' and replacing them with the words ' Demand Side Programme'.

16.32 Clause 4.5.13(g) is amended by deleting the words 'second and third Capacity Years' and replacing them with the words 'third Capacity Year':

16.33 Insert the following new clause 4.5.15A:

4.5.15A.   To the extent practicable, the Coordinator must coordinate the reviews under clause 4.5.15 and clause 4.16.11, so they are conducted at the same time.

16.34 Clause 4.5.19 is amended by deleting the word 'Where' and replacing it with the word 'If'.

16.35 Clause 4.5.20(a) is amended by deleting the word 'methodology' and replacing it with the word 'method'.

17.   Clause 4.5A.7 amended

17.1 Clause 4.5A.7(b) is amended by deleting the word 'methodology' and replacing it with the word 'method'.

18.   Clause 4.5B.8 amended

18.1 Clause 4.5B.8 is amended by:

(a)   deleting the word 'where' and replacing it with the word 'if'; and

(b)   deleting the double space after the word 'it,' and replacing it with a single space.

19.   Clause 4.7.3 amended

19.1 Clause 4.7.3(b) is deleted.

19.2 Clause 4.7.3(c) is renumbered to be clause 4.7.3(b).

20. Section 4.8 amended

20.1 Clause 4.8.1 is amended by:

(a) deleting the words 'Subject to clause 4.8.2, a' and replacing them with the word 'A'; and

(b) inserting the words 'or component of a Facility' immediately after the words 'provided by a Facility'.

20.2 Clause 4.8.1(a) is amended by:

(a) inserting the words 'or component of a Facility' immediately after the words 'the Facility'; and

(b) inserting the words 'or Interruptible Load' immediately after the words 'than a Network'.

20.3 Clause 4.8.1(b) is amended by:

(a) inserting the words 'or component of a Facility' immediately after the words 'the Facility';

(b) inserting the word 'relevant' after the words 'to have the'; and

(c) inserting the words 'or Interruptible Load' immediately after the words 'than a Network'.

20.4 Clause 4.8.2 is deleted.

20.5 Clause 4.8.3 is deleted.

21. Section 4.8A amended

21.1 Clause 4.8A.1 is amended by:

(a) deleting the word 'Where' and replacing it with the word 'If'; and

(b) deleting the word 'facility' and replacing it with the word 'Facility' everywhere it occurs.

21.2 Clause 4.8A.1(a) is amended by:

(a) inserting the letter 's' at the end of the word 'Type';

(b) deleting the word 'where' and replacing it with the word 'if'; and

(c) deleting the word 'facility' and replacing it with the word 'Facility' everywhere it occurs.

21.3 Clause 4.8A.1(b) is amended by deleting the word 'facility' and replacing it with the word 'Facility' everywhere it occurs.

21.4 Clause 4.8A.3 is amended by:

(a) inserting the words 'has not submitted an Expression of Interest under clause 4.2.6, and' immediately after the words 'A person that';

(b) deleting the words 'Facility Technology Type' and replacing them with the words 'Facility Technology Types'; and

(c)   deleting the word 'facility' and replacing it with the word 'Facility' everywhere it occurs.

21.5   Clause 4.8A.3(a) is amended by deleting the word 'facility' and replacing it with the word 'Facility' everywhere it occurs.

21.6   Clause 4.8A.3(b) is amended by:

(a)   inserting the word 'Peak' after the word 'Conditional'; and

(b)   removing the word 'facility' and replacing it with the word 'Facility'.

21.7   Clause 4.8A.3(c) is amended by deleting the words 'for a new Facility subject to an NCESS Contract'.

21.8   Clause 4.8A.4 is deleted and replaced by the following:

4.8A.4.   An application under clause 4.8A.3:

(a)   must include the information required under clause 4.4.1; and

(b)   must be submitted at least 25 Business Days prior to the date and time specified in clause 4.1.11

21.9   Clause 4.8A.5 is amended by deleting the word 'Where' and replacing it with the word 'If'.

21.10   Clause 4.8A.5(a) is amended by:

(a)   inserting the letter 's' at the end of the word 'Type'; and

(b)   deleting the word 'facility' and replacing it with the word 'Facility' everywhere it occurs.

21.11   Clause 4.8A.5(b) is amended by deleting the word 'facility' and replacing it with the word 'Facility' everywhere it occurs.

21.12   Clause 4.8A.5(c) is amended by deleting the words ', in which case, the application submitted by the applicant under clause 4.8A.3 will be deemed to be withdrawn and then resubmitted under clause 4.8A.3 once AEMO receives the clarification or further information'.

21.13   Clause 4.8A.6 is amended by:

(a)   deleting the word 'facility' and replacing it with the word 'Facility' everywhere it occurs; and

(b)   deleting the word '30 days' and replacing it with the words '10 Business Days'.

21.14   Clause 4.8A.7(a) is amended by:

(a)   deleting the word 'facility' and replacing it with the word 'Facility' everywhere it occurs; and

(b)   deleting the words ' or an unregistered facility under clause 1.45.9'.

21.15   Clause 4.8A.7(b) is deleted and replaced with the following:

(b)   [Blank]

21.16 Clause 4.8A.7(d) is amended by deleting the letter 's' from the word 'clauses' and by deleting the words '1.45.4, 1.45.8 or'.

22. Section 4.9 amended

22.1 Clause 4.9.1(b) is amended by:

(a) deleting the word '4.1.7' and replacing it with '4.1.11'; and

(b) inserting the words ', provided the application only relates to Peak Capacity' immediately after the words 'which the application relates'.

22.2 Clause 4.9.2 is amended by inserting the words 'or component of that Facility' immediately after the words 'that Facility'.

22.3 Clause 4.9.3(b) is amended by inserting the words 'or component of that Facility' immediately after the words ''Generating System'.

22.4 Clause 4.9.3(bA) is amended by inserting the words 'or component of that Facility' immediately after the words 'for a Facility'.

22.5 Clause 4.9.5 is amended by:

(a) inserting the word 'Peak' immediately after the words 'If AEMO assigns'; and

(b) inserting the word 'Peak' immediately after the word 'Conditional'.

22.6 Clause 4.9.5(a) is amended by inserting the word 'Peak' immediately before the words 'Certified Reserve Capacity' everywhere they occur.

22.7 Clause 4.9.5(b) is amended by inserting the word 'Peak' immediately before the words 'Certified Reserve Capacity' everywhere they occur.

22.8 Clause 4.9.5(c) is amended by:

(a) inserting the word 'Peak' immediately after the words 'upon which the Conditional';

(b) deleting the words 'subject to' and replacing them with the words 'except that';

(c) inserting the word 'Peak' immediately after the words 'except that the';

(d) deleting the word 'being' and replacing it with the words 'must be redetermined and'; and

(e) deleting the words 'clause 4.11.2(b)' and replacing them with the words 'the Relevant Level Method for the current Reserve Capacity Cycle'.

22.9 Clause 4.9.5(c)(i) is amended by inserting the word 'Peak' immediately before the words 'Certified Reserve Capacity'.

22.10 Clause 4.9.5(c)(iii) is amended by deleting the word 'DSM' and replacing it with the word 'DSP'.

22.11   Clause 4.9.5(d) is amended by inserting the word 'Peak' immediately before the words 'Certified Reserve Capacity' everywhere they occur.

22.12   Clause 4.9.7A is amended by:

(a)   deleting the word 'Where' and replacing it with the word 'If';

(b)   deleting the words 'certification of Reserve' and replacing them with the words 'certification of Peak';

(c)   inserting the words 'AEMO must process' immediately before the words 'the application';

(d)   deleting the words 'will be processed by AEMO'; and

(e)   inserting the word 'Peak' immediately after the words 'at the time AEMO next processes applications for'.

22.13   Clause 4.9.8(a) is amended by deleting the words 'quantity of the Certified Reserve Capacity' and replacing them with the words 'quantity of Peak Certified Reserve Capacity'.

22.14   Clause 4.9.8(b) is amended by inserting the word 'Peak' immediately before the words 'Certified Reserve Capacity' everywhere they occur.

22.15   Clause 4.9.9(a) is amended by deleting the word 'amount' and replacing it with the word 'quantity'.

22.16   Clause 4.9.9(c) is amended by deleting the word 'DSM' and replacing it with the word 'DSP'.

22.17   Clause 4.9.9(d) is amended by inserting the word 'Peak' immediately after the words 'the case of Conditional'.

22.18   Clause 4.9.9(f) is amended by deleting the words 'methodology described in clause 4.11.2(b)' and replacing it with the words 'Relevant Level Method'.

23.   Section 4.10 amended

23.1   Clause 4.10.1 is amended by:

(a)   deleting the word 'where' and replacing it with the word 'if'; and

(b)   deleting the words ', the following information'.

23.2   Clause 4.10.1(bA) is amended by:

(a)   inserting the word 'Peak' immediately after the words 'applications for Conditional'; and

(b)   inserting the words ', or if the Facility is a Demand Side Programme,' immediately after the words 'Reserve Capacity'.

23.3   Clause 4.10.1(bA)(i) is amended by inserting the words 'or other evidence from the Network Operator that the Facility will have an Arrangement for Access' immediately after the words 'in respect of the Facility'.

23.4   Clause 4.10.1(bA)(iii) is amended by deleting the words 'except where the Facility is a Demand Side Programme,'.

23.5   Clause 4.10.1(c)(ii) is amended by inserting the word 'Peak' immediately after the words 'applications for Conditional'.

23.6   Clause 4.10.1(dA) is amended by deleting the word 'where' and replacing it with the word 'if'.

23.7   Clause 4.10.1(e)(iv) is amended by:

(a)   deleting the word '(Where' and replacing it with the word 'If';

(b)   inserting the words 'AEMO must use' immediately before the words 'a temperature'; and

(c)   Deleting the words 'will be assumed)' after the words '41 degrees Celsius'.

23.8   Clause 4.10.1(e)(v) is amended by deleting the footnote.

23.9   Clause 4.10.1(e)(v)(1) is amended by deleting the word 'where' and replacing it with the word 'if'.

23.10   Clause 4.10.1(e)(v)(2) is amended by deleting the words 'for Peak Trading Intervals' and replacing it with the words 'during Capability Class 1 Availability Assessment Intervals'.

23.11   Clause 4.10.1(f)(i) is deleted and replaced as follows:

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

23.12   Insert the following new clause 4.10.1(f)(iA):

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;

23.13   Clause 4.10.1(f)(ii) is amended by:

(a)   deleting the words '200 hours' and replacing them with the words 'the Peak Demand Side Programme Dispatch Requirement for that Reserve Capacity Cycle'; and

(b)   deleting the word 'hours' and replacing it with the words 'Trading Intervals'.

23.14   Clause 4.10.1(f)(iii) is amended by:

(a)   deleting the words 'hours per day' and replacing them with the words 'Trading Intervals per Trading Day';

(b)   deleting the word 'Reserve' and replacing it with the word 'Peak'; and

(c)   deleting the words 'twelve hours' and replacing them with the words 'twenty four Trading Intervals'.

23.15   Clause 4.10.1(fA) is amended by deleting the word 'where' and replacing it with the word 'if'.

23.16   Clause 4.10.1(fA)(iii) is amended by inserting the word 'Peak' immediately after the words 'across the'.

23.17   Clause 4.10.1(fA)(v) is amended by:

(a)   inserting the word 'Peak' immediately after the words 'account the'; and

(b)   deleting the letter 's' from the word 'Obligations'.

23.18   Clause 4.10.1(fD)(iii) is amended by inserting the word 'Peak' immediately after the words 'across the'.

23.19   Clause 4.10.1(fD)(iv) is amended by deleting the words 'during the' and replacing it with the words 'during their Peak'.

23.20   Clause 4.10.1(h) is amended by inserting the word 'Peak' before the word 'Certified'.

23.21   Clause 4.10.1(k) is amended by:

(a)   deleting the word 'where' and replacing it with the word 'if';

(b)   inserting the word 'Peak' immediately after the word 'Conditional'; and

(c)   deleting the words 'methodology described in clause 4.11.2(b)' and replacing them with the words 'Relevant Level Method'.

23.22   Clause 4.10.2 is amended by:

(a)   deleting the words 'methodology described in clause 4.11.2(b)' and replacing them with the words 'Relevant Level Method'; and

(b)   inserting the word 'Peak' immediately after the word 'Conditional'.

23.23   Clause 4.10.3 is amended by:

(a)   deleting the words 'An application for certification of Reserve Capacity' and replacing them with the words 'A person who intends to apply for Certified Reserve Capacity under clause 4.9.1(a)';

(b)   deleting the words 'methodology described in clause 4.11.2(b)' and replacing them with the words 'Relevant Level Method';

(d)   inserting the word 'Peak' immediately after the word 'assign'; and

(e)   deleting the words 'methodology described in clause 4.11.2(b)' and replacing them with the words 'Relevant Level Method'.

23.24   Clause 4.10.3A(a) is amended by deleting the words 'methodology described in clause 4.11.2(b)' and replacing them with the words 'Relevant Level Method'.

24.   Section 4.10A amended:

24.1   Clause 4.10A.4. is amended by deleting the word 'where' and replacing it with the word 'if'.

24.2   Clause 4.10A.5. is amended by deleting the word 'where' and replacing it with the word 'if'.

24.3   Clause 4.10A.6. is amended by deleting the word 'Where' and replacing it with the word 'If'.

24.4   Clause 4.10A.9. is amended by deleting the word 'Where' and replacing it with the word 'If'.

24.5   Clause 4.10A.10 is amended by deleting the word 'Where' and replacing it with the word 'If'.

25.   Section 4.11 amended

25.1   Clause 4.11.1. is amended by deleting the words 'clause 4.11.12' and replacing them with the words 'clauses 4.11.1A and 4.11.12'.

25.2   Clause 4.11.1(a) is amended by:

(a)   inserting the word 'Peak' before the word 'Certified';

(b)   deleting the word 'amount' and replacing it with the word 'quantity';

(c)   deleting the words 'Intermittent Loads, embedded loads and Parasitic'; and

(e)   deleting the words 'for Peak Trading Intervals' and replacing them with 'during Capability Class 1 Availability Assessment Intervals'.

25.3   Insert the following new sub-clause 4.11.1(aA):

(aA)   the Peak Certified Reserve Capacity for a Non-Intermittent Generating System for a Reserve Capacity Cycle must not exceed the quantity of capacity calculated under clause 4.11.2C;

25.4   Clause 4.11.1(b) is amended by inserting the word 'Peak' before the word 'Certified'.

25.5   Clause 4.11.1(bA) is amended by:

(a)   deleting the word 'where' and replacing it with the word 'if'; and

(b)   inserting the word 'Peak' before the word 'Certified'.

25.6   Clause 4.11.1(bB) is amended by:

(a)   deleting the word 'where' and replacing it with the word 'if'; and

(b)   inserting the word 'Peak' before the word 'Certified'.

25.7   Clause 4.11.1(bC) is amended by inserting the word 'Peak' before the word 'Certified'.

25.8   Clause 4.11.1(bD) is amended by inserting the word 'Peak' before the word 'Certified'.

25.9   Clause 4.11.1(bD)(i) is amended by:

(a)   deleting the word 'Methodology' and replacing it with the word 'Method'; and

(b)   deleting the words 'determined in accordance with clause 4.11.2'.

25.10   Clause 4.11.1(bE) is amended by:

(a)   inserting the word 'Peak' before the word 'Certified'; and

(b)   deleting the word 'Methodology' and replacing it with the word 'Method'.

25.11   Clause 4.11.1(c)(v) is amended by deleting '[Blank]' and replacing it with the words 'during any of the previous three Capacity Years, a Market Participant held Capacity Credits for that Facility, and did not comply with clause 7.10.6A in respect of the Facility; or'.

25.12   Clause 4.11.1(h) is deleted and replaced with the following:

(h)   [Blank]

25.13   Clause 4.11.1(i) is deleted and replaced with the following:

(i)   the Certified Reserve Capacity assigned to a Facility or Separately Certified Component is to be expressed to a precision of 0.001 MW;

25.14   Clause 4.11.1(j) is deleted and replaced with the following:

(j)   the Peak Certified Reserve Capacity for a Demand Side Programme for a Reserve Capacity Cycle must equal:

i.   if the Demand Side Programme has more than one Associated Load, or has a single Associated Load and no Peak Individual Reserve Capacity Requirement Contribution has been calculated for the Associated Load, the quantity nominated for the Demand Side Programme under clause 4.10.1(f)(iA); and

ii.   otherwise, the Individual Reserve Capacity Requirement Contribution of the Associated Load as determined for the first Trading Month of the current Capacity Year less the expected Minimum Consumption provided under clause 2.29.5B(c); and

25.15   Clause 4.11.1(k) is amended by:

(a)   inserting the word 'Peak' before the word 'Certified' in each place it occurs; and

(b)   deleting the word 'where' and replacing it with the word 'if'.

25.16   Clause 4.11.1A is deleted and replaced with the following:

4.11.1A.   Subject to clauses 4.11.1B and 4.11.1C, if a Facility or Separately Certified Component has been in Commercial Operation for at least 12 months and has had a Forced Outage rate greater than the Forced Outage Threshold over the preceding 36 months (or fewer, if it was not in operation for all 36 months), then unless the Facility has, within the previous 12 months, re-entered service after significant maintenance or an upgrade, AEMO must assign a quantity of Peak Certified Reserve Capacity no greater than:

(a)   the quantity of Peak Certified Reserve Capacity that AEMO would otherwise have assigned to the Facility under clause 4.11.1; multiplied by

(b)   1 minus the Forced Outage rate of the Facility or Separately Certified Component during the preceding 36 months (or fewer, if it was not in operation for all 36 months),

where the Forced Outage rate for a Facility or Separately Certified Component for a period is calculated in accordance with the WEM Procedure specified in clause 4.9.10, and AEMO must publish the reasons for its decision on the WEM Website with any confidential information redacted.

25.17   Clause 4.11.1B is amended by:

(a)   deleting the words '4.11.1(h) or 4.11.1(j)' and replacing it with the words ' 4.11.1A'; and

(b)   deleting the words 'in either case'.

25.18   Clause 4.11.C is deleted and replaced with the following:

4.11.C   In making a decision under clause 4.11.1A, AEMO must be satisfied that its decision under clause 4.11.1A would not, on balance, be contrary to the Wholesale Market Objectives.

25.19   Delete clause 4.11.1D.

25.20   Clause 4.11.2 is amended by:

(a)   deleting the word 'Where' and replacing it with the word 'If' at the start of the clause;

(b)   inserting the word 'Peak' before the word 'Certified';

(c)   deleting the word 'clause' after the words 'in accordance with' and replacing it with the word 'section';

(d)   deleting the words 'methodology described in clause 4.11.2(b)' and replacing it with the words 'Relevant Level Method'; and

(e)   deleting the word 'where' and replacing it with the word 'if'.

25.21   Clause 4.11.2(b) is amended by:

(a)   inserting the word 'Peak' before the word 'Certified';

(b)   deleting the word 'Methodology' and replacing it with the word "Method"; and

(c)   deleting the words '4.11.1(h)' and replacing it with the words '4.11.1A'.

25.22   Clause 4.11.2A is amended by deleting the word 'Where' and replacing it with the word 'If' at the start of the clause.

25.23   Insert the following new clause 4.11.2C.:

4.11.2C. The quantity of Peak Certified Reserve Capacity to be assigned to a Non-Intermittent Generating System for a Reserve Capacity Cycle must not exceed:

(a) AEMO's reasonable expectation of the maximum quantity of capacity likely to be available, net of embedded and Parasitic Loads, during the Capability Class 1 Availability Assessment Intervals on each Business Day from the start of the Trading Day starting on 1 October of Year 3 of the Reserve Capacity Cycle to the end of the Trading Day starting on 31 July of Year 4 of the Reserve Capacity Cycle, assuming an ambient temperature of 41 degrees Celsius; multiplied by

(b) the lesser of the Capability Class 1 Availability Assessment Duration and AEMO's reasonable expectation, based on the restrictions specified under clauses 4.10.1(e)(v)(2) or 4.10.1(g), of the number of complete Trading Intervals that the quantity of capacity in clause 4.11.2C(a) could be continuously delivered for; divided by

(c) the Capability Class 1 Availability Assessment Duration.

25.24 Clause 4.11.3 is amended by:

(a) inserting the words 'quantity of Peak' after the word 'The' and before the word 'Certified';

(b) deleting the word 'for' before the words 'an Electric Storage Resource' and replacing it with the words 'to be assigned to';

(c) deleting the words 'for a component of a Scheduled Facility, Semi-Scheduled Facility or Non-Scheduled Facility,';

(d) deleting the word 'where' between the words 'except' and 'clause' and replacing it with the word 'if';

(e) inserting the words 'or clause 4.11.1(bE)' after the word '4.11.1(bD)(i)';

(f) deleting the words 'the quantity of Certified Reserve Capacity to be assigned'; and

(g) inserting the word 'Peak' before the words 'Electric Storage Resource Obligation'.

25.25 Clause 4.11.3A(a) is deleted and replaced with:

(a) determine in Year 1 of a Reserve Capacity Cycle the Trading Intervals in each Trading Day that is classified as the Mid Peak Electric Storage Resource Obligation Intervals from 1 October of Year 3 of the Reserve Capacity Cycle, and publish the Mid Peak Electric Storage Resource Obligation Interval on the

WEM Website (which may be published in the Statement of Opportunities Report) by the date specified in clause 4.1.8;

25.26   Clause 4.11.3A(b) is deleted and replaced with:

(b)   in Years 2 and 3 of a Reserve Capacity Cycle, determine whether the Trading Interval classified as the Mid Peak Electric Storage Resource Obligation Interval remains appropriate for the relevant Capacity Year, and if not, publish the revised Mid Peak Electric Storage Resource Obligation Interval on the WEM Website by the date specified in clause 4.1.8 for the relevant Reserve Capacity Cycle;

25.27   Clause 4.11.3A(c)(i) is amended by:

(a)   inserting the words 'Mid Peak' before the word 'Electric';

(b)   inserting an 's' at the end of the word 'clause'; and

(c)   deleting the words ', including the processes to be followed by AEMO to comply with its obligation to consult Market Participants' and replacing them with 'and 4.11.3A(b)'.

25.28   Clause 4.11.3A(c)(ii) is amended by:

(a)   inserting the words 'Mid Peak' before the word 'Electric';

(b)   inserting an 's' at the end of the word 'clause'; and

(c)   inserting the words 'and 4.11.3A(b)' after the words '4.11.3A(a)'.

25.29   Clause 4.11.3A(c)(iii) is amended by:

(a)   inserting the words 'Mid Peak' before each reference to the the word 'Electric';

(b)   amending each reference to the word 'Intervals' to read 'Interval';

(c)   deleting the word 'are' after the words 'Trading Day' and replacing it with the word 'is'; and

(d)   inserting the words 'or 4.11.3A(b)' after the words '4.11.3A(a)'.

25.30   Clause 4.11.3B is amended by inserting the words 'the Required Levels for' after the 'the sum of'.

25.31   Clause 4.11.3BA(a) is amended by:

(a)   inserting the words 'or clause 4.11.1(aA)' imeadiately after the word '4.11.1(a)'; and

(b)   deleting the word 'where' and replacing it with the word 'if'.

25.32   Clause 4.11.3BA(b) is amended by deleting the words 'under clause 4.11.2(b)' and replacing it with the words 'using the 'Relevant Level Method'.

25.33   Clause 4.11.3BA(b)(ii) is amended by deleting the word 'where' and replacing it with the word 'if'.

25.34 Clause 4.11.3BA(c) is amended by deleting the word 'where' and replacing it with the word 'if'.

25.35 Clause 4.11.3BB is amended by:

(a) inserting the words 'in a Trading Interval' after the word 'Programme';

(b) inserting the words 'in that Trading Interval' before the word 'minus'; and

(c) inserting the word 'Peak' before the words 'Capacity Credits'.

25.36 Clause 4.11.3BC is amended by:

(a) deleting the word 'where' and replacing it with the word 'if' between 'Except' and 'clause';

(b) deleting the words 'under clause 4.11.2(b)' and replacing it with the phrase 'using the Relevant Level Method'; and

(c) inserting the word 'Peak' before the words 'Capacity Credits'.

25.37 Clause 4.11.3BD is amended by:

(a) inserting the word 'Peak' before the words 'Capacity Credits'; and

(b) deleting the word 'where' and replacing it with the word 'if'.

25.38 Clause 4.11.4 is deleted and replaced with:

4.11.4 Subject to clause 4.11.12, when assigning Peak Certified Reserve Capacity, AEMO must assign a Capability Class to apply to the relevant Facility or component of a Facility as follows:

(a) Capability Class 1 if:

i. the Peak Certified Reserve Capacity is not associated with a Facility which is registered as, or is expected to be registered as a Non-Scheduled Facility; and

ii. AEMO reasonably expects the Facility to be available to be dispatched for the MW quantity of its Peak Certified Reserve Capacity for all Trading Intervals in a Capacity Year, allowing for Outages; or

(b) Capability Class 2 if the Peak Certified Reserve Capacity:

i. is not associated with a Facility which is registered as, or is expected to be registered as, a Non-Scheduled Facility; and

ii. is:

1. associated with a Demand Side Programme or Electric Storage Resource; or

2. has energy or availability limitations such that AEMO does not expect it to be available to be dispatched for the MW quantity of its Peak Certified Reserve Capacity in all Trading Intervals in a

Capacity Year but, allowing for Outages, AEMO reasonably expects it to be available to be dispatched for the MW quantity of its Peak Certified Reserve Capacity during all Default Peak Electric Storage Resource Obligation Intervals on each Business Day; and

(c)   otherwise; Capability Class 3.

25.39   Clause 4.11.5(b) is deleted and replaced with:

(b)   request that a Network Operator assess the data and information related to clause 4.10.1(bA) provided to AEMO by or on behalf of an applicant for Certified Reserve Capacity and provide its opinion, acting reasonably, of whether the Facility will be entitled to have network access before the date specified in clause 4.10.1(c)(iii)(7),

25.40   Clause 4.11.6 is amended by deleting the word 'where' and replacing it with the word 'if'.

25.41   Clause 4.11.6(c) is amended by deleting the word 'can' and replacing it with the word 'may' at the start of the clause.

25.42   Clause 4.11.10A is amended by deleting the word 'Where' and replacing it with the word 'If' at the start of the clause.

25.43   Clause 4.11.11 is amended by deleting the word 'Where' and replacing it with the word 'If' at the start of the clause.

26.   Clause 4.12.3 amended

26.1   Clause 4.12.3 is amended to delete the footnote reference at the end of the clause.

27.   Section 4.13 amended

27.1   Clause 4.13.1 is amended by deleting the word 'Where' and replacing it with the word 'If' at the start of the clause.

27.2   Clause 4.13.1A is amended by deleting the word 'where' and replacing it with the word 'if'.

27.3   Clause 4.13.1B is amended by deleting the word 'where' and replacing it with the word 'if'.

27.4   Clause 4.13.1B(b) is amended by inserting the word 'Peak' before the words 'Capacity Credits'.

27.5   Clause 4.13.2(a) is amended by:

(a)   inserting the word 'Peak' before each reference to the word 'Benchmark'; and

(b)   inserting the word 'Peak' before each reference to the word 'Certified'.

27.6   Clause 4.13.2(b) is amended by:

(c)   inserting the word 'Peak' before the word 'Benchmark'; and

(d)   inserting the word 'Peak' before the words 'Capacity Credits'.

27.7 Clause 4.13.2C is amended by deleting the word 'Where' and replacing it with the word 'If' at the start of the clause.

27.8 Clause 4.13.3 is amended by deleting the word 'Where' and replacing it with the word 'If' at the start of the clause.

27.9 Clause 4.13.4 is amended by deleting the word 'Where' and replacing it with the word 'If' at the start of the clause.

27.10 Clause 4.13.6 is amended by deleting the word 'Where' and replacing it with the word 'If' at the start of the clause.

27.11 Clause 4.13.10(a) is amended by inserting the word 'Peak' before each reference to the words 'Capacity Credits' each time it appears throughout the clause.

27.12 Clause 4.13.10C is amended by deleting the words 'under clause 4.11.2(b)' and replacing them with the words 'using the Relevant Level Method'.

27.13 Clause 4.13.11A(b) is amended by:

(a) inserting the word 'relevant' before the word 'Trading'; and

(b) deleting the word 'Month' and replacing it with the word 'Day'.

27.14 Clause 4.13.13(a) is amended by inserting the word 'Peak' before the words 'Capacity Credits'.

27.15 Clause 4.13.14 is amended by deleting the word 'Where' and replacing it with the word 'If' at the start of the clause.

28 Section 4.13A amended

28.1 The heading to Section 4.13A is amended by deleting the word 'DSM' and replacing it with the word 'DSP'.

28.2 Clause 4.13A.1 is amended by:

(a) deleting the word 'Where' and replacing it with the word 'If' at the start of the clause; and

(b) deleting the word 'DSM' and replacing it with the word 'DSP'.

28.3 Clause 4.13A.1(a) is amended by deleting the word 'where' and replacing it with the word 'if' at the start of the clause.

28.4 Clause 4.13A.2. is amended by deleting the word 'DSM' and replacing it with the word 'DSP'.

28.5 Clause 4.13A.2(a) is amended by inserting the word 'Peak' before the word 'Benchmark.

28.6 Clause 4.13A.2(a) is amended by inserting the word 'Peak' before each reference to the words 'Certified Reserve'.

28.7 Clause 4.13A.2(b) is amended by inserting the word 'Peak' before the word 'Benchmark.

28.8 Clause 4.13A.2(b) is amended by inserting the word 'Peak' before the words 'Capacity Credits'.

28.9 Clause 4.13A.3 is amended by:

(a) deleting the word 'Where' and replacing it with the word 'If' at the start of the clause; and

(b) deleting each reference to the word 'DSM' and replacing it with the word 'DSP'.

28.10 Clause 4.13A.4 is amended by:

(a) deleting the word 'where' and replacing it with 'if'; and

(b) deleting each reference to the word 'DSM' and replacing it with the word 'DSP'.

28.11 Clause 4.13A.6 is amended by deleting the word 'DSM' and replacing it with the word 'DSP'.

28.12 Clause 4.13A.7 is amended by deleting each reference to the word 'DSM' and replacing it with the word 'DSP' including in the subclauses.

28.13 Clause 4.13 A.8 is amended by deleting the word 'DSM' and replacing it with the word 'DSP'.

28.14 Clause 4.13A.9 is amended by deleting each reference to the word 'DSM' and replacing it with the word 'DSP' including in the subclauses.

28.15 Clause 4.13A.10 is amended by:

(a) deleting the word 'Where' and replacing it with the word 'If' at the start of the clause; and

(b) deleting each reference to the word 'DSM' and replacing it with the word 'DSP' including in the subclauses.

28.16 Clause 4.13A.11 is amended by:

(a) deleting the word 'Where' and replacing it with the word 'If' at the start of the clause; and

(b) deleting each reference to the word 'DSM' and replacing it with the word 'DSP' including in the subclauses.

28.17 Clause 4.13A.12 is amended by:

(a) deleting the word 'Where' and replacing it with the word 'If' at the start of the clause; and

(b) deleting each reference to the word 'DSM' and replacing it with the word 'DSP'.

28.18 Clause 4.13A.13 is amended by deleting the words 'Where DSM' at the start of the clause and replacing them with the words 'If DSP'.

28.19 Clause 4.13A.15 is amended by:

(a) deleting each reference to the word 'DSM' and replacing it with the word 'DSP'; and

(b) inserting the word 'Peak' before the words 'Capacity Credits'.

28.20 Clause 4.13A.16 is amended by deleting the word 'DSM' and replacing it with the word 'DSP'.

28.21 Clause 4.13A.17 is amended by deleting the word 'DSM' and replacing it with the word 'DSP'.

28.22 Clause 4.13A.18(a) is amended by:

(a) deleting the reference to the word 'where' and replacing it with the word 'if'; and

(b) deleting each reference to the word 'DSM' and replacing it with the word 'DSP'.

28.23 Clause 4.13A.18(b) is amended by:

(a) deleting the reference to the word 'where' and replacing it with the word 'if'; and

(b) deleting each reference to the word 'DSM' and replacing it with the word 'DSP'.

28.24 Clause 4.13A.19 is amended by:

(a) deleting the word 'Where' and replacing it with the word 'If' at the start of the clause; and

(b) deleting each reference to the word 'DSM' and replacing it with the word 'DSP' throughout the clause.

28.25 Clause 4.13A.21 is amended by deleting each reference to the word 'DSM' and replacing it with the word 'DSP' throughout the clause.

28.26 Clause 4.13A.22 is amended by:

(a) deleting the word 'Where' and replacing it with the word 'If' at the start of the clause; and

(b) deleting the word 'DSM' and replacing it with the word 'DSP'.

28.27 Clause 4.13A.23 is amended by deleting each reference to the word 'DSM' and replacing it with the word 'DSP' throughout the clause.

28.28 Clause 4.13A.24 is amended by deleting the word 'DSM' and replacing it with the word 'DSP'.

29 **Clause 4.13.B6 amended**

29.1 Clause 4.13B.6 is amended by deleting the word 'where' and replacing it with the word 'if'.

30 **Section 4.14 amended**

30.1 Clause 4.14.1B is amended by:

(a) deleting the word 'the' after the words 'notice in writing that' and replacing it with the word 'a'; and

(b) inserting the words 'or a Facility Technology Type within that Facility be classified as a Fixed Price Component' immediately after the words 'Fixed Price Facility' at the end of the clause.

30.2 Insert the following new clause 4.14.1CA:

4.14.1CA. For the purposes of clause 4.14.1B, a Facility Technology Type within a Facility may only be nominated to be classified as a Fixed Price Component if:

(a) the Facility Technology Type has not been a Separately Certified Component in a previous Reserve Capacity Cycle;

(b) the Facility Technology Type is part of a Facility that is not a Non-Scheduled Facility;

(c) the Facility Technology Type is an Energy Producing System;

(d) the Facility Technology Type is not considered by AEMO to be in Commercial Operation;

(e) the Facility Technology Type will be treated as a Facility upgrade under Appendix 3, or all Fixed Price Components of the Facility would collectively be treated as a Facility upgrade under Appendix 3;

(f) the Facility Technology Type is not part of a Facility which is subject to an NCESS Contract (at the date Capacity Credits are first assigned to the Facility or Separately Certified Component);

(g) the Facility Technology Type is not part of a Facility which is a Network Augmentation Funding Facility under section 4.10A; and

(h) the Facility Technology Type is not part of a Facility to which section 4.28C applies.

30.3 Clause 4.14.1D is amended by inserting the words 'or a component of a Facility' after each reference to the word Facility.

30.4 Clause 4.14.2 is amended by:

(a) deleting the word 'where' and replacing it with the word 'if';

(b) inserting the words ', or Separately Certified Component,' immediately after the word 'Facility' throughout the clause; and

(c) adding the letter 's' at the end of each reference to the word 'Requirement' throughout the clause.

30.5 Clause 4.14.6 is amended to delete the words 'either or both of'.

30.6 Clause 4.14.6(c) is amended by inserting the word 'Peak' before each reference to the word 'Certified'.

30.7 Clause 4.14.6(e) is amended by inserting the word 'Peak' after the word 'Conditional'.

30.8 Clause 4.14.8 is amended by deleting the words '(including for the purposes of determining an Initial Network Access Quantity under clause 4.1A.2)' at the end of the clause.

31   Section 4.15 amended

31.1   Clause 4.15.5(b) is amended by inserting the word 'Peak' before the word 'Certified'.

31.2   Clause 4.15.5(c) is amended by inserting the word 'Peak' before the word 'Certified'.

31.3   Clause 4.15.9(a) is amended by deleting the word 'where' and replacing it with the word 'if' at the beginning of the clause.

31.4   Clause 4.15.9(b) is amended by:

(a)   deleting the word 'where' and replacing it with the word 'if' at the beginning of the clause; and

(b)   inserting the word 'Peak' before the word 'Certified'.

31.5   Clause 4.15.9(d) is amended by inserting the word 'Peak' before the word 'Certified'.

31.6   Clause 4.15.14(b) is amended by:

(a)   deleting the word 'where' and replacing with the word 'if' at the beginning of the clause; and

(b)   deleting the word 'methodology' and replacing it with the word 'method'.

31.7   Clause 4.15.15 is amended by deleting the word 'Where' and replacing it with the word 'If' at the start of the clause.

31.8   Clause 4.15.15(a) is amended by:

(a)   deleting the words 'methodology described in clause 4.11.2(b)' and replacing them with the words 'Relevant Level Method'; and

(b)   inserting the word 'Peak' before each reference to the word 'Certified'.

32   Section 4.16 amended

32.1   The heading to Section 4.16 is amended by:

(a)   deleting the word 'The'; and

(b)   deleting the letter 's' from the end of the word 'Price'.

32.2   Clause 4.16.1 is amended by inserting the words 'Peak Benchmark Reserve Capacity Price and a Flexible' after the words 'Authority must publish a'.

32.3   Clause 4.16.2 is amended by deleting the word '[Blank]' and replacing it with the following:

'The Peak Benchmark Reserve Capacity Price:

(a)   must be expressed in dollars per MW of Peak Capacity Credits per year; and

(b)   must reflect the expected annualised capital cost plus the annualised fixed operating and maintenance cost of the Benchmark Peak Capacity Provider.'

32.4   Insert the following new clause 4.16.2A:

4.16.2A. The Flexible Benchmark Reserve Capacity Price:

    (a)   must be expressed in dollars per MW of Flexible Capacity Credits per year; and

    (b)   must reflect the expected annualised capital cost plus the annualised fixed operating and maintenance cost of the Benchmark Flexible Capacity Provider.

32.5   Clause 4.16.3 is amended by:

    (a)   deleting the word 'methodology' and replacing it with the word 'method'; and

    (b)   adding the letter 's' at the end of the word 'Price' each time it appears throughout the clause.

32.6   Clause 4.16.4 is amended by deleting the word '[Blank]' and replacing with the following:

'If the Economic Regulation Authority, acting reasonably, expects a parameter which is used to determine a Benchmark Reserve Capacity Price to change from year to year, the Economic Regulation Authority:

    (a)   must not specify a fixed value for that parameter in the WEM Procedure referred to in clause 4.16.3; and

    (b)   must specify the principles and processes for determining that parameter in the WEM Procedure referred to in clause 4.16.3.'

32.7   Clause 4.16.5 is amended by:

    (a)   adding the letter 's' at the end of the word 'Price'; and

    (b)   deleting the word 'methodology' and replacing it with the word 'method'.

32.8   Clause 4.16.6 is amended by:

    (a)   deleting the word 'a' immediately after the words 'arrived at';

    (b)   adding the letter 's' at the end of the word 'value';

    (c)   adding the letter 's' at the end of the word 'Price'; and

    (d)   deleting the words 'and advertise the report in newspapers widely distributed in Western Australia'.

32.9   Clause 4.16.7 is amended by:

    (a)   deleting the word 'a' immediately after the words 'must propose';

    (b)   adding the letter 's' the end of the word 'value' each time it appears throughout the clause;

    (c)   adding the letter 's' at the end of the word 'Price'; and;

    (d)   deleting the word 'that' after the word 'publish' and replacing it with the word 'those'.

32.10 Clause 4.16.8 is amended by:

(a) deleting the words 'A proposed' at the start of the clause and replacing it with the word 'Proposed';

(b) adding the letter 's' the end of each reference to the word 'value';

(c) deleting the letter 's' at the end of the word 'becomes'; and

(d) adding the letter 's' at the end of each reference to the word 'Price' immediately after the words 'for the Benchmark Reserve Capacity';

32.11 Clause 4.16.8A is amended by adding the letter 's' at the end of each reference to the word 'Price'.

32.12 Clause 4.16.9 is deleted and replaced with the following:

4.16.9. The Economic Regulation Authority must review the WEM Procedure referred to in clause 4.16.3 and must undertake a public consultation process as part of the review:

(a) at least once in every five year period; and

(b) within one year of a review under clause 4.16.11, where that review determines a change to a Benchmark Capacity.

32.13 Insert the following new clause 4.16.11:

4.16.11. The Coordinator of Energy must determine the Benchmark Capacity Providers:

(a) initially, by 31 January 2024; and then the earlier of

(b) within six months of the revised ESR Duration Requirement being published in the Electricity Statement of Opportunities, if the ESR Duration Requirement determined by AEMO under clause 4.5.12(d) is different from the ESR Duration Requirement for the previous Reserve Capacity Cycle; or

(c) within three years of the previous determination of the Benchmark Capacity Providers under this clause 4.16.11.

32.14 Insert the following new clause 4.16.12:

4.16.12. When determining the Benchmark Capacity Providers under clause 4.16.11, the Coordinator of Energy must determine:

(a) the appropriate reference technology to be used for each Benchmark Capacity Provider;

(b) the technical parameters to be used for each Benchmark Capacity Provider, including size and capabilities;

(c) the uncongested network location to be used for each Benchmark Capacity Provider, or if there is no uncongested network location, a network location with relatively low congestion; and

(d) whether the relevant Benchmark Reserve Capacity Price is to be assessed on the basis of:

i. the gross capital cost of the relevant Benchmark Capacity Provider; or

ii. the capital cost of the relevant Benchmark Capacity Provider less any expected contribution to capital costs from participation in the Real-Time Market.

32.15 Insert the following new clause 4.16.13:

4.16.13. The Coordinator must consult with Market Participants on the parameters determined under clause 4.16.12.

32.16 Insert the following new clause 4.16.14:

4.16.14. The Coordinator must publish the results of the determination under clause 4.16.11, including the items specified in clause 4.16.12.

33 Section 4.20 Amended

33.1 Clause 4.20.5A(aA) is amended by:

(a) deleting the words '(excluding any Capacity Credits associated with any CC Uplift Quantities) '; and

(b) deleting the words 'Year 3 of' and replacing them with the words 'the third Capacity Year of the Long Term PASA Study Horizon for'.

33.2 Clause 4.20.5A(b)(2) is amended by deleting the words 'any CC Uplift Quantity associated with the Capacity Credits assigned; and' and replacing them with the word '[Blank]'.

33.3 Clause 4.20.5AA is deleted and replaced with the following:

4.20.5AA. For each Reserve Capacity Cycle, if AEMO has assigned Capacity Credits to Facilities or Separately Certified Components at any of the following prices, AEMO must 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:

(a) the Peak Reserve Capacity Price;

(b) if the Reserve Capacity Cycle is also a Transitional Reserve Capacity Cycle the Facility Monthly Reserve Capacity Price for a Transitional Facility or Transitional Component multiplied by 12; and

   (c) if the Reserve Capacity Cycle is also a Fixed Price Reserve Capacity Cycle the Facility Monthly 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 12.

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

 4.20.5B. The quantity of Capacity Credits assigned to a Facility f is equal to the Network Access Quantity determined by AEMO in accordance with section 4.15 for Facility f.

34 Section 4.26 Amended

3.33 Clause 4.26.4 is deleted.

3.34 Clause 4.26.5 is deleted.

3.33 Clause 4.26.6 is deleted.

35 Clause 4.27.11 amended

35.1 Clause 4.27.11D is amended by deleting the word 'Where' and replacing it with the word 'If' at the start of the clause.

36 Clause 4.28.4 amended

36.1 Clause 4.28.4(b) is amended by deleting the word 'DSM' and replacing it with the word 'DSP'.

36.2 Insert the following new clause 4.28.4(cA):

 (cA) the sum of all Capacity Cost Refunds, calculated under clause 4.26.2E, paid by all Market Participants for that Trading Day; less

36.3 Clause 4.28.4(d) is amended by deleting the word 'DSM' and replacing it with the word 'DSP'.

37 Section 4.28C amended

37.1 Clause 4.28C.2 is amended by deleting the words ' ("**Early Certified Reserve Capacity**")'.

37.2 Clause 4.28C.2B is amended by deleting the word 'Where' and replacing it with the word 'If' at the start of the clause.

37.3 Clause 4.28C.7 is amended:

 (a) by deleting the word 'Where' and replacing it with the word 'If' at the start of the clause; and

 (b) by deleting the word '4.1.5' and replacing it with '4.1.11'.

37.4 Clause 4.28C.7(a) is amended by deleting the words 'that amount' and replacing them with the words 'the quantity'.

37.5 Clause 4.28C.7A is amended by deleting the word 'Where' and replacing it with the word 'If' at the start of the clause.

37.6   Clause 4.28C.7AA is amended by deleting the word 'Where' and replacing it with the word 'If' at the start of the clause.

38   Clause 5.2A.3 amended

38.1   Clause 5.2A.3 is amended by deleting the words '4.11.7' and replacing them with the words '4.1.11'.

39   Section 7.13 amended

39.1   Clause 7.13.6 is amended by:

(a)   deleting the word 'Where' and replacing it with the word 'If' at the start of the clause; and

(b)   deleting the word 'Methodology' and replacing it with the word 'Method'.

39.2   Clause 7.13.7 is amended by deleting the word 'Methodology' and replacing it with the word 'Method'.

40   Clause 9.8.3 amended

40.1   Clause 9.8.3 is amended by deleting the words '$Participant\_Capacity\_Rebate(p,d) +$'.

40.2   Clause 9.8.3(a) is amended by deleting the words 'Participant_Capacity_Rebate(p,d) is the Participant Capacity Rebate payable to the Market Participant p for all Trading Intervals in Trading Day d, as determined in accordance with clause 4.29.3(d)(vii);' and replacing them with '[Blank]'.

41.   Chapter 11 (Glossary) amended

41.1   Insert each of the following new defined terms in Chapter 11 (Glossary) in the appropriate alphabetical order:

Availability Duration Gap: For a Capacity Year, the value most recently determined by AEMO under clause 4.5.12(c).

Availability Duration Gap Load Scenario: For a Capacity Year, the load scenario determined by AEMO under clause 4.5.12(a).

Benchmark Capacity Provider: In respect of a Reserve Capacity Cycle, the Benchmark Flexible Capacity Provider or the Benchmark Peak Capacity Provider or both (as the context requires).

Benchmark Flexible Capacity Provider: In respect of a Reserve Capacity Cycle, a notional new Facility of the Facility Technology Type which is expected to be able to provide Flexible Capacity at the lowest annual capital cost and annual fixed operating and maintenance costs as determined by the Coordinator of Energy under clause 4.6.11.

Benchmark Peak Capacity Provider: In respect of a Reserve Capacity Cycle, a notional new Facility of the Facility Technology Type which is expected to be able to provide Peak

Capacity at the lowest annual capital cost and annual fixed operating and maintenance costs as determined by the Coordinator of Energy under clause 4.6.11.

Capability Class: Means the classes of capability that must be assigned to Peak Certified Reserve Capacity by AEMO under clause 4.11.4.

Capability Class 1: The Capability Class that may be assigned by AEMO to Peak Certified Reserve Capacity for a Facility or component of a Facility under clause 4.11.4(a).

Capability Class 1 Availability Assessment Duration: 28 Trading Intervals.

Capability Class 1 Availability Assessment Interval: A Trading Interval occurring between 8:00 AM and 10:00 PM on a Business Day.

Capability Class 2: The Capability Class that may be assigned by AEMO to Peak Certified Reserve Capacity for a Facility, or component of a Facility, under clause 4.11.4(b).

Capability Class 3: The Capability Class that may be assigned by AEMO to Peak Certified Reserve Capacity for a Facility, or component of a Facility, under clause 4.11.4(c).

Default Peak Electric Storage Resource Obligation Intervals: For a Trading Day in a Capacity Year, the set of contiguous Trading Intervals, which has the Mid Peak Electric Storage Resource Obligation Interval in the middle, for that Trading Day, and including the exact number of Trading Intervals in the ESR Duration Requirement for that Reserve Capacity Cycle. If the ESR Duration Requirement is an even number, then the last Trading Interval in the first half of the Default Peak Electric Storage Resource Obligation Intervals must be the Mid Peak Electric Storage Resource Obligation Interval.

ESR Duration Requirement: For a Reserve Capacity Cycle, the number of Trading Intervals in each Trading Day in the applicable Capacity Year to be designated as Peak Electric Storage Resource Obligation Intervals for Electric Storage Resources first allocated Peak Capacity Credits in that Reserve Capacity Cycle, which is:

> (a)   for Reserve Capacity Cycles up to and including the 2024 Reserve Capacity Cycle, eight Trading Intervals; and

> (b)   for Reserve Capacity Cycles after 2024, the value published by AEMO under clause 4.5.12(d) for the third Capacity Year of the Long Term PASA Study Horizon in the relevant Reserve Capacity Cycle.

Flexible Benchmark Reserve Capacity Price: In respect of a Reserve Capacity Cycle, the price described in clause 4.16.2A and published by the Economic Regulation Authority on its website under clause 4.16.1.

Flexible Capacity: Reserve Capacity that is able to respond at very short notice to manage changes in load during high ramp periods.

Flexible Capacity Credit: A notional unit of Flexible Capacity provided by a Facility or Separately Certified Component during a Capacity Year. Each Flexible Capacity Credit is

equivalent to 1 MW of Flexible Capacity. Flexible Capacity Credits are held by the Market Participant registered in respect of the relevant Facility or Separately Certified Component.

Forced Outage Threshold: The Forced Outage rate above which a Facility will have its historical Forced Outage rate reflected in its Certified Reserve Capacity, which is 10%.

Indicative Demand Side Programme Dispatch Threshold: For a Reserve Capacity Cycle, the value which indicates the MW demand above which Demand Side Programmes would likely be dispatched, as published by AEMO under clause 4.5.12(f) for Year 3 of the Long Term PASA Study Horizon for the Reserve Capacity Cycle.

Indicative Peak Electric Storage Resource Obligation Intervals: For a Trading Day in a Capacity Year, the set of contiguous Trading Intervals which has the Mid Peak Electric Storage Resource Obligation Interval in the middle for that Trading Day, and including the number of Trading Intervals in the ESR Duration Requirement for the previous Reserve Capacity Cycle. If the ESR Duration Requirement for the previous Reserve Capacity Cycle is an even number, then the last Trading Interval of the first half of the Indicative Peak Electric Storage Resource Obligation Intervals must be the Mid Peak Electric Storage Resource Obligation Interval.

Mid Peak Electric Storage Resource Obligation Interval: For a Trading Day, the Trading Interval that AEMO has determined, in accordance with the WEM Procedure referred to in clause 4.11.3A, to be the reference Peak Electric Storage Resource Obligation Interval for all Electric Storage Resources.

Peak Benchmark Reserve Capacity Price: In respect of a Reserve Capacity Cycle, the price described in clause 4.16.2 and published by the Economic Regulation Authority on its website under clause 4.16.1.

Peak Capacity: Reserve Capacity that contributes to meeting peak demand.

Peak Capacity Credit: A notional unit of Peak Capacity provided by a Facility or Separately Certified Component during a Capacity Year. Each Peak Capacity Credit is equivalent to 1 MW of Peak Capacity. Peak Capacity Credits are held by the Market Participant registered in respect of the Facility or Separately Certified Component.

Peak Certified Reserve Capacity: In respect of a Reserve Capacity Cycle, for a Facility or a Separately Certified Component, the quantity of Peak Capacity that AEMO has assigned to the Facility for the Reserve Capacity Cycle in accordance with section 4.11, as adjusted under these WEM Rules including clause 4.14.8.

Peak Demand Side Programme Dispatch Requirement: For a Reserve Capacity Cycle, the minimum number of Trading Intervals in the applicable Capacity Year during which a Demand Side Programme can be dispatched, which is:

        (a)   for Reserve Capacity Cycles up to and including the 2023 Reserve Capacity Cycle, 400 Trading Intervals;

(b)   for the 2024 Reserve Capacity Cycle, 100 Trading Intervals; and

(c)   for Reserve Capacity Cycles after 2024, the value determined by AEMO under clause 4.5.12(g) for the third Capacity Year of the Long Term PASA Study Horizon.

Peak Early Certified Reserve Capacity: Peak Capacity which is certified and assigned to a new Facility by AEMO for a future Reserve Capacity Cycle under section 4.28C.

Peak Electric Storage Resource Obligation Interval: For an Electric Storage Resource for which a Market Participant holds Peak Capacity Credits, a Trading Interval in the Peak Electric Storage Resource Obligation Duration, in which a non-zero Peak Reserve Capacity Obligation Quantity is applied to the Electric Storage Resource.

Peak Electric Storage Resource Obligation Duration: For an Electric Storage Resource and a Trading Day, the contiguous Trading Intervals which have the Mid Peak Electric Storage Resource Obligation Interval in the middle published by AEMO in accordance with clause 4.11.3A, where:

(a)   the number of Trading Intervals is equal to:

    i.   if the Electric Storage Resource first received Capacity Credits within any of the four previous Capacity Years, the ESR Duration Requirement for the Capacity Year in which it first received Capacity Credits; and

    ii.   otherwise the ESR Duration Requirement for the current Capacity Year; and

(b)   if the number of Trading Intervals is an even number, then the last Trading Interval in the first half of the Peak Electric Storage Resource Obligation Duration must be the Mid Peak Electric Storage Resource Obligation Interval.

Peak IRCR Intervals: For a Capacity Year, the Trading Intervals determined by AEMO under clause 4.1.23A, which are used solely in the Relevant Level Method in Appendix 9.

Peak Reserve Capacity Requirement: Has the meaning given in clause 4.6.1.

Peak Reserve Capacity Target: In respect of a Capacity Year, AEMO's estimate of the total amount of Energy Producing Systems' capacity or Demand Side Programme capacity required in the SWIS to satisfy clauses 4.5.9(a) and 4.5.9(b) for that Capacity Year determined in accordance with clause 4.5.10(b).

RCM Reform Commencement: The date and time specified by the Minister as RCM Reform Commencement, as published in the Government Gazette.

Transitional Component: Means a Separately Certified Component that was part of a Transitional Facility at the time that Facility was assigned Capacity Credits for the 2018 Reserve Capacity Cycle.

41.2 The definition for 'Benchmark Reserve Capacity Price' in Chapter 11 (Glossary) is deleted and replaced by the following:

> **Benchmark Reserve Capacity Price:** In respect of a Reserve Capacity Cycle, the Peak Benchmark Reserve Capacity Price or the Flexible Benchmark Reserve Capacity Price or both (as the context requires).

41.3 The definition for 'Constraints Library' in Chapter 11 (Glossary) is amended by deleting paragraph (c) and replacing it with the following:

> (c) for each Reserve Capacity Cycle:
>
>   i. the information provided by each Network Operator under clause 4.4B.5; and
>
>   ii. the final RCM Constraint Equations used by AEMO in the Network Access Quantity Model for determining Network Access Quantities under Appendix 3.

41.4 The definition for 'DSM Reserve Capacity Security' in Chapter 11 (Glossary) is amended by deleting the word 'DSM' and replacing it with the word 'DSP'.

41.5 The definition for 'Linearly Derating Capacity' in Chapter 11 (Glossary) is deleted and replaced with the following:

> **Linearly Derating Capacity:** The maximum capacity, in MW, of an Electric Storage Resource that can be guaranteed to be available over the Peak Electric Storage Resource Obligation Duration, being the minimum of:
>
> (a) the nameplate capacity; and
>
> (b) the maximum Charge Level capability (in MWh) divided by half the number of Trading Intervals in the Peak Electric Storage Resource Obligation Duration, being the maximum sustainable MW capacity, which could be delivered continuously across the Peak Electric Storage Resource Obligation Duration.

41.6 The definition for 'Long Term PASA' in Chapter 11 (Glossary) is amended by deleting the words 'Reserve Capacity Target' and replacing them with the words 'Reserve Capacity Targets and Availability Duration Gap'.

41.7 The definition for 'Minimum Capacity Credits Quantity' in Chapter 11 (Glossary) is amended by:

> (a) inserting the word 'Peak' immediately after the words 'minimum quantity of'; and
>
> (b) inserting the words ', as notified to AEMO under clause 4.14.1D' immediately after the words 'participate in the Reserve Capacity Cycle'.

41.8 The definition for 'Price-Quantity Pair' in Chapter 11 (Glossary) is amended by deleting paragraph (a) and replacing it with the following:

(a)   Portfolio Demand Curves and STEM Offers, a quantity that will be provided to AEMO by a Market Participant for a price equalling or exceeding the specified price. In the context of Portfolio Demand Curves and STEM Bids, a quantity that will be purchased from AEMO by a Market Participant for a price equalling or less than the specified price;

41.9   The definition for 'Relevant Level' in Chapter 11 (Glossary) is amended by deleting the word 'Methodology' and replacing it with the word 'Method'.

41.10   The definition for 'Relevant Level Methodology' in Chapter 11 (Glossary) is amended by deleting the word 'Methodology' and replacing it with the word 'Method'.

41.11   The definition for 'Reserve Capacity' in Chapter 11 (Glossary) is deleted and replaced with the following:

Reserve Capacity: Capacity associated with a Facility. Capacity may be either Peak Capacity or both Peak Capacity and Flexible Capacity, and may be:

(a)   the capacity of Energy Producing Systems to produce electricity and send it out into a Network forming part of the SWIS; or

(b)   the capability of a Demand Side Programme to reduce the consumption of electricity at connection points to a Network forming part of the SWIS.

41.12   The definition for 'Reserve Capacity Target' in Chapter 11 (Glossary) is amended by deleting the word 'Management' and replacing it with the word 'Programme'.

41.13   Delete each of the following defined terms in Chapter 11 (Glossary) in their entirety:

(a)   Availability Class;

(b)   Availability Class 1;

(c)   Availability Class 2;

(d)   Deemed DSM Dispatch;

(e)   Demand Side Management;

(f)   Electric Storage Resource Obligation Duration;

(g)   Electric Storage Resource Obligation Interval;

(h)   Existing Facility Load for Scheduled Generation;

(i)   New Facility Load for Scheduled Generation;

(j)   Participant Capacity Rebate;

(k)   Peak Trading Interval; and

(l)   Preliminary RCM Constraint Equation.

42.   Appendix 3 amended

42.1   Appendix 3 is deleted and replaced with the following:

Appendix 3: Determination of Network Access Quantities

The objectives of this appendix are:

1. To prevent AEMO determining Network Access Quantities (and assigning Peak Capacity Credits) for Facilities that have been assigned Peak Certified Reserve Capacity that have insufficient access to the Network and availability to usefully address the Peak Reserve Capacity Requirement. A single algorithm is used for testing of Peak Certified Reserve Capacity and for determining whether, in respect of a Reserve Capacity Cycle, a Network Access Quantity will be determined for any new Candidate Fixed Price Facilities for the current Reserve Capacity Cycle. The process is:

    *   if the Facilities, for which Peak Capacity Credits for the current Reserve Capacity Cycle are being sought, do not include a Candidate Fixed Price Facility or a Facility Upgrade that is a Candidate Fixed Price Component, set out in Part A; and

    *   if the Facilities, for which Peak Capacity Credits for the current Reserve Capacity Cycle are being sought, include a Candidate Fixed Price Facility or a Facility Upgrade that is a Candidate Fixed Price Component, set out in Part B.

2. To determine, using the Network Access Quantity Model:

    *   whether a Network Access Quantity will be determined for a new Facility, or Facility Upgrade, for the current Reserve Capacity Cycle and, if so, to determine a Network Access Quantity for that Facility or Facility Upgrade;

    *   a preliminary Network Access Quantity or an Indicative Network Access Quantity for an Early CRC Facility, as applicable; and

    *   a Network Access Quantity (which may be zero) for other NAQ Facilities for the current Reserve Capacity Cycle.

Terms defined in this Appendix 3 are defined for the purposes of this Appendix 3 alone and must not be used to infer the meaning of those words, or other words, in these WEM Rules. Terms which are defined in the WEM Rules will apply to this Appendix unless defined in this Appendix.

AEMO must use the applicable Constraint Sets in the Network Access Quantity Model for the Facilities assessed in each step of this Appendix 3.

In this Appendix 3:

*   "current Reserve Capacity Cycle" means the Reserve Capacity Cycle for which the processes in this Appendix are being undertaken to procure Reserve Capacity for the Capacity Year for that Reserve Capacity Cycle;

*   "Early CRC Facility" is a Facility for which:

- o an application for Early Certified Reserve Capacity has been made under section 4.28C to deliver Peak Capacity for a future Reserve Capacity Cycle; and

  - o pursuant to that application, AEMO has assigned Peak Early Certified Reserve Capacity to the Facility in accordance with section 4.28C;

- "Facility Upgrade" means, for a NAQ Facility, an increase in the nameplate capacity of the NAQ Facility, being the difference between:

  - o the nameplate capacity specified under clause 4.10.1(dA), for the NAQ Facility, as provided in the Reserve Capacity Cycle immediately preceding the current Reserve Capacity Cycle; and

  - o the nameplate capacity specified under clause 4.10.1(dA), for the NAQ Facility as provided in the current Reserve Capacity Cycle;

- "future Reserve Capacity Cycle" means a Reserve Capacity Cycle that is subsequent to the current Reserve Capacity Cycle;

- "Indicative NAQ Facility" means an Early CRC Facility for which an Indicative Network Access Quantity was determined for the Facility under Step 13(c)(ii) in the Reserve Capacity Cycle immediately preceding the current Reserve Capacity Cycle, but does not include:

  - o an Early CRC Facility that is also a Network Augmentation Funding Facility; or

  - o an NAQ Facility;

- "NAQ Facility" means:

  - o a Facility for which a Final Network Access Quantity has been determined in a previous Reserve Capacity Cycle and the Facility has been assigned Peak Certified Reserve Capacity for the current Reserve Capacity Cycle;

  - o an Early CRC Facility where the current Reserve Capacity Cycle is the Reserve Capacity Cycle in which the Facility will first deliver Peak Capacity; or

  - o a Facility that has been assigned Peak Certified Reserve Capacity and is subject to an NCESS Contract for the current Reserve Capacity Cycle,

  but excludes a Facility for which AEMO has received a notice under section 4.4A.1 that the Facility is expected to retire in the Capacity Year to which the current Reserve Capacity Cycle relates and the notice has not been withdrawn under clause 4.4A.6;

- "NAQ rules" means:

  - o the preliminary Network Access Quantity determined for a Facility under a step in Part A or Part B, as applicable, cannot be reduced, but can be increased, in a subsequent step; and

- o the maximum preliminary Network Access Quantity that can be determined for a Facility at the end of a step in Part A or Part B, as applicable, cannot exceed the Peak Certified Reserve Capacity assigned to the Facility for the current Reserve Capacity Cycle;

- "preliminary Network Access Quantity" is the Network Access Quantity first determined by AEMO for a Facility in a step, as may be adjusted by AEMO in a subsequent step;

- "prioritisation order" means, if two or more Facilities are tied with respect to the selection criteria such that assigning a preliminary Network Access Quantity to all but one of them would result in the total preliminary Network Access Quantity assigned to those Facilities exceeding the Peak Reserve Capacity Requirement, then those tied Facilities are to be selected according to the following rules until the tie is resolved:

  - o in order of Capability Class, with Facilities in Capability Class 1 being selected first, then Facilities in Capability Class 3, and then Facilities in Capability Class 2;

  - o the ratio of a Facility's preliminary Network Access Quantity to Peak Certified Reserve Capacity from highest to lowest; then

  - o the combination of the Peak Certified Reserve Capacity for Facilities that will minimise the excess of the total Network Access Quantities to be assigned to the Facilities to achieve the Peak Reserve Capacity Requirement; then

  - o whether or not the Facility was included in an Expression of Interest submission, with Facilities included in Expression of Interest submissions being selected first;

  - o in the order of the time Expression of Interest submissions were received by AEMO, with the Facility to which the earlier submission relates being selected first; then

  - o in the order of the time the applications for Certified Reserve Capacity were received by AEMO, with the Facility to which the earlier application relates being selected first.

Part A No Candidate Fixed Price Facility or Facility Upgrade that is a Candidate Fixed Price Component

Step 1: Identify the Peak Reserve Capacity Requirement for the relevant Capacity Year.

Step 2: Let the Network Access Quantity Model contain:

(a) NAQ Facilities; and

(b) Indicative NAQ Facilities.

Step 3: [Blank]

Step 3A: Subject to the NAQ rules, using the Network Access Quantity Model determine the preliminary Network Access Quantity for each NAQ Facility and, if applicable, Indicative Network Access Quantity for each Indicative NAQ Facility, which is a value up to the minimum of:

(a)   the Network Access Quantity determined for the NAQ Facility or Indicative NAQ Facility in the Reserve Capacity Cycle immediately preceding the current Reserve Capacity Cycle, which:

i.   for an Early CRC Facility is deemed to be:

1.   for an Early CRC Facility that is also a Network Augmentation Funding Facility, the preliminary Network Access Quantity determined for the Facility at Step 13(c)(i) in a previous Reserve Capacity Cycle; or

2.   for each other Early CRC Facility, the Indicative Network Access Quantity determined for the Facility in the Reserve Capacity Cycle immediately preceding the current Reserve Capacity Cycle; and

ii.   for an NAQ Facility subject to an NCESS Contract, that was not assigned a Network Access Quantity in the Reserve Capacity Cycle immediately preceding the current Reserve Capacity Cycle, is deemed to be the Peak Certified Reserve Capacity for the NAQ Facility; and

(b)   the Peak Certified Reserve Capacity for the NAQ Facility or Peak Early Certified Reserve Capacity for the Indicative NAQ Facility,

then go to Step 3B.

Step 3B: Using the Network Access Quantity Model and, subject to the NAQ Rules, adjust the preliminary Network Access Quantity determined for an NAQ Facility under a prior step up to the Highest Network Access Quantity for the NAQ Facility where this is greater than the preliminary Network Access Quantity determined for the NAQ Facility in a prior step and, if applicable, adjust the Indicative Network Access Quantity determined under a prior step for an Indicative NAQ Facility up to the Peak Early Certified Reserve Capacity for the Indicative NAQ Facility,

then go to Step 3C.

Step 3C: Using the Network Access Quantity Model and, subject to the NAQ rules, adjust the preliminary Network Access Quantity determined for an NAQ Facility or Indicative Network Access Quantity for an Indicative NAQ Facility under a prior step up to the Peak Certified Reserve Capacity for the NAQ Facility or Peak Early Certified Reserve Capacity for an Indicative NAQ Facility, excluding, for the NAQ Facility, any associated Facility Upgrade, where this is greater than the preliminary Network Access Quantity determined in a prior step.

Step 4:   Add all new committed Network Augmentation Funding Facilities (as defined in section 4.10A) to the Network Access Quantity Model, then

using the Network Access Quantity Model and, subject to the NAQ rules:

(a)   determine the preliminary Network Access Quantity for each such Network Augmentation Funding Facility; and

(b)   if applicable, adjust the preliminary Network Access Quantity determined for a Facility under a prior step or the Indicative Network Access Quantity for an Indicative NAQ Facility.

To avoid doubt, an Early CRC Facility that is also a Network Augmentation Funding Facility is not a Network Augmentation Funding Facility for the purposes of this Step 4.

Step 5:   Add to the Network Access Quantity Model:

(a)   any remaining committed Facilities, excluding any new Early CRC Facilities; and

(b)   any committed Facility Upgrade for an NAQ Facility, then:

(c)   using the Network Access Quantity Model and, subject to the NAQ rules:

   i.   determine the preliminary Network Access Quantity for each such Facility or Facility Upgrade; and

   ii.   if applicable, adjust the preliminary Network Access Quantity determined for a Facility or Facility Upgrade under a prior step or the Indicative Network Access Quantity for an Indicative NAQ Facility.

Step 6:   If the sum of the preliminary Network Access Quantity determined for each Facility and Facility Upgrade under all prior steps fully covers the Peak Reserve Capacity Requirement, go to Step 8. Otherwise:

(a)   add all remaining Facilities and Facility Upgrades, excluding any new Early CRC Facilities to the Network Access Quantity Model; then

(b)   using the Network Access Quantity Model and, subject to the NAQ rules, determine the preliminary Network Access Quantity for each Facility or Facility Upgrade added in Step 6(a); then

(c)   select Facilities and Facility Upgrades, subject to, if applicable, the preliminary Network Access Quantity determined for a Facility or Facility Upgrade being not less than the Minimum Capacity Credits Quantity for the Facility or Facility Upgrade, until the Peak Reserve Capacity Requirement is fully covered, applying the prioritisation order, if required, or until there are no Facilities or Facility Upgrades left to be selected; then

(d)   remove any Facilities and Facility Upgrades not selected under Step 6(c) from the Network Access Quantity Model; then

(e)   using the Network Access Quantity Model and, subject to the NAQ rules:

   i.   determine the preliminary Network Access Quantity for each Facility or Facility Upgrade selected under Step 6(c); and

   ii.   if applicable, adjust the preliminary Network Access Quantity determined for a Facility or Facility Upgrade under a prior step or the Indicative Network Access Quantity for an Indicative NAQ Facility.

For the purposes of Step 8, Facilities that have not been selected under Step 6(c) will not be treated as a Facility for which a preliminary Network Access Quantity has been determined.

Step 7:   If a preliminary Network Access Quantity has been determined for each Facility and Facility Upgrade in the Network Access Quantity Model (except for any Facilities or Facility Upgrades that were not selected due to the preliminary Network Access Quantity determined for the Facility or Facility Upgrade being less than the Minimum Capacity Credits Quantity for the Facility or Facility Upgrade) but the Peak Reserve Capacity Requirement has not been covered, then record the difference as the Peak Capacity shortfall.

Step 8:   Record:

(a)   for an Indicative NAQ Facility, if the Indicative Network Access Quantity has been adjusted under this Part A, the adjusted Indicative Network Access Quantity; and

(b)   for each other Facility, the preliminary Network Access Quantity determined under this Part A as the Final Network Access Quantity for the Facility.

Step 9:   Report the Peak Capacity shortfall, which indicates the amount that may be procured through the supplementary capacity process in section 4.24.

Step 10:   Add the Facilities referred to in Step 10(a) and Step 10(b) (each comprising a "group") in the order specified to the Network Access Quantity Model, except that before adding the next group of Facilities to the Network Access Quantity Model, undertake the applicable determination in Step 10(c) for that group of Facilities before adding the next group of Facilities and repeating Step 10(c) for that subsequent group of Facilities:

(a)   new Early CRC Facilities that are also Network Augmentation Funding Facilities; then

(b)   any other new Early CRC Facilities; then

(c)   using the Network Access Quantity Model and, subject to the NAQ rules:

   i.   determine the preliminary Network Access Quantity for each Facility in the group of Facilities described in Step 10(a); and

ii.   determine the Indicative Network Access Quantity for each Facility in the group of Facilities described in Step 10(b).

Step 11:   End.

Part B Candidate Fixed Price Facility or Facility Upgrade that is a Candidate Fixed Price Component

Step 1:   Identify the Peak Reserve Capacity Requirement for the relevant Capacity Year.

Step 2:   Let the Network Access Quantity Model contain:

(a)   NAQ Facilities; and

(b)   Indicative NAQ Facilities.

Step 3:   [Blank]

Step 3A: Subject to the NAQ rules, using the Network Access Quantity Model determine the preliminary Network Access Quantity for each NAQ Facility and, if applicable, Indicative Network Access Quantity for each Indicative NAQ Facility, which is a value up to the minimum of:

(a)   the Network Access Quantity determined for the NAQ Facility or Indicative NAQ Facility in the Reserve Capacity Cycle immediately preceding the current Reserve Capacity Cycle, which:

i.   for an Early CRC Facility is deemed to be:

1.   for an Early CRC Facility that is also a Network Augmentation Funding Facility, the preliminary Network Access Quantity determined for the Facility at Step 13(c)(i) in a previous Reserve Capacity Cycle; or

2.   for each other Early CRC Facility, the Indicative Network Access Quantity determined for the Facility in the Reserve Capacity Cycle immediately preceding the current Reserve Capacity Cycle; and

ii.   for an NAQ Facility subject to an NCESS Contract, that was not assigned a Network Access Quantity in the Reserve Capacity Cycle immediately preceding the current Reserve Capacity Cycle, is deemed to be the Peak Certified Reserve Capacity for the NAQ Facility; and

(b)   the Peak Certified Reserve Capacity for the NAQ Facility or Peak Early Certified Reserve Capacity for the Indicative NAQ Facility,

then go to Step 3B.

Step 3B: Using the Network Access Quantity Model and, subject to the NAQ Rules, adjust the preliminary Network Access Quantity determined for an NAQ Facility under a prior step up to the Highest Network Access Quantity for the NAQ Facility where this is greater than the

preliminary Network Access Quantity determined for the NAQ Facility in a prior step and, if applicable, adjust the Indicative Network Access Quantity determined under a prior step for an Indicative NAQ Facility up to the Peak Early Certified Reserve Capacity for the Indicative NAQ Facility,

then go to Step 3C.

Step 3C: Using the Network Access Quantity Model and, subject to the NAQ rules, adjust the preliminary Network Access Quantity determined for an NAQ Facility or Indicative Network Access Quantity for an Indicative NAQ Facility under a prior step up to the Peak Certified Reserve Capacity for the NAQ Facility or Peak Early Certified Reserve Capacity for an Indicative NAQ Facility, excluding, for the NAQ Facility any associated Facility Upgrade, where this is greater than the preliminary Network Access Quantity determined in a prior step.

Step 4: Add all new committed Network Augmentation Funding Facilities (as defined in section 4.10A) to the Network Access Quantity Model, then using the Network Access Quantity Model and, subject to the NAQ rules:

(a) determine the preliminary Network Access Quantity for each such Network Augmentation Funding Facility; and

(b) if applicable, adjust the preliminary Network Access Quantity determined for a Facility under a prior step or the Indicative Network Access Quantity for an Indicative NAQ Facility.

To avoid doubt, an Early CRC Facility that is also a Network Augmentation Funding Facility is not a Network Augmentation Funding Facility for the purposes of this Step 4.

Step 5: Add to the Network Access Quantity Model:

(a) any remaining committed Facilities, excluding:

i. any new Early CRC Facilities; and

ii. any committed Candidate Fixed Price Facilities; and

(b) any committed Facility Upgrade for an NAQ Facility, excluding any that are Candidate Fixed Price Components, then:

(c) using the Network Access Quantity Model and, subject to the NAQ rules:

i. determine the preliminary Network Access Quantity for each such Facility, or Facility Upgrade; and

ii. if applicable, adjust the preliminary Network Access Quantity determined for a Facility or Facility Upgrade under a prior step or the Indicative Network Access Quantity for an Indicative NAQ Facility.

Step 6:   If the sum of the preliminary Network Access Quantity determined for each Facility or Facility Upgrade under all prior steps is:

(a)   less than the Peak Reserve Capacity Requirement plus 3%, then go to Step 6A; or

(b)   equal to or more than the Peak Reserve Capacity Requirement plus 3%, then go to Step 6C.

Step 6A: Add all committed Candidate Fixed Price Facilities and committed Facility Upgrades that are Candidate Fixed Price Components to the Network Access Quantity Model, then, using the Network Access Quantity Model and, subject to the NAQ rules:

(a)   determine the preliminary Network Access Quantity for each committed Candidate Fixed Price Facility and each Facility Upgrade that is a Candidate Fixed Price Component; and

(b)   if applicable, adjust the preliminary Network Access Quantity determined for a Facility or Facility Upgrade under a prior step or the Indicative Network Access Quantity for an Indicative NAQ Facility.

Step 6B: If the sum of the preliminary Network Access Quantity determined for each Facility under all prior steps does not fully cover the Peak Reserve Capacity Requirement, then:

(a)   add the Facilities and Facility Upgrades referred to in Step 6B(a)(i) and Step 6B(a)(ii) (each step comprising a "group") in the order specified to the Network Access Quantity Model, except that before adding the next group of Facilities and Facility Upgrades to the Network Access Quantity Model, undertake Steps 6B(b), 6B(c), 6B(d) and 6B(e)(i) for that group of Facilities and Facility Upgrades, and Step 6B(e)(ii) in respect to the Facilities and Facility Upgrades referred to in Step 6B(e)(ii), before adding the next group of Facilities and Facility Upgrades, if required, and repeating Steps 6B(b), 6B(c), 6B(d) and 6B(e)(i) for that subsequent group of Facilities and Facility Upgrades, and Step 6B(e)(ii) in respect to the Facilities referred to in Step 6B(e)(ii):

i.   any remaining Facilities that are not committed and are not Candidate Fixed Price Facilities, and any remaining Facility Upgrades that are not committed and are not Candidate Fixed Price Components; then

ii.   Candidate Fixed Price Facilities that are not committed and Facility Upgrades that are Candidate Fixed Price Components that are not committed; then

(b)   using the Network Access Quantity Model and, subject to the NAQ rules, determine the preliminary Network Access Quantity for each Facility and Facility Upgrade in that group of Facilities and Facility Upgrades; then

(c) select Facilities and Facility Upgrades from that group of Facilities and Facility Upgrades, subject to, if applicable, the preliminary Network Access Quantity determined for a Facility or Facility Upgrade in that group of Facilities and Facility Upgrades being not less than the Minimum Capacity Credits Quantity for the Facility or Facility Upgrade, until the Peak Reserve Capacity Requirement is fully covered, applying the prioritisation order, if required, or until there are no Facilities or Facility Upgrades left to be selected; then

(d) remove any Facilities and Facility Upgrade not selected under Step 6B(c) from that group from the Network Access Quantity Model; then

(e) using the Network Access Quantity Model and, subject to the NAQ rules:

  i. determine the preliminary Network Access Quantity for each Facility and Facility Upgrade selected under Step 6B(c); and

  ii. if applicable, adjust the preliminary Network Access Quantity determined for a Facility or Facility Upgrade under a prior step (other than a step in this Step 6B) or the Indicative Network Access Quantity for an Indicative NAQ Facility,

then go to Step 7.

For the purposes of Step 8, Facilities that have not been selected under Step 6B(c) will not be treated as a Facility for which a preliminary Network Access Quantity has been determined.

Step 7: If a preliminary Network Access Quantity has been determined for all Facilities and Facility Upgrades in the Network Access Quantity Model (except for any Facilities or Facility Upgrades that were not selected due to the preliminary Network Access Quantity determined for the Facility or Facility Upgrade being less than the Minimum Capacity Credits Quantity for the Facility or Facility Upgrade) but the Peak Reserve Capacity Requirement has not been covered, then record the difference as the capacity shortfall for Peak Capacity.

Step 8: Record:

(a) for an Indicative NAQ Facility, if the Indicative Network Access Quantity has been adjusted under this Part B, the adjusted Indicative Network Access Quantity; and

(b) for each other Facility, the preliminary Network Access Quantity determined under this Part B as the Final Network Access Quantity for the Facility.

Step 9: Report the capacity shortfall for Peak Capacity, which indicates the amount that may be procured through the supplementary capacity process in section 4.24.

Step 10: Add the Facilities referred to in Step 10(a) and Step 10(b) (each comprising a "group") in the order specified to the Network Access Quantity Model, except that before adding the

next group of Facilities to the Network Access Quantity Model, undertake the applicable determination in Step 10(c) for that group of Facilities before adding the next group of Facilities and repeating Step 10(c) for that subsequent group of Facilities:

(a)   new Early CRC Facilities that are also Network Augmentation Funding Facilities; then

(b)   any other new Early CRC Facilities; then

(c)   using the Network Access Quantity Model and, subject to the NAQ rules:

     i.   determine the preliminary Network Access Quantity for each Facility in the group of Facilities described in Step 10 (a); and

    ii.   determine the Indicative Network Access Quantity for each Facility in the group of Facilities described in Step 10 (b).

Step 11:   End.

Schedule 2

1.   Section 1.63 amended

1.1   Insert the following new clause 1.63.3:

1.63.3.   For the purposes of steps B.1.2 and B.1.3 of Appendix 9, AEMO must estimate the output of a Facility under clause 7.13.6 for any Trading Interval before RCM Reform Commencement in which the Facility was:

(a)   affected by a Consequential Outage under the Pre-New WEM Commencement Rules, and AEMO must treat the Facility as being restricted by a Network limitation; and

(b)   a GIA Facility issued an Operating Instruction under a Network Control Service Contract under the Pre-New WEM Commencement Rules, and AEMO must treat the Facility as having been restricted by a Dispatch Instruction.

1.2   Insert the following new clause 1.63.4:

1.63.4   For all Reserve Capacity Cycles up to and including the 2024 Reserve Capacity Cycle:

(a)   Capacity Credits issued for that Reserve Capacity Cycle are deemed to be Peak Capacity Credits; and

(b)   Certified Reserve Capacity assigned for that Reserve Capacity Cycle is deemed to be Peak Certified Reserve Capacity.

1.3   Insert the following new clause 1.63.5:

1.63.5   In the first Reserve Capacity Cycle that AEMO has to calculate an expected Forced Outage rate in respect of clause 4.5.9(c)(ii), AEMO must use an expected Forced Outage rate of 7.6%.

1.3   Insert the following new clause 1.63.6:

1.63.6   Notwithstanding clause 4.1.26, Reserve Capacity Obligations relating to Flexible Capacity do not apply before 1 October of Year 3 of the first Reserve Capacity Cycle in which AEMO allocates Flexible Capacity Credits.

2.   Section 2.13 amended

2.1   Clause 2.13.7(b) is amended by deleting the word '[Blank]' and replacing it with the words 'monitor Rule Participants' behaviour for compliance with clauses 4.12.2(d) and 7.10.6B;'

2.2   Clause 2.13.7(c) is amended by deleting the word 'Participant's' and replacing it with the word 'Participants'.

3.   Clause 2.29.13 amended

3.1   Clause 2.29.13(b) is amended by deleting the word 'and'

3.2   Clause 2.29.13(c) is amended by deleting the full stop at the end of paragraph (c) and inserting the words '; and'.

3.3   Insert the following new clause 2.29.13(d):

(d)   reviewing expert reports under clause 4.11.7.

4.   Clause 2.30.5 amended

4.1   Clause 2.30.5(f) is amended by:

(a)   deleting the words 'Facility Monthly' and replacing them with the words 'Entity Daily Peak'; and

(b)   inserting the words ' and Separately Certified Components' immediately after the words ' each of the Facilities'

5.   Clause 3.16.7A amended

5.1   Insert the following new clause 3.16.7A:

3.16.7A   The Four-Hour Demand Increase for a Trading Interval is to be calculated as follows:

$$\text{FHDI}(t) = (\text{OPDEM}(t) - |\text{OPWITH}(t)|) - (\text{OPDEM}(t-8) - |\text{OPWITH}(t-8)|)$$

where:

(a)   FHDI(t) is the Four-Hour Demand Increase for Trading Interval t;

(b)   OPDEM(t) is the Operational Demand for the last Dispatch Interval in Trading Interval t;

(c)   OPWITH(t) is the Operational Withdrawal for the last Dispatch Interval in Trading Interval t.

6.   Section 3.21 amended

6.1   Clause 3.21.6 is amended by:

(a)   inserting the words 'Peak Capacity' after the word 'The' at the beginning of the clause; and

(b)   deleting the formula for calculating 'Q(c,DI,o)' and replacing it with the following formula:
$$\text{PCQ}(c,DI,o) = \text{PrevRAC}(c,DI,o) - \text{RAC}(c,DI,o)$$

6.2   Clause 3.21.6(c)(ii) is amended by:

(a)   inserting the word 'Peak' after the words 'supply across the'; and

(b)   inserting the words 'for Separately Certified Component c in Dispatch Interval DI' after the words 'Resource Obligation Duration'

6.3   Clause 3.21.6(d)(ii) is amended by:

(a)   inserting the word 'Peak' after the words 'supply across the'; and

(b)   inserting the words 'for Separately Certified Component c in Dispatch Interval DI' after the words 'Resource Obligation Duration'

6.4   Clause 3.21.7 is deleted and replaced as follows:

3.21.7.   The Peak Capacity Adjusted Forced Outage Quantity for Dispatch Interval DI for Separately Certified Component c of a Registered Facility is:

(a)   if Separately Certified Component c is an Intermittent Generating System:

$$PCAFO(c, DI) = 0$$

(b)   otherwise:

$$PCAFO(c, DI) =$$

$$max\left(0, \sum_{o \in FO} PCQ(c, DI, o) \right.$$

$$\left. - \left(MaxCap(c, DI) - DefPRCOQ(c, DI) \right) \right)$$

where:

i.   o ∈ FO denotes all Forced Outages o for Separately Certified Component c that include Dispatch Interval DI;

ii.   PCQ(c,DI,o) is the Peak Capacity Outage Quantity for Outage o of Separately Certified Component c in Dispatch Interval DI as calculated in clause 3.21.6;

iii.   MaxCap(c,DI) is:

1.   if Separately Certified Component c is a Non-Intermittent Generating System, the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from the Non-Intermittent Generating System under optimal conditions, as specified under Appendix 1(b)(x) or Appendix 1(c)(x) as applicable; or

2.   if Separately Certified Component c is an Electric Storage Resource, the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply across the Peak Electric Storage Resource Obligation Duration for Separately Certified Component c in Dispatch

Interval DI to the relevant Network from the Electric Storage Resource under optimal conditions, as specified under Appendix 1(b)(xii) or Appendix 1(c)(xii) as applicable; and

iv. DefPRCOQ(c,DI) is the Peak Reserve Capacity Obligation Quantity that would apply to Separately Certified Component c in Dispatch Interval DI if the Separately Certified Component was not subject to an Outage or an approved Commissioning Test Plan.

6.5 Clause 3.21.7A is deleted and replaced as follows:

3.21.7A. The Peak Capacity Adjusted Forced Outage Quantity for Trading Interval t for Separately Certified Component c of a Registered Facility is:

$$\mathrm{PCAFO(c,t)} = \frac{\sum_{\mathrm{DI} \in \mathrm{t}} \mathrm{PCAFO(c,DI)}}{6}$$

where:

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

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

6.6 Clause 3.21.7B is deleted and replaced as follows:

3.21.7B. The Peak Capacity Adjusted Forced Outage Quantity for Trading Interval t for Registered Facility f is:

(a) where no Peak Capacity Credits are assigned to Registered Facility f in Trading Interval t or Registered Facility f is a Non-Scheduled Facility:

$$\mathrm{PCAFO(f,t)} = 0$$

(b) otherwise:

$$\mathrm{PCAFO(f,t)} = \sum_{\mathrm{c} \in \mathrm{f}} \mathrm{PCAFO(c,t)}$$

where:

i. c ∈ f denotes all Separately Certified Components c of Facility f; and

ii. PCAFO(c,t) is the Peak Capacity Adjusted Forced Outage Quantity for Separately Certified Component c in Trading Interval t as calculated in clause 3.21.7A.

6.7   Clause 3.21.7C is deleted and replaced as follows:

3.21.7C.   The Peak Capacity Adjusted Forced Outage Quantity for Dispatch Interval DI for Registered Facility f is:

(a)   if no Peak Capacity Credits are assigned to Registered Facility f in Dispatch Interval DI or Registered Facility f is a Non-Scheduled Facility:

$$\text{PCAFO(f, DI)} = 0$$

(b)   otherwise:

$$\text{PCAFO(f, DI)} = \sum_{c \in f} \text{PCAFO(c, DI)}$$

where:

i.   c ∈ f denotes all Separately Certified Components c of Facility f; and

ii.   PCAFO(c,DI) is the Peak Capacity Adjusted Forced Outage Quantity for Separately Certified Component c in Dispatch Interval DI as calculated in clause 3.21.7.

6.8   Clause 3.21.8 is deleted and replaced as follows:

3.21.8.   The Peak Capacity Adjusted Planned Outage Quantity for Dispatch Interval DI for Separately Certified Component c of a Registered Facility is:

(a)   if Separately Certified Component c is an Intermittent Generating System:

$$\text{PCAPO(c, DI)} = 0$$

(b)   otherwise:

$$PCAPO(c, DI) = max\left(0, \sum_{o \in \textbf{PO}} PCQ(c, DI, o)\right.$$
$$- max\left(0, MaxCap(c, DI) - DefPRCOQ(c, DI)\right.$$
$$\left.\left. - \sum_{o \in \textbf{FO}} PCQ(c, DI, o)\right)\right)$$

where:

i.   o ∈ PO denotes all Planned Outages o for Separately Certified Component c that include Dispatch Interval DI;

ii.   o ∈ FO denotes all Forced Outages o for Separately
          Certified Component c that include Dispatch Interval DI;

iii.   PCQ(c,DI,o) is the Peak Capacity Outage Quantity for
          Outage o of Separately Certified Component c in Dispatch
          Interval DI as calculated in clause 3.21.6;

iv.   MaxCap(c,DI) is:

          1.   if Separately Certified Component c is a
                   Non-Intermittent Generating System, the
                   maximum sent out capacity, net of embedded and
                   Parasitic Loads, that can be available for supply to
                   the relevant Network from the Non-Intermittent
                   Generating System under optimal conditions, as
                   specified under Appendix 1(b)(x) or Appendix
                   1(c)(x) as applicable; or

          2.   if Separately Certified Component c is an Electric
                   Storage Resource, the maximum sent out
                   capacity, net of embedded and Parasitic Loads,
                   that can be available for supply across the Peak
                   Electric Storage Resource Obligation Duration for
                   Separately Certified Component c in Dispatch
                   Interval DI to the relevant Network from the
                   Electric Storage Resource under optimal
                   conditions, as specified under Appendix 1(b)(xii) or
                   Appendix 1(c)(xii) as applicable; and

v.   DefPRCOQ(c,DI) is the Peak Reserve Capacity Obligation
          Quantity that would apply to Separately Certified
          Component c in Dispatch Interval DI if the Separately
          Certified Component was not subject to an Outage or an
          approved Commissioning Test Plan.

6.9   Clause 3.21.8A is deleted and replaced as follows:

3.21.8A.   The Peak Capacity Adjusted Planned Outage Quantity for Trading Interval t for
            Separately Certified Component c of a Registered Facility is:

$$\mathrm{PCAPO}(c, t) = \frac{\sum_{\mathrm{DI} \in t} \mathrm{PCAPO}(c, \mathrm{DI})}{6}$$

where:

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

(b)   PCAPO(c,DI) is the Peak Capacity Adjusted Planned Outage Quantity for Separately Certified Component c in Dispatch Interval DI as calculated in clause 3.21.8.

6.10   Clause 3.21.8B is deleted and replaced as follows:

3.21.8B.   The Peak Capacity Adjusted Planned Outage Quantity for Trading Interval t for Registered Facility f is:

(a)   if no Peak Capacity Credits are assigned to Registered Facility f in Trading Interval t or Registered Facility f is a Non-Scheduled Facility:

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

(b)   otherwise:

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

where:

i. $c \in f$ denotes all Separately Certified Components c of Facility f; and

ii.   PCAPO(c,t) is the Peak Capacity Adjusted Planned Outage Quantity for Separately Certified Component c in Trading Interval t as calculated in clause 3.21.8A.

6.11   Clause 3.21.8C is deleted and replaced as follows:

3.21.8C.   The Peak Capacity Adjusted Planned Outage Quantity for Dispatch Interval DI for Registered Facility f is:

(a)   if no Peak Capacity Credits are assigned to Registered Facility f in Dispatch Interval DI or Registered Facility f is a Non-Scheduled Facility:

$$PCAPO(f, DI) = 0$$

(b)   otherwise:

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

where:

i. $c \in f$ denotes all Separately Certified Components c of Facility f; and

ii.   PCAPO(c,DI) is the Peak Capacity Adjusted Planned Outage Quantity for Separately Certified Component c in Dispatch Interval DI as calculated in clause 3.21.8.

7.   Section 4.1 amended

7.1   Clause 4.1.9 is deleted and replaced with the following:

4.1.9.   AEMO must publish input data to be used in the Relevant Level Method in accordance with step B.9.1 of Appendix 9 by 5:00 PM on the first Business Day falling on or following 10 June of Year 1 of a Reserve Capacity Cycle.

7.2   Clause 4.1.16 is deleted and replaced with the following:

4.1.16.   AEMO must publish the information set out in step B.9.2 of Appendix 9 by the time specified in clause 4.1.15A.

7.3   Clause 4.1.16A(b) is amended by:

(a)   inserting the word 'Peak' before the words ' Reserve Capacity Requirement'; and

(b)   inserting the word 'Peak' and before the words ' Capacity Credits'; and

(c)   Inserting the words the 'the Capacity Year commencing on 1 October of' before the words ' Year 3 of'.

7.4   Clause 4.1.22(a) is amended by deleting the words 'clause 4.20.17' and replacing them with the words 'clauses 4.20.17 and 4.20.17A'

7.5   Clause 4.1.26 is deleted and replaced with the following:

4.1.26.   Reserve Capacity Obligations apply:

(a)   from the Trading Day commencing 1 October of Year 3 of the Reserve Capacity Cycle, where AEMO has determined in accordance with clause 4.20.5A(aA) that the Peak Reserve Capacity Requirement has been met or exceeded with the Peak Capacity Credits assigned for Year 3 of the Reserve Capacity Cycle:

i.   to Facilities to which section 4.13 applies, for which no Reserve Capacity Security was required to be provided under section 4.13; or

ii.   to Demand Side Programmes determined by AEMO to be in Commercial Operation, and

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

i.   to Facilities to which section 4.13 applies, for which no Reserve Capacity Security was required to be provided under section 4.13; or

ii.   to Demand Side Programmes determined by AEMO to be in Commercial Operation,

from the Trading Day commencing:

iii.   on 1 October of Year 3 of the Reserve Capacity Cycle, for Facilities that were commissioned as at 16 September 2019 or for Facilities which have provided Peak Capacity Credits in one or both of the two previous Reserve Capacity Cycles;

iv.   on 1 June of Year 3 of the Reserve Capacity Cycle, for Facilities commissioned between 16 September 2019 and 1 June of Year 3 of the Reserve Capacity Cycle;

v.   on the scheduled date of commissioning, as specified in accordance with clause 4.10.1(c)(iii)(7), or as revised in accordance with clause 4.27.11A, for Facilities commissioned between 1 June of Year 3 of the Reserve Capacity Cycle and 1 October of Year 3 of the Reserve Capacity Cycle; or

vi.   on 1 October of Year 3 of the Reserve Capacity Cycle, for new Energy Producing Systems undertaking Commissioning Tests after 1 October of Year 3 of the Reserve Capacity Cycle.

7.6   Clause 4.1.29 is deleted and replaced with the following:

4.1.29 The Peak Reserve Capacity Price, the Flexible Reserve Capacity Price, each Entity Daily Peak Reserve Capacity Price, and each Entity Daily Flexible Reserve Capacity Price for a Reserve Capacity Cycle apply from the start of the Trading Day commencing on 1 October of Year 3 of the Reserve Capacity Cycle to the end of the Trading Day ending on 1 October of Year 4 of the Reserve Capacity Cycle.

8.   Clause 4.2.7 amended

8.1   Clause 4.2.7(b) is amended by inserting the words ' Peak Capacity and Flexible Capacity from' immediately after the words 'potentially available, categorised as'.

8.2   Clause 4.2.7(c) is amended by deleting the words 'Reserve Capacity' and replacing them with the words 'Peak Capacity and Flexible Capacity'.

8.3   Clause 4.2.7(cA) is deleted and replaced as follows:

(cA)   for each Facility that contains an Energy Producing System, the additional Peak Capacity and Flexible Capacity potentially available from each technology;

8.4   Clause 4.2.7(d) is amended by deleting the words 'Reserve Capacity' and replacing them with the words 'Peak Capacity and Flexible Capacity'.

9.   Clause 4.3.1 amended

9.1   Clause 4.3.1(b) is amended by adding the letter 's' at the end of the word 'Requirement'.

9.2x   Clause 4.3.1(c)(i) is amended by:

(a)   adding the letter 's' at the end of the word 'Requirement'; and

(b)   deleting the words 'clause 4.6.1' and replacing them with the words ' clauses 4.6.1 and clause 4.6.1A'.

9.3   Insert the following new clause 4.3.19(c)(iii):

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

9.4   Clause 4.3.1(c)(iv) is amended by inserting the words 'Peak Capacity Credits and Flexible ' before the words 'Capacity Credits'.

9.5   Clause 4.3.1(c)(v) is amended by adding the letter 's' at the end of the word 'Price'.

9.6   Clause 4.3.1(c)(vi) is amended adding the letter 's' at the end of the word 'Price'.

9.7   Clause 4.3.1(c)(vii) is amended by deleting the words 'Facility Monthly' and replacing them with the words 'Entity Daily Peak'.

9.8   Clause 4.3.1(c)(viii) is amended by:

(a)   inserting the words 'Peak Capacity Credits and Flexible ' before the words 'Capacity Credits';

(b)   inserting the words ' or Separately Certified Components' after the words 'to Facilities'; and

(b)   inserting the words ' 4.3.1(c)(iii), ' after the word clauses.

9.9   Clause 4.3.1(d) is amended by:

(a)   inserting the words 'Peak Capacity Credits and Flexible ' before the words 'Capacity Credits'; and

(b)   inserting the words ' clause 4.14.1(a) and' after the words 'in accordance with'.

9.10   Clause 4.3.1(e) is deleted and replaced as follows:

(e)   the amount of Peak Capacity and Flexible Capacity expected to be required from new Facilities, where these figures are based on the difference between the values as determined in accordance with clause 4.6.3 and the latest information available to AEMO as to the aggregate available Peak Capacity and Flexible Capacity for the SWIS during the period to which the Reserve Capacity Requirements relate;

9.11   Clause 4.3.1(f) is amended by adding the letter 's' at the end of the word 'Requirement'.

10. Clause 4.4.1 amended

10.1   Clause 4.4.1(bA)(ii) is amended by deleting the words 'Reserve Capacity' and replacing them with the words 'Peak Capacity and Flexible Capacity'.

10.2   Clause 4.4.1(c) is amended by deleting the words 'Reserve Capacity' and replacing them with the words 'Peak Capacity and Flexible Capacity'.

11. Section 4.5 amended

11.1   Clause 4.5.2A is amended by deleting the word 'Reserve' and replacing it with the word 'Peak'.

11.2   Clause 4.5.2A(a) is amended by:

(a)   deleting the word 'Reserve' and replacing it with the word 'Peak' everywhere it occurs; and

(b)   deleting the words 'the Planning Criterion' and replacing them with the words 'the requirements specified in clauses 4.5.9(a) and 4.5.9(b)'.

11.3   Clause 4.5.2A(b) is amended by deleting the word 'Reserve' and replacing it with the word 'Peak'.

11.4   Clause 4.5.2A(b)(ii) is amended by inserting the word 'Peak' before the words ' Reserve Capacity Target'.

11.5   Clause 4.5.9(a) is amended to delete the word 'and' after the semicolon at the end of the clause.

11.6   Clause 4.5.9(b) is amended to delete the fullstop at the end of the clause and insert '; and'.

11.7   Insert the following new clause 4.5.9(c):

(c)   meet the highest forecast Four-Hour Demand Increase, plus a reserve margin equal to:

i.   the highest forecast Four-Hour Demand Increase; multiplied by

ii.   the proportion of Flexible Capacity expected to be unavailable at the time of the highest forecast Four-Hour Demand Increase due to Forced Outages based on Forced Outage rates calculated in accordance with the WEM Procedure specified in clause 4.9.10, excluding Forced Outages of Facilities to which clause 4.11.1A applies.

11.8   Clause 4.5.10(aA) is amended to insert the words ' or Flexible Capacity' after the words 'any shortfalls in Peak Capacity'.

11.9   Insert the following new clause 4.5.10(bA):

(bA)   forecast the expected highest Four-Hour Demand Increase and the corresponding Flexible Reserve Capacity Target for each Capacity Year during the Long Term PASA Study Horizon, where:

   i.   the Flexible Reserve Capacity Target for a Capacity Year is the greater of:

      1.   the Flexible Capacity required to meet the requirements specified in clause 4.5.9(c) in that year under the scenario described in clause 4.5.10(a)(iii); and

      2.   the Flexible Capacity required to meet clause 4.5.9(c) in that year under the scenario described in clause 4.5.10(a)(iv); and

   ii.   the expected highest Four-Hour Demand Increase in that year is the greater of:

      1.   the highest Four-Hour Demand Increase under the scenario described in clause 4.5.10(a)(iii); and

      2.   the highest Four-Hour Demand Increase under the scenario described in clause 4.5.10(a)(iv);

11.10   Clause 4.5.12(g) is deleted and replaced as follows:

(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; divided by

   ii.   the number of Capacity Years in the reference demand profile;

11.11   Clause 4.5.13(a)(ii) is amended by inserting the words ' to provide Peak Capacity and Flexible Capacity' immediately after the words 'Registered Facility' at the end of the clause.

11.12   Clause 4.5.13(a)(iii) is amended by inserting the words ' to provide Peak Capacity and Flexible Capacity' immediately after the words 'producing project' at the end of the clause.

11.13   Clause 4.5.13(a)(iv) is amended by inserting the words ' to provide Peak Capacity and Flexible Capacity' immediately after the words 'producing project' at the end of the clause.

11.14   Clause 4.5.13(a)(v) is amended by inserting the words ' to provide Peak Capacity and Flexible Capacity' immediately after the words 'and availability' at the end of the clause.

11.15   Clause 4.5.13(b) is amended by:

(a)   inserting the word 'Peak' immediately before the words 'Reserve Capacity'; and

(b)   inserting the words 'and the Flexible Reserve Capacity Target' immediately after the words 'Capacity Target'.

11.16 Clause 4.5.13(c) is amended by Inserting the word 'Peak' immediately after the words 'short of the'

11.17 Insert the following new clause 4.5.13(cA):

(cA)   the amount by which the installed Energy Producing System Flexible Capacity plus the Demand Side Programme Flexible Capacity available exceeds or falls short of the Flexible Reserve Capacity Target for each Capacity Year and each demand growth scenario considered in the study;

11.18 Clause 4.5.16 is amended by:

(a)   inserting the words 'from Rule Participants' immediately after the words 'must invite submissions'; and

(b)   deleting the words 'from Rule Participants' and replacing them with the words 'and expected system-wide ramp rates'.

12.   Section 4.6 amended

12.1 Clause 4.6.1 is amended by:

(a)   inserting the word 'Peak' before the words ' Reserve Capacity Requirement'; and

(b)   inserting the word 'Peak' before the words ' Reserve Capacity Target'.

12.2 Insert the following new clause 4.6.1A:

4.6.1A.   The Flexible Reserve Capacity Requirement for a Reserve Capacity Cycle is the Flexible Reserve Capacity Target for the Capacity Year commencing on 1 October of Year 3 of a Reserve Capacity Cycle as reported in the Statement of Opportunities Report for that Reserve Capacity Cycle.

12.3 Clause 4.6.2 is amended by inserting the word 'Peak' before the words ' Reserve Capacity Requirement'.

12.4 Insert the following new clause 4.6.2A:

4.6.2A.   The expected highest Four-Hour Demand Increase corresponding to the Flexible Reserve Capacity Requirement is the forecasted value determined in accordance with clause 4.5.10(bA)(ii) for the Capacity Year commencing on 1 October of Year 3 of a Reserve Capacity Cycle.

12.5 Clause 4.6.3 is amended by:

(a)   adding the letter 's' at the end of the word 'Requirement';

(b)   deleting the word 'is' and replacing it with the word 'are'; and

(a)   adding the letter 's' at the end of the word 'Target'.

13.   Clause 4.7.3 amended

13.1   Clause 4.7.3(a) is amended by:

(a)   adding the letter 's' at the end of the word 'Requirement'; and

(b)   inserting the words ' or clause 4.6.1A' immediately after the words 'clause 4.6.1' at the end of the clause.

14.   Section 4.9 amended

14.1   Clause 4.9.3(bA) is amended by deleting the words 'period identified in step 1(a) of the Relevant Level Methodology during which the Facility Sub-Metering was installed' and replacing them with the words 'RLM Reference Period for the current Reserve Capacity Cycle'

14.2   Clause 4.9.8(a) is amended by inserting the words ' and Flexible Certified Reserve Capacity' after the words 'Peak Certified Reserve Capacity'.

14.3   Clause 4.9.9(a) is amended by:

(a)   deleting the word 'amount' and replacing it with the word 'quantity'; and

(b)   inserting the words ' Peak Certified Reserve Capacity and Flexible' before the words 'Certified Reserve Capacity'.

14.4   Clause 4.9.9A is amended by:

(a)   deleting the word 'level' and replacing it with the word 'quantity';

(b)   inserting the words ' Peak Certified Reserve Capacity and Flexible' before the words 'Certified Reserve Capacity'; and

(c)   inserting the words ' or a component of a Facility' immediately after the word 'Facility' at the end of the clause.

14.5   Insert the following new clause 4.9.10(aA):

(aA)   the method that AEMO uses to determine the system demand profiles required under step B.2 of Appendix 9;

14.6   Clause 4.9.10(b) is amended by deleting the word 'methodology' and replacing it with the word 'method'.

14.7   Clause 4.9.10(c)(ii)(2) is amended by deleting the word 'where' and replacing it with the word 'if'.

15.   Section 4.10 amended

15.1   Clause 4.10.1(e)(iv) is amended by:

(a)   inserting the word 'Peak' before the words 'Reserve Capacity Obligation'; and

(b)   inserting the words ' and, where applicable, the Flexible Reserve Capacity Obligation Quantity' after the word 'Quantity'.

15.2   Insert the following new clause 4.10.1(f)(iB):

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;

15.3　Insert the following new clause 4.10.1(f)(iB):

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;

15.4　Clause 4.10.1(f)(ii) is deleted and replaced as follows:

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;

15.5　Insert the following new clause 4.10.1(f)(iiA):

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

15.6　Clause 4.10.1(f)(iv) is amended by deleting the word '[Blank]' and replacing it with the following:

'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;'

15.7　Clause 4.10.1(f)(v) is deleted and replaced as follows:

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;

15.8　Insert the following new clause 4.10.1(fE):

(fE)　if the application relates to Flexible Capacity then, as applicable:

i.　the amount of Flexible Capacity the Market Participant expects to make available from the Facility and, where applicable, from each component of the Facility;

ii.   the maximum ramp up rate of the Facility and each component, expressed in MW per minute;

iii.   the maximum ramp down rate of the Facility and each component, expressed in MW per minute;

iii.   the minimum ramp up rate of the Facility and each component, expressed in MW per minute;

iv.   the minimum ramp down rate of the Facility and each component, expressed in MW per minute;

v.   the minimum required running time of the Facility and each component, expressed in minutes;

vi.   the minimum time (in minutes) required for the Facility and each component, between receiving a Dispatch Instruction in a cold state and operating at the minimum stable loading level;

vii.   the minimum time (in minutes) required for the Facility and each component, after receiving a Dispatch Instruction to ramp down from the minimum stable loading level to zero output;

viii.   the minimum time (in minutes) before each component in the Facility, excluding Loads, can be restarted after it is shut down; and

ix.   which, if any, FCESS the Facility expects to be capable of providing;

15.9   Insert the following new clause 4.10.1A:

4.10.1A.   AEMO must:

(a)   determine in Year 1 of a Reserve Capacity Cycle the minimum eligibility requirements for receiving Flexible Certified Reserve Capacity which are:

i.   for a Non-Intermittent Generating System:

1.   the maximum allowed minimum stable loading level of the Non-Intermittent Generating System expressed as a percentage of nameplate capacity;

2.   the minimum allowed ramp up rate expressed as a percent of nameplate capacity per minute;

3.   the minimum allowed ramp down rate expressed as a percent of nameplate capacity per minute;

4.   the maximum time (in minutes) allowed between receiving a Dispatch Instruction when in a cold state and operating at the minimum stable loading level; and

5.　　if the Non-Intermittent Generating System is part of a Scheduled Facility or Semi-Scheduled Facility, that Facility is to be classed as a Fast Start Facility;

ii.　　for an Intermittent Generating System:

1.　　the maximum allowed minimum stable loading level of the Intermittent Generating System expressed as a percentage of nameplate capacity;

2.　　the minimum allowed ramp up rate expressed as a percent of nameplate capacity per minute;

3.　　the minimum allowed ramp down rate expressed as a percent of nameplate capacity per minute;

4.　　the maximum time (in minutes) allowed between receiving a Dispatch Instruction when fully curtailed and operating at the minimum stable loading level; and

5.　　if the Intermittent Generating System is part of a Scheduled Facility or Semi-Scheduled Facility, that Facility is to be classed as a Fast Start Facility;

iii.　　for an Electric Storage Resource:

1.　　that the Electric Storage Resource is capable of switching from charging to discharging within a single Dispatch Interval;

2.　　that the Electric Storage Resource is capable of switching from discharging to charging within a single Dispatch Interval;

3.　　the minimum allowed ramp up rate expressed as a percent of nameplate capacity per minute;

4.　　the minimum allowed ramp down rate expressed as a percent of nameplate capacity per minute; and

5.　　if the Electric Storage Resource is part of a Scheduled Facility or Semi-Scheduled Facility, that Facility is to be classed as a Fast Start Facility;

iv.　　for a Demand Side Programme:

1.　　the minimum allowed ramp up rate expressed as a percent of Certified Reserve Capacity per minute;

2.   the minimum allowed ramp down rate expressed as a percent of Certified Reserve Capacity per minute; and

3.   the maximum time (in minutes) allowed between receiving a Dispatch Instruction and beginning to change output, which must be no more than five minutes;

(b)   determine the minimum eligibility requirements taking into account the technical parameters of the Benchmark Flexible Capacity Provider such that each Facility holding Flexible Certified Reserve Capacity will be capable of providing all of its capacity promptly and flexibly in the four-hour period ending in the Trading Interval used to determine the expected highest forecast Four-Hour Demand Increase under clause 4.5.10(bA) so as to minimise costs while maintaining Power System Security and Power System Reliability;

(c)   consult with Market Participants on the proposed minimum eligibility requirements for receiving Flexible Capacity before publishing them including responding to Market Participant submissions, except if AEMO does not propose changes to the eligibility requirements last published under clause 4.10.1A(d). AEMO's consultation must also include a statement of how the minimum eligibility requirements meet the Wholesale Market Objectives.

(d)   publish the minimum eligibility requirements for receiving Flexible Capacity on the WEM Website by the date specified in clause 4.1.4;

(e)   document the following in a WEM Procedure:

i.   the processes to be followed by AEMO for determining the minimum eligibility requirements for receiving Flexible Capacity under clause 4.10.1A(a);

ii.   the processes to be followed by AEMO to comply with its obligation to consult with Market Participants in accordance with this clause 4.10.1A.; and

iii.   the processes to be followed by AEMO for publishing the minimum eligibility requirements for receiving Flexible Capacity.

15.10   Clause 4.10.2(b) is amended by deleting the words 'period of performance assessment identified in step 1(a) of the Relevant Level Methodology' and replacing them with the words 'RLM Reference Period for the current Reserve Capacity Cycle'.

15.11   Clause 4.10.2(c) is amended by deleting the words 'period of performance assessment identified in step 1(a) of the Relevant Level Methodology' and replacing them with the words 'RLM Reference Period for the current Reserve Capacity Cycle'.

15.12 Clause 4.10.3 is amended by:

(a) deleting the word 'include' before the words 'a report prepared by an expert and replacing it with the words ' submit, at least 25 Business Days prior to the date and time specified in clause 4.11.1,'; and

(b) inserting the word 'Peak' before the words 'Certified Reserve Capacity for the Facility'.

15.13 Clause 4.10.3(d) is amended by deleting the words 'period of performance assessment identified in step 1(a) of the Relevant Level Methodology' and replacing them with the words 'RLM Reference Period for the current Reserve Capacity Cycle'.

15.14 Clause 4.10.3A(a) is amended by deleting the words 'period identified in step 1(a) of the Relevant Level Methodology' and replacing them with the words 'RLM Reference Period for the current Reserve Capacity Cycle'.

15.15 Insert the following new clause 4.10.5:

4.10.5. AEMO may seek an independent review of the estimates in a report provided under clause 4.10.3 if AEMO reasonably concludes that the report overstates the expected output of the relevant Facility or component of the Facility.

15.16 Insert the following new clause 4.10.6:

4.10.6. A review conducted under clause 4.10.5 must consider the expected output of the Facility or component under the operating conditions that prevailed during the RLM Reference Period for the relevant Reserve Capacity Cycle.

15.17 Insert the following new clause 4.10.7:

4.10.7. AEMO may reject a report provided under clause 4.10.3 if the independent review conducted under clause 4.10.5 concludes that the report overstates the expected output of the relevant Facility or component of the Facility.

15.18 Insert the following new clause 4.10.8:

4.10.8. If AEMO rejects a report under clause 4.10.7, the Market Participant must reimburse AEMO for the cost of the independent review, otherwise AEMO must recover the cost of the independent review as part of its Allowable Revenue.

15.19 Insert the following new clause 4.10.9:

4.10.9. If AEMO rejects a report under clause 4.10.7, the relevant Market Participant must provide a revised report to AEMO within ten Business Days of receiving notice of the rejection.

16. Section 4.11 amended

16.1 Clause 4.11.1(bD)(ii) is amended by deleting the words 'period of performance assessment identified in step 1(a) of the Relevant Level Methodology' and replacing them with ' RLM Reference Period for the current Reserve Capacity Cycle'.

16.2   Insert the following new clause 4.11.1(bF):

(bF)   the Flexible Certified Reserve Capacity for a Facility or component for a Reserve
        Capacity Cycle must not exceed:

        i.   the Peak Certified Reserve Capacity for that Facility or component for that
                Reserve Capacity Cycle; or

        ii.   for a Facility that is not a Demand Side Programme the maximum output in
                MW that the Facility or component could reach four hours after receiving a
                Dispatch Instruction in a cold state;

16.3   Insert the following new clause 4.11.1(bG):

(bG)   AEMO must not assign Flexible Certified Reserve Capacity to a Facility or component
        of a Facility if the parameters submitted under clause 4.10.1(fE) do not meet the
        minimum requirements determined in accordance with clause 4.10.1A;

16.4   Insert the following new clause 4.11.1(bH):

(bH)   AEMO must not assign Flexible Certified Reserve Capacity to a Non-Scheduled
        Facility;

16.5   Clause 4.11.1(j) is amended by:

(a)   inserting the word 'Peak' before the words ' Individual Reserve Capacity
        Requirement'; and

(b)   deleting the word 'and' after the semicolon at the end of the clause.

16.6   Insert the following new clause 4.11.1(jA):

(jA)   the Flexible Certified Reserve Capacity for a Demand Side Programme for a Reserve
        Capacity Cycle must equal:

        i.   if the Demand Side Programme has more than one Associated Load, or has a
                single Associated Load and no Peak Individual Reserve Capacity
                Requirement Contribution has been calculated for the Associated Load, the
                quantity nominated for the Demand Side Programme under clause
                4.10.1(f)(iC); and

        ii.   otherwise, the Peak Individual Reserve Capacity Requirement Contribution of
                the Associated Load as determined for the first Trading Month of the current
                Capacity Year less the expected Minimum Consumption provided under
                clause 2.29.5B(c); and

16.17   Clause 4.11.1(k) is is amended to delete the full stop at the end of the clause and insert '; and'
        at the end of the clause.

16.18   Insert the following new clause 4.11.1(l):

(l)   the Flexible Certified Reserve Capacity assigned to a Facility is to be, if relevant, the sum of the Flexible Certified Reserve Capacity assigned to each relevant component of a Facility.

16.19   Insert the following new clause 4.11.2B:

4.11.2B.   AEMO must document in a WEM Procedure the assumptions and processes for the Relevant Level Method, including how it determines:

(a)   the DER Adjusted Demand Profile under step B.2.2;

(b)   the Reference Demand Profile under step B.2.5;

(c)   Non-Candidate Availability Scenarios under step B.3.4; and

(d)   and other aspect of the Relevant Level Method AEMO considers appropriate.

16.20   Insert the following new clause 4.11.3A(aA):

(aA)   determine in Year 1 of a Reserve Capacity Cycle the Trading Intervals in each Trading Day that are classified as Flexible Electric Storage Resource Obligation Intervals from 1 October of Year 3 of the Reserve Capacity Cycle, where the Flexible Electric Storage Resource Obligation Intervals are:

i.   the Trading Interval in each Trading Day outside the Hot Season in which the highest Four-Hour Demand Increase is expected to occur in the scenario used to forecast the Flexible Reserve Capacity Target under clause 4.5.10(bA);

ii.   the contiguous Trading Intervals immediately preceding the Trading Interval identified in clause 4.11.3A(aA)(i),

where the number of Trading Intervals identified is equal to the Flexible Capacity Obligation Duration;

16.21   Insert the following new clause 4.11.3A(aB):

(aB)   publish the Flexible Electric Storage Resource Obligation Intervals determined under clause 4.11.3A(aA) on the WEM Website (which may be published in the Statement of Opportunities Report) by the date specified in clause 4.1.8;

16.22   Clause 4.11.3A(c)(i) is amended by:

(a)   inserting the words 'and Flexible Electric Storage Resource Obligation Intervals ' before the words 'under clauses'; and

(b)   inserting the words ', 4.11.3A(aB), 4.11.3A(aE),' immediately after the words 'clauses 4.11.3A(a)'.

16.23   Clause 4.11.3A(c)(ii) is amended by:

(a) inserting the words 'and Flexible Electric Storage Resource Obligation Intervals ' before the words 'in accordance with'; and

(b) inserting the words ', 4.11.3A(aB), 4.11.3A(aE),' immediately after the words 'clauses 4.11.3A(a)'.

16.24 Clause 4.11.3C is deleted and replaced as follows:

4.11.3C. For each five year period, beginning with the period commencing on 1 January 2028, the Economic Regulation Authority must, by 1 April of the first year of that period, conduct a review of the Relevant Level Method. In conducting the review, the Economic Regulation Authority must examine the effectiveness of the Relevant Level Method in meeting the Wholesale Market Objectives and may examine any other matters that the Economic Regulation Authority considers to be relevant.

16.25 Clause 4.11.3E is deleted and replaced as follows:

4.11.3E. At the conclusion of a review under clause 4.11.3C, the Economic Regulation Authority must publish a final report containing:

(a) details of the Economic Regulation Authority's review of the Relevant Level Method;

(b) a summary of the submissions received during the consultation period;

(c) the Economic Regulation Authority's response to any issues raised in those submissions; and

(d) any recommended amendments to the Relevant Level Method which the Economic Regulation Authority intends to progress as a Rule Change Proposal.

16.26 Clause 4.11.7 is amended by deleting '[Blank]' and replacing it with the words:

'If a report provided by a Market Participant under clause 4.10.3 is used to determine the Certified Reserve Capacity of a Facility or component of a Facility, then once the Facility is fully operational, AEMO must conduct a review to compare:

(a) the estimates in the report of expected sent out energy in historical Trading Intervals; and

(b) the actual energy sent out by the Facility or the component of the Facility,

under similar operating conditions, including temperature, insolation, and wind speed.'

16.27 Clause 4.11.8 is amended by deleting '[Blank]' and replacing it with the words:

'AEMO must conduct at least two reviews under clause 4.11.7 for each Facility for which a report is provided under clause 4.10.3, including:

(a)   one review, one year after AEMO determines that the Facility is fully operational; and

(b)   another review, four years after AEMO determines that the Facility is in Commercial Operation.'

16.28   Clause 4.11.9 is amended by deleting '[Blank]' and replacing it with the words:

'If a review under clause 4.11.7 concludes that, based on the performance of the relevant Facility since it has been in Commercial Operation, the estimates in the report provided under clause 4.10.3 were unreasonably high, AEMO may remove the accreditation of the relevant expert under clause 4.11.6(c).'

17.   Section 4.12 amended

17.1   Clause 4.12.1(b) is amended to insert the word 'Peak ' immediately before the words ' Reserve Capacity Obligation Quantity'.

17.2   Clause 4.12.2(b) is amended to delete the word 'and' after the semicolon at the end of the clause.

17.3   Clause 4.12.2(c) is amended to delete the full stop at the end of the clause and insert '; and' at the end of the clause.

17.4   Insert the following new clause 4.12.2(d)

(d)   the Market Participant must, before the start of the first Capacity Year for which it holds Flexible Capacity Credits in relation to a Facility, apply for Frequency Co-optimised Essential System Services accreditation under clause 2.34A.2 for that Facility and any Frequency Co-optimised Essential System Services the Facility is capable of providing.

17.5   Clause 4.12.4 is amended by inserting the word 'Peak' before the words ' Reserve Capacity Obligation'.

17.6   Clause 4.12.4(a) is amended:

(a)   inserting the word 'Peak' before the words ' Reserve Capacity Obligation'; and

(b)   inserting the word 'Peak' before the words ' Capacity Credits'.

17.7   Clause 4.12.4(b) is amended by inserting the word 'Peak' before the words ' Reserve Capacity Obligation'.

17.8   Clause 4.12.4(c) is amended by inserting the word 'Peak' before the words ' Reserve Capacity Obligation'.

17.9   Clause 4.12.4(c)(i) is amended by:

(a)   inserting the word 'Peak' before the words ' Capacity Credits'; and

(b)   deleting the word 'where' and replacing it with the word 'if'.

17.10   Clause 4.12.4(c)(iii) is amended by:

(b)   deleting the word 'hours' and replacing it with the words 'Trading Interval'; and

(b)   inserting the words ' plus, if the Demand Side Programme has Flexible Capacity Credits, the number of Trading Intervals per Capacity Year that is specified for the Demand Side Programme under clause 4.10.1(f)(iiA)' immediately after the words 'clause 4.10.1(f)(ii)' at the end of the clause.

17.11   Clause 4.12.4(c)(iv) is amended by deleting the word 'hours' and replacing it with the words 'Trading Interval'.

17.12   Clause 4.12.4(d) is amended by:

(a)   inserting the word 'Peak' before the words ' Reserve Capacity Obligation' everywhere they occur; and

(b)   inserting the word 'Peak' before the words ' Capacity Credits'.

17.13   Clause 4.12.5 is amended by:

(a)   inserting the word 'Peak' before the words ' Reserve Capacity Obligation'; and

(b)   inserting the word 'Peak' before the words ' Capacity Credits'.

17.14   Clause 4.12.5(a) is amended by inserting the word 'Peak' before the words ' Reserve Capacity Obligation'.

17.15   Clause 4.12.5(b) is amended by inserting the word 'Peak' before the words ' Reserve Capacity Obligation'.

17.16   Clause 4.12.5(b)(i) is amended by inserting the word 'Peak' before the words ' Capacity Credits'.

17.17   Clause 4.12.5(b)(ii) is deleted and replaced as follows:

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;

17.18   Clause 4.12.5(c) is deleted and replaced as follows:

(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), the Peak Reserve Capacity Obligation Quantity for an Electric Storage Resource:

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

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

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

$$PCC \times MSOC45 / MSOC41$$

where:

1.   PCC is the number of Peak Capacity Credits assigned to the Electric Storage Resource for the Dispatch Interval;

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

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

17.19   Clause 4.12.5(d) is amended by:

(a)   deleting the word 'where' and replacing it with the word 'if'; and

(b)   inserting the word 'Peak' before the words ' Reserve Capacity Obligation'

17.20   Clause 4.12.5(e) is amended by:

(a)   deleting the word 'where' and replacing it with the word 'if';

(a)   inserting the word 'Peak' before the words ' Reserve Capacity Obligation'; and

(b)   inserting the word 'Peak' before the words ' Capacity Adjusted Planned'.

17.21   Clause 4.12.5(f) is amended by:

(a)   deleting the words 'clauses 4.12.5(d) and 4.12.5(g)' and replacing them with the words ' clauses 4.12.5(d), 4.12.5(g) and 4.12.5(h) if'; and

(b)   inserting the word 'Peak' before the words ' Reserve Capacity Obligation';

(c)   inserting the word 'Peak' before the words ' Capacity Adjusted Planned'; and

(d)   deleting the word 'and' after the semicolon at the end of the clause.

17.22   Clause 4.12.5(g) is amended by:

(a)   deleting the word 'where' and replacing it with the word 'if' at the start of the clause; and

(b)   inserting the word 'Peak' before the words ' Reserve Capacity Obligation' everywhere they occur; and

(c)   deleting the full stop at the end of the clause and inserting '; and' at the end of the clause

17.23   Insert the following new clause 4.12.5(h):

(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.

17.24   Clause 4.12.6 is deleted and replaced as follows:

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

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

where:

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

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

17.25   Insert the following new clause 4.12.7:

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

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

(b)   the Flexible Reserve Capacity Obligation Quantity for a Demand Side Programme:

i.   for a Dispatch Interval that falls within a period specified for the Demand Side Programme under clause 4.10.1(f)(vi), is equal to the number of Flexible Capacity Credits assigned to the Demand Side Programme for the Dispatch Interval, except if clauses 4.12.7(b)(iii) or 4.12.7(b)(iv) apply;

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

iii.   will equal zero for the remainder of a Capacity Year once the capacity of the Demand Side Programme has been dispatched under clause 7.6.5A for the number of Trading Intervals per Capacity Year that is specified for the Demand Side Programme under clause 4.10.1(f)(ii), plus the number of Trading Intervals per Capacity Year that is specified for the Demand Side Programme under clause 4.10.1(f)(iiA); and

iv.   will equal zero for the remainder of a Trading Day once the capacity of the Demand Side Programme has been dispatched under clause 7.6.5A for the number of Trading Intervals per

Trading Day that is specified for the Demand Side Programme under clause 4.10.1(f)(iv); and

(c)   the Flexible Reserve Capacity Obligation Quantity for a Scheduled Facility or Semi-Scheduled Facility which is assigned Flexible Capacity Credits for a Dispatch Interval is equal to the sum of the Flexible Reserve Capacity Obligation Quantities determined under clause 4.12.8 for each Separately Certified Component of the Registered Facility for the relevant Dispatch Interval.

17.26   Insert the following new clause 4.12.8:

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

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

(b)   subject to the exceptions specified in clauses 4.12.8(d) and 4.12.8(e), the Flexible Reserve Capacity Obligation Quantity for a Non-Intermittent Generating System:

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

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

$$FCC \times MSOC45 / MSOC41$$

where:

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

2.   MSOC45 is the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from the Non-Intermittent Generating System when it is operated normally at an

ambient temperature of 45 degrees Celsius, as specified in Standing Data; and

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

(c) subject to the exceptions specified in clauses 4.12.8(d), 4.12.8(f), 4.12.8(g) and 4.12.8(h), the Flexible Reserve Capacity Obligation Quantity for an Electric Storage Resource:

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

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

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

$$FCC \times MSOC45 / MSOC41$$

where:

1. FCC is the number of Flexible Capacity Credits assigned to the Electric Storage Resource for the Dispatch Interval;

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

3. MSOC41 is the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for

supply to the relevant Network from the Electric Storage Resource when it is operated normally at an ambient temperature of 41 degrees Celsius, as specified in Standing Data;

(d) if a Scheduled Facility or Semi-Scheduled Facility is subject to a Commissioning Test Plan approved by AEMO in a Dispatch Interval, the Flexible Reserve Capacity Obligation Quantity for each Separately Certified Component of the Registered Facility is equal to zero for the Dispatch Interval and clauses 4.12.8(e) and 4.12.8(f) do not apply;

(e) subject to clause 4.12.8(d), if a Separately Certified Component which is a Non-Intermittent Generating System is subject to a Planned Outage in a Dispatch Interval, the Flexible Reserve Capacity Obligation Quantity of the Separately Certified Component for the Dispatch Interval is reduced from the value determined under clause 4.12.8(b) by the Flexible Capacity Adjusted Planned Outage Quantity determined for the Separately Certified Component under clause 3.21.16;

(f) subject to clauses 4.12.8(d) and 4.12.8(g), if a Separately Certified Component which is an Electric Storage Resource is subject to a Planned Outage in a Dispatch Interval, the Flexible Reserve Capacity Obligation Quantity of the Separately Certified Component for the Dispatch Interval is reduced from the value determined under clause 4.12.8(c) by the Flexible Capacity Adjusted Planned Outage Quantity determined for the Separately Certified Component under clause 3.21.16; and

(g) if:

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

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

   the Flexible Reserve Capacity Obligation Quantity for the Electric Storage Resource is reduced to zero for all Dispatch Intervals subsequent to the Dispatch Interval in which the direction is issued in the relevant Trading Day and clause 4.12.8(f) does not apply for those Dispatch Intervals.

17.27   Insert the following new clause 4.12.9:

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

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

where:

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

(b)   FRCOQ(f,DI) is the Flexible Reserve Capacity Obligation Quantity determined for Registered Facility f for Dispatch Interval DI under clause 4.12.7.

18.   Clause 4.13A.11 amended

18.1   Clause 4.13.11(b) is amended by inserting the word 'Peak' before the word 'Individual'.

19.   Clause 4.13A.16 amended

18.2   Clause 4.13A.16 is amended by inserting the word 'Peak' before the word 'Individual'.

20.   Section 4.13B amended

20.1   Section 4.13B heading is amended by deleting the words 'Electric Storage Resources' and replacing them with the words 'Energy and Availability Limited Technologies'.

20.2   Clause 4.13B.1 is deleted and replaced with the following:

4.13B.1.   The Coordinator must review the effectiveness of the approach for:

(a)   certification of Reserve Capacity;

(b)   determination of Reserve Capacity obligations;

(c)   Reserve Capacity refunds; and

(d)   the operation of clause 4.5.12 to ensure adequacy with clause 4.5.9(b),

for Electric Storage Resources and other energy limited resources in accordance with this section 4.13B.

20.3   Clause 4.13B.3 is deleted and replaced with the following:

4.13B.3.   A review conducted under clause 4.13B.1 must examine:

(a)   whether the method for rating the capacity of Electric Storage Resources and other energy limited resources for the purposes of setting Certified Reserve Capacity remains consistent with the Wholesale Market Objectives;

(b)   whether the use of different Peak Electric Storage Resource Obligation Durations for Electric Storage Resources commissioned in different years remains consistent with the Wholesale Market Objectives;

(c)   whether the method to determine the ESR Duration Requirement for Electric Storage Resources as set out in clauses 4.5.12(a), 4.5.12(b), 4.5.12(c) and 4.5.12(d) remains consistent with the Wholesale Market Objectives;

(d)   whether the method and processes used by AEMO to determine the Mid Peak Electric Storage Resource Obligation Intervals remain consistent with the Wholesale Market Objectives;

(e)   whether applying Flexible Capacity refunds only outside the Hot Season remains consistent with the Wholesale Market Objectives;

(f)   any trend in the Availability Duration Gap from year to year, and its implications for the approach to certification of Energy Storage Resources in the WEM; and

(g)   whether the method to determine the Peak Demand Side Programme Dispatch Requirement and Flexible Demand Side Programme Dispatch Requirement, as set out in clauses 4.5.12(f), 4.5.12(g) and 4.5.12(h) remains consistent with the Wholesale Market Objectives.

21.   Section 4.14 amended

21.1   Clause 4.14.1 is deleted and replaced with the following:

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

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

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

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

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

21.2   Insert the following new clause 4.14.1A:

4.14.1A.   The quantities provided under clause 4.14.1 must meet the following criteria:

(a)   the sum of the quantities provided under clauses 4.14.1(a) and 4.14.1(b) must equal the Flexible Certified Reserve Capacity of the Facility for the Reserve Capacity Cycle;

(b)   the sum of the quantities provided under clauses 4.14.1(c) and 4.14.1(d) must equal the Peak Certified Reserve Capacity of the Facility for the Reserve Capacity Cycle; and

(c)   the quantity provided under clause 4.14.1(a) must be less than or equal to the quantity provided under clause 4.14.1(c).

21.3   Clause 4.14.3 is amended by deleting the words 'clause 4.11.1(c)' and replacing them with the words 'clauses 4.14.1(a) and 4.11.1(c) as applicable':

21.4   Clause 4.14.6 is amended by deleting the words 'clause 4.11.1(c)' and replacing them with the words 'either or both of clauses 4.14.1(a) and 4.11.1(c)'.

21.5   Insert the following new clause 4.14.6(cA):

(cA)   if more than one Facility remains, then Facilities with the greatest quantity of Flexible Certified Reserve Capacity will be accepted ahead of other Facilities; then

21.6   Clause 4.14.8 is amended by deleting the words 'clause 4.14.1(d)' and replacing them with the words 'clauses 4.14.1(b) or 4.14.1(d)'.

21.7   Clause 4.14.9 is deleted and replaced with the following:

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

22.   Section 4.15 amended

22.1   Clause 4.15.3(c) is amended by inserting the word 'Peak' after the words 'calculation of the'.

22.2   Clause 4.15.5(b) is amended by inserting the word 'Peak' before the word 'Early'.

22.3   Clause 4.15.5(c) is amended by inserting the word 'Peak' before the word 'Early'.

23.   Section 4.20 amended

23.1   Delete clause 4.20.5A and replace it with the following:

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;

(aA)   determine whether the Peak Reserve Capacity Requirement has been met or exceeded with the Peak Capacity Credits assigned for the third Capacity Year of the Long Term PASA Study Horizon for a Reserve Capacity Cycle:

   i.   to Facilities to which section 4.13 applies, for which no Reserve Capacity Security was required to be provided under section 4.13; or

   ii.   to Demand Side Programmes determined by AEMO to be in Commercial Operation;

(aB)   determine whether the Flexible Reserve Capacity Requirement has been met or exceeded with the Flexible Capacity Credits assigned for the third Capacity Year of the Long Term PASA Study Horizon for a Reserve Capacity Cycle:

   i.   to Facilities to which section 4.13 applies, for which no Reserve Capacity Security was required to be provided under section 4.13; or

   ii.   to Demand Side Programmes determined by AEMO to be in Commercial Operation; and

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

   i.   AEMO's determinations under clause 4.20.5A(aA) and 4.20.5A(aB); and,

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

      1.   the quantity of Peak Capacity Credits assigned;

      2.   the quantity of Flexible Capacity Credits assigned; and

      3.   the Facility Class.

23.2   Delete clause 4.20.5AA and replace it with the following:

4.20.5AA.   For each Reserve Capacity Cycle, if AEMO has assigned Capacity Credits to Facilities or Separately Certified Components at any of the following prices, AEMO must 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:

(a)   the Peak Reserve Capacity Price;

(aA)   the Flexible Reserve Capacity Price;

(b)   if the Reserve Capacity Cycle is also a Transitional Reserve Capacity Cycle:

      i.   the Transitional Daily Peak Reserve Capacity Price for a Transitional Facility or Transitional Component multiplied by the number of Trading Days in the relevant Capacity Year for the Reserve Capacity Cycle; and

      ii.   the Transitional Daily Flexible Reserve Capacity Price multiplied by the number of Trading Days in the relevant Capacity Year for the Reserve Capacity Cycle;

(c)   if the Reserve Capacity Cycle is also a Fixed Price Reserve Capacity Cycle:

      i.   the 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

      ii.   the Fixed Daily Flexible Reserve Capacity Price for each Separately Certified Component that is a Fixed Price Component for that Reserve Capacity Cycle multiplied by the number of Trading Days in the relevant Capacity Year.

23.3   Amend clause 4.20.5B by inserting the word 'Peak' before the words 'Capacity Credits'.

23.4   Insert the following new clause 4.20.5BA:

4.20.5BA   The quantity of Flexible Capacity Credits assigned to a Facility f is equal to the lesser of:

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

(b)   the quantity of Flexible Certified Reserve Capacity notified by AEMO under clause 4.14.9.

23.5   Clause 4.20.5C is amended by:

(a)   deleting the word 'Where' and replacing it with 'If' at the beginning of the clause; and

(b)   inserting the words 'Peak Capacity Credits or Flexible' immediately after the words 'to be assigned a quantity of'.

23.6   Insert the following new clause 4.20.9(aA):

(aA)   whether the Notice of Intention to Cancel Capacity Credits applies to Peak Capacity Credits, Flexible Capacity Credits, or both Peak Capacity Credits and Flexible Capacity Credits;

23.7   Clause 4.20.11 is amended by deleting the word 'Where' and replacing it with 'If' at the beginning of the clause.

23.8   Clause 4.20.12 is amended by deleting the word 'Where' and replacing it with 'If' at the beginning of the clause.

23.9   Clause 4.20.14 is amended by deleting the word 'Where' and replacing it with 'If' at the beginning of the clause.

23.10   Clause 4.20.15 is amended by deleting the word 'Where' and replacing it with 'If' at the beginning of the clause.

23.11   Clause 4.20.16 is amended by:

(a)   deleting the word 'Where' and replacing it with 'If' at the beginning of the clause;

(b)   inserting the word 'Peak' immediately before each reference to the words 'Capacity Credits'; and

(c)   inserting the word 'Peak' immediately before each reference to the words 'Certified Reserve Capacity'.

23.12   Insert the following new clause 4.20.16A:

4.20.16A   If AEMO has assigned Flexible Capacity Credits to a Facility for a Capacity Year that is less than the total Flexible Certified Reserve Capacity for each component of the Facility for that Capacity Year, the Market Participant must, by the date and time specified in clause 4.1.21A, notify AEMO of the number of Flexible Capacity Credits that are to be associated with each component of the Facility for the Capacity Year, where:

(a)   the number of Flexible Capacity Credits to be associated with a component must not exceed the Flexible Certified Reserve Capacity assigned to that component for that Capacity Year; and

(b)   the number of Flexible Capacity Credits to be associated with a component must not exceed the number of Peak Capacity Credits to be associated with that component for the Capacity Year.

23.13   Clause 4.20.17 is amended by:

(a)   deleting the word 'Where' and replacing it with 'If' at the beginning of the clause; and

(b)   inserting the word 'Peak' immediately before each reference to the words 'Capacity Credits'.

23.14   Clause 4.20.17(a) is amended by:

(a)   inserting the word 'Peak' immediately before the word 'Capacity'; and

(b)   inserting '(c)' at the end of the clause immediately after the words '4.14.1' at the end of the clause.

23.15   Clause 4.20.17(b) is amended by:

(a)   deleting the word 'where' and replacing it with 'if' at the start of the clause; and

(b)   inserting the word 'Peak' immediately before the word 'Capacity'.

23.16   Insert the following new clause 4.20.17A:

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

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

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

24.   Section 4.23A amended

8.1   Clause 4.23A.4(b) is amended by:

(a)   inserting the word 'Peak' after the words 'Aggregated Facility the';

(b)   inserting the word 'Peak' before the words 'Capacity Credits'; and

(c)   inserting the word 'Peak' before the words ' Reserve Capacity Obligation Quantity'.

25.   Section 4.24 amended

25.1   Clause 4.24.1 is amended by:

(a)   deleting the words 'Reserve Capacity' and replacing them with the words 'Peak Capacity'; and

(b)   deleting the word 'methodology' and replacing it with the word 'method'.

25.2   Clause 4.24.1(b) is amended by deleting the word 'amount' and replacing it with the word 'size'.

25.3   Clause 4.24.1(c) is amended by deleting the word 'capacity' and replacing it with the word 'Peak Capacity'.

25.4   Clause 4.24.1A is amended by:

(a)   deleting the words 'Reserve Capacity' and replacing them with the words 'Peak Capacity'; and

(b)   deleting the word 'capacity' after the words 'interest for supplementary' and replacing it with the words 'Peak Capacity'.

25.5   Insert the following new clause 4.24.1AA:

4.24.1AA.   If, at any time after the day which is nine months before the start of a Capacity Year AEMO considers that inadequate Flexible Capacity will be available to maintain Power System Security and Power System Reliability between 1 October and 30 November of that Capacity Year, using the most recent published forecasts and the method outlined in clause 4.5.9(c) and any other information AEMO considers relevant, then it must:

(a)   determine whether a shortfall in Flexible Capacity will also occur between 1 April and 30 September of the relevant Capacity Year;

(b)   determine the expected start and end dates for the period of the shortfall or shortfalls;

(c)   determine the expected amount of the shortfall or shortfalls; and

(d)   seek to acquire supplementary Flexible Capacity in accordance with clause 4.24.2.

25.6   Insert the following new clause 4.24.1AB:

4.24.1AB.   Without limiting clause 4.24.1AA, if, at any time after the day which is nine months before the start of a Capacity Year, AEMO considers that there is a risk that adequate Flexible Capacity may not be available to maintain Power System Security and Power System Reliability between 1 October and 30 November of that Capacity Year, then it may advertise a call for expressions of interest for supplementary Flexible Capacity by publishing a notice on the WEM Website and issuing a Market Advisory.

25.7   Insert the following new clause 4.24.1AC:

4.24.1AC.   If, at any time after the day which is three months before the start of a Capacity Year, AEMO considers that inadequate Flexible Capacity will be available to maintain Power System Security and Power System Reliability between 1 April and 30 September of that Capacity Year, using the most recent published forecasts and the method outlined in clause 4.5.9(c) and any other information AEMO considers relevant, then it must:

(a)   determine the expected start and end dates for the period of the shortfall;

(b)   determine the expected size of the shortfall; and

(c)   seek to acquire supplementary Flexible Capacity in accordance with clause 4.24.2.

25.8   Insert the following new clause 4.24.1AD:

4.24.1AD.   Without limiting clause 4.24.1AC, if, at any time after the day which is three months before the start of a Capacity Year, AEMO considers that there is a

risk that adequate Flexible Capacity may not be available to maintain Power System Security and Power System Reliability between 1 April and 30 September of that Capacity Year, then it may advertise a call for expressions of interest for supplementary Flexible Capacity by publishing a notice on the WEM Website and issuing a Market Advisory.

25.9   Clause 4.24.1B is amended by inserting the words ', clause 4.24.1AB, or clause 4.24.1AD' immediately after the words 'clause 4.24.1A'.

25.10   Insert the following new clause 4.24.1B(bA):

(bA)   whether the supplementary capacity will be Peak Capacity or Flexible Capacity;

25.11   Clause 4.24.1C is amended by inserting the words ', clause 4.24.1AB or clause 4.24.1AD' immediately after the words 'clause 4.24.1A'.

25.12   Clause 4.24.3 is amended by:

(a)   deleting the word 'capacity' after the words 'sources of supplementary' and replacing it with the words 'Peak Capacity'; and

(b)   inserting the word '**Peak** ' immediately before the words '**Eligible Services**'.

25.13   Clause 4.24.3(c)(i) is amended by inserting the word 'Peak' before each reference to the words 'Capacity Credits'.

25.14   Insert the following new clause 4.24.3A:

4.24.3A.   The only eligible sources of supplementary Flexible Capacity are the following services ("**Flexible Eligible Services**"):

(a)   load reduction, that is measures to reduce a consumer's consumption of electricity supplied through the SWIS from that which the consumer would have otherwise consumed and which meets the minimum requirements published under clause 4.10.1A(d) for the relevant Reserve Capacity Cycle, but excluding reductions provided by a Market Participant with a Demand Side Programme that does not satisfy its Reserve Capacity Obligations during the current Capacity Year or did not satisfy its Reserve Capacity Obligations during the immediately preceding Capacity Year;

(b)   load increase, that is measures to increase a consumer's consumption of electricity supplied through the SWIS from that which the consumer would have otherwise consumed and which meets the minimum requirements published under clause 4.10.1A(d) for the relevant Reserve Capacity Cycle, but excluding increases provided by a Market Participant with a Demand Side Programme that does not satisfy its Reserve Capacity Obligations during the current Capacity Year or did not satisfy

its Reserve Capacity Obligations during the immediately preceding Capacity Year;

(c)   the production of electricity by Energy Producing Systems that meet the minimum requirements published under clause 4.10.1A(d) for the relevant Reserve Capacity Cycle and are not Registered Facilities; and

(d)   the production of electricity by Energy Producing Systems that are Registered Facilities, or load reductions provided by loads, but only to the extent that the electricity is generated, or the load reduction is provided, by capacity that meets the minimum requirements published under clause 4.10.1A(d) for the relevant Reserve Capacity Cycle, and for which the relevant Market Participant:

    i.   does not hold Flexible Capacity Credits in the current Capacity Year or has not held Flexible Capacity Credits in the current Capacity Year or the immediately preceding Capacity Year; or

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

        1.   costs have been incurred to increase the flexibility of the capacity so that it meets the minimum requirements published under clause 4.10.1A(d) for the relevant Reserve Capacity Cycle through the installation of physical equipment; and

        2.   the capacity is in addition to the Flexible Capacity of the Facility that existed prior to the installation of the physical equipment.

25.15   Insert the following new clause 4.24.6(bA):

(bA)   whether the capacity will be supplementary Peak Capacity or supplementary Flexible Capacity;

25.16   Clause 4.24.8(b) is amended by:

(a)   deleting the words 'an Eligible Service' and replacing it with the words 'a Peak Eligible Service' immediately after the words 'an offer for the provision of'; and

(b)   inserting the word 'Peak' after the words 'if AEMO is not satisfied that the'.

25.17   Insert the following new clause 4.24.8(bA):

(bA)   AEMO must not accept an offer for the provision of a Flexible Eligible Service if AEMO is not satisfied that the Flexible Eligible Service will be available during times of high ramp coinciding with the shortfall period;

25.18   Clause 4.24.8(c)(i) is amended by deleting the word 'capacity' and replacing it with the words 'Peak Capacity or supplementary Flexible Capacity'.

25.19   Clause 4.24.8(c)(ii) is amended by:

(a)   deleting the word 'capacity' after the word 'supplementary' and replacing it with the words 'Peak Capacity or supplementary Flexible Capacity';

(b)   deleting the words 'Reserve Capacity' and replacing them with the words 'Peak Capacity'; and

(c)   inserting the words 'or Flexible Capacity shortfall' after the word 'shortfall'.

25.20   Insert the following new clause 4.24.10(aA):

(aA)   whether the capacity will be supplementary Peak Capacity or supplementary Flexible Capacity;

25.21   Clause 4.24.11 is amended by inserting the words ' 4.24.3A,' immediately after the words '4.24.3,'.

25.22   Clause 4.24.11A is amended by deleting the word 'Where' and replacing it with the word 'If' at the beginning of the clause.

25.23   Insert the following new clause 4.24.11B(aA):

(aA)   whether the Supplementary Capacity Contract is for Peak Capacity or Flexible Capacity;

25.24   Clause 4.24.13(e) is amended by deleting the word 'where' and replacing it with the word 'if'.

25.25   Clause 4.24.13(g) is amended by inserting the words ', including for Flexible Eligible Services the minimum requirements published under clause 4.10.1A(d) for the relevant Reserve Capacity Cycle' immediately after the word 'with' at the end of the clause.

25.26   Clause 4.24.13(h)(i) is deleted and replaced with the following

i.   the term of the Supplementary Capacity Contract, where:

1.   for supplementary Peak Capacity, this term is not to exceed, but may be shorter than, the Hot Season;

2.   for supplementary Flexible Capacity, this term is not to apply during the Hot Season;

25.27   Clause 4.24.14 is amended by deleting the word 'where' and replacing it with the word 'if'.

25.28   Clause 4.24.18(a)(ii) is amended by deleting the word 'and' after the semicolon.

25.29   Insert the following new clause 4.24.18(a)(iv):

iv   determining how a payment in relation to a Supplementary Capacity Contract is to be made to the party identified in clause 4.29.3(e)(ii) if that party is not a Market Participant; and

25.30   Insert the following new clause 4.24.18(a)(v):

v.   determining under clause 4.24.8(d) that a provider of an Eligible Service has access to the network;

25.31   Clause 4.24.18(b) is deleted and replaced with the following:

(b)   requirements regarding the information and assistance AEMO may require from Western Power to support:

i.   an expression of interest process or a procurement process for supplementary capacity under this section 4.24; and

ii.   measuring the performance of activated Eligible Services the subject of a Supplementary Capacity Contract;

25.32   Clause 4.24.18(c) is amended by inserting the words ', clause 4.24.1AB, or clause 4.24.1AD' immediately after the words 'under clause 4.24.1A'.

25.33   Clause 4.24.18(d) is amended by deleting the word 'where' and replacing it with the word 'if'.

25.34   Clause 4.24.18B is amended by inserting the words ', clause 4.24.1AB, or clause 4.24.1AD' immediately after the words 'under clause 4.24.1A'.

26.   Section 4.26 amended

26.1   Clause 4.26.1 is deleted and replaced by the following:

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

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

Peak Trading Interval Refund Rate$(f,t) = PRF(f,t) \times PY(f,t)$

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 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 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, the Entity Daily Peak Reserve Capacity Price for Facility f in Trading Interval t divided by 48;

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

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

where:

1.   c∈ESR(f,t) refers to all Separately Certified Components c of Facility f in Trading Interval t that are Electric Storage Resources;

2.   PESROI(c,t) is 1 if Trading Interval t is a Peak Electric Storage Resource Obligation Interval for Separately Certified Component c and 0 otherwise;

3.   PCC(c,t) is the Peak Capacity Credits associated with Separately Certified Component c in Trading Interval t;

4.   PCC(f,t) is the Peak Capacity Credits associated with Facility f in Trading Interval t;

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

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

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

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

v. if Facility f is a Demand Side Programme:

$$PY(f,t) = EDPRCP(f,t) \times \frac{TICY(t)}{DSPTICY(f,t)}$$

where:

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

2. TICY(t) is the number of Trading Intervals in the Capacity Year in which Trading Interval t falls; and

3. DSPTICY(f,t) is the number of Trading Intervals in the Capacity Year in which Trading Interval t falls which fall in the period specified under clause 4.10.1(f)(vi) for Demand Side Programme f;

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

i. six; and

ii. the greater of the Peak Capacity dynamic refund factor PRF_dynamic(t) as determined under clause 4.26.1(d) and the minimum Peak Capacity refund factor PRFfloor(f,t) as determined under clauses 4.26.1(f) or 4.26.1(g) as appropriate.

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

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

where:

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

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

(e) For Registered Facility f in the Trading Interval t, Spare(f,t) is determined as follows:

    i. if Facility f is a Scheduled Facility, the greater of zero and:

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

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

        3. the Sent Out Metered Schedule for Facility f in Trading Interval t multiplied by two so as to be a MW quantity;

    iA. if Facility f is a Semi-Scheduled Facility, the greater of zero and:

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

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

        3. the Sent Out Metered Schedule for Facility f in Trading Interval t multiplied by two so as to be a MW quantity;

    ii. if Facility f is a Non-Scheduled Facility, zero; and

    iii. if Facility f is a Demand Side Programme in the Trading Interval t, Spare(f,t) is equal to:

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

    where:

        1. [Blank]

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

        3. DSP Load(f,t) is the Demand Side Programme Load for the Demand Side Programme f in the Trading Interval t as determined under clause 9.5.4 multiplied by two so as to be a MW quantity; and

        4. DSP MinLoad(f,t) is the sum of the Minimum Consumption of each Associated Load of the Demand Side Programme f in MW in the Trading Interval t.

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

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

where:

    i.   Dispatchable(f,t) for a Facility f in the Trading Interval t is its portion of capacity which is not subject to a Forced Outage for energy over the 4320 previous Trading Intervals pt prior to and including the Trading Interval t, where this is equal to one in the Trading Interval if no Peak Capacity Credits are held by the Facility in any of the 4320 previous Trading Intervals, determined as follows:

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

where:

    1.   PT is the set of 4320 Trading Intervals immediately prior to and including the Trading Interval t and pt is a Trading Interval within that set;

    2.   PCAFO(f,pt) is the Peak Capacity Adjusted Forced Outage Quantity for Facility f in the Trading Interval pt, as determined in accordance with clause 3.21.7B; and

    3.   PCC(f,pt) is the number of Peak Capacity Credits a Market Participant holds for Facility f in the Trading Interval pt.

(g)   PRF floor(f,t) is equal to one in the Trading Interval t for a Facility f to which any of the following applies:

    i.   the Facility f is a Demand Side Programme; or

    ii.   the Facility f is not a Registered Facility or AEMO has deemed the Facility to not be in Commercial Operation in the Trading Interval t.

26.2   Clause 4.26.1A is deleted and replaced by the following:

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

(a)   the product of:

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

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

1. if Facility f is not a Registered Facility then the number of Peak Capacity Credits associated with Facility f in Trading Interval t;

2. if Facility f is considered by AEMO to have not been in Commercial Operation in Trading Interval t and is either a Scheduled Facility, a Semi-Scheduled Facility or a Non-Scheduled Facility, the number of Peak Capacity Credits associated with Facility f;

3. if Facility f is considered by AEMO to have been in Commercial Operation in Trading Interval t and is either a Scheduled Facility or a Semi-Scheduled Facility:

$$\min(PCCIG(f,t),$$
$$\max(0, \min(RL(f,t) - 2 \times MAX2(f,t), RL(f,t) - A(f,t))))$$
$$+ PRTMRCD(f,t)$$

where:

i. $PCCIG(f,t)$ is the number of Peak Capacity Credits held for Facility f associated with Separately Certified Components of Facility f which are Intermittent Generating Systems of the Facility in Trading Interval t;

ii. $RL(f,t)$ is the Required Level for Facility f, adjusted to 100 percent of the level of Peak Capacity Credits held for Facility f in Trading Interval t;

iii. $MAX2(f,t)$ is the second highest value of the output for Facility f (in MWh) achieved for a Trading Interval during the Trading Day in which Trading Interval t falls, as measured in Meter Data Submissions received by AEMO in accordance with section 8.4, that has been achieved since the date AEMO determined the Facility to be in Commercial Operation up to the relevant Trading Day, where this value must be set equal to or greater than the Max2 applied by AEMO for the previous Trading Day;

iv. $A(f,t)$ is the level of output (in MW) detailed in the most recent report provided prior to Trading Interval t by the Market Participant for Facility f under clause 4.13.10C; and

     v.   PRTMRCD(f,t) is the Peak Real-Time Market Reserve Capacity Deficit determined for Facility f in Trading Interval t under clause 4.26.1B;

4.   if Facility f is considered by AEMO to have been in Commercial Operation in Trading Interval t and is a Non-Scheduled Facility:

$$\min(PCC(f,t), \max(0, \min(RL(f,t) - 2 \times MAX2(f,t), RL(f,t) - A(f,t))))$$

where:

    i.   PCC(f,t) is the number of Peak Capacity Credits held for Facility f in Trading Interval t;

    ii.   RL(f,t) is the Required Level for Facility f, adjusted to 100 percent of the level of Peak Capacity Credits held for Facility f in Trading Interval t;

    iii.   MAX2(f,t) is the second highest value of the output for Facility f (in MWh) achieved for a Trading Interval during the Trading Day in which Trading Interval t falls, as measured in Meter Data Submissions received by AEMO in accordance with section 8.4, that has been achieved since the date AEMO determined the Facility to be in Commercial Operation up to the relevant Trading Day, where this value must be set equal to or greater than the Max2 applied by AEMO for the previous Trading Day; and

    iv.   A(f,t) is the level of output (in MW) detailed in the most recent report provided prior to Trading Interval t by the Market Participant for Facility f under clause 4.13.10C; and

5.   if Facility f is a Demand Side Programme, the capacity shortfall calculated as zero if DSPConstrainedFlag = 1, and otherwise:

$$\max (0, PRCOQ(f,t) - \max(0, (2xDSPLoad(f,t) - (DSPMinLoad(f,t) + PDSPTS(f,t)))))$$

where:

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

ii.   DSPLoad(f,t) is the Demand Side Programme Load in MWh for the Demand Side Programme f in the Trading Interval t as determined under clause 9.5.4;

iii.   DSPMinLoad is the sum of the MW quantities of Minimum Consumption for Facility f's Associated Loads in Trading Interval t;

iv.   PDSPTS(f,t) is the Peak DSP Test Shortfall in MW determined by AEMO under clause 4.25.3D, clause 4.25.4(b) or clause 4.25.6(b)(i), or zero if AEMO has not determined a Peak DSP Test Shortfall; and

v.   DSPConstrainedFlag is equal to zero, except that it is equal to one if the Demand Side Programme was responding to a Dispatch Instruction, or if one of its Associated Loads was unable to withdraw due to a Network limitation, or if one of its Associated Loads that is also associated with an Interruptible Load was responding to a Contingency Event; 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.

26.3   Clause 4.26.1B is deleted and replaced by the following:

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

$$PRTMRCD(f,t) = min(PRCOQ(f,t), PCAFO(f,t) + PNISCRQ(f,t) \\ + PESRCSF(f,t) + PRTMOSF(f,t)) + PNIMGRPPO(f,t) \\ + PESRRPPO(f,t)$$

where:

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

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

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

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

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

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

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

26.4   Clause 4.26.1C is deleted and replaced by the following:

4.26.1C.   If the Peak Capacity Adjusted Planned Outage Quantity in a Trading Interval for a Separately Certified Component of a Scheduled Facility or Semi-Scheduled Facility which is a Non-Intermittent Generating System is greater than zero, then AEMO must determine that Peak Capacity Adjusted Planned Outage Quantity to be:

(a)   if the Peak Refund Exempt Planned Outage Count for the Separately Certified Component, calculated over the 1000 Trading Days preceding the Trading Day in which the Trading Interval falls, is less than 8400, a Peak Refund Exempt Planned Outage Quantity; or

(b)   otherwise, a Peak Refund Payable Planned Outage Quantity.

26.5   Clause 4.26.1CA is deleted and replaced by the following:

4.26.1CA.   If the Peak Capacity Adjusted Planned Outage Quantity in a Trading Interval for a Separately Certified Component of a Scheduled Facility or Semi-Scheduled Facility which is an Electric Storage Resource is greater than zero, then AEMO must determine that Peak Capacity Adjusted Planned Outage Quantity to be:

(a)   if the Peak Refund Exempt Planned Outage Count for the Separately Certified Component, calculated over the 1000 Trading Days preceding the Trading Day in which the Trading Interval falls, is less than 16800 divided by the ESR Duration Requirement for the Reserve Capacity Cycle, a Peak Refund Exempt Planned Outage Quantity; or

(b)   otherwise, a Peak Refund Payable Planned Outage Quantity.

26.6   Clause 4.26.1D is deleted and replaced by the following:

4.26.1D.   AEMO must calculate the Peak Not In-Service Capacity Refund Quantity for each Scheduled Facility or Semi-Scheduled Facility f for each Trading Interval t in which AEMO considers the Facility to have been in Commercial Operation as:

$$PNISCRQ(f,t) = \frac{5}{30} \times \sum_{DI\in t} \begin{cases} 0, \text{ if } RTMSuspFlag(DI) = 1, \text{ otherwise} \\ \min(PRCOQ(f,DI) - PCAFO(f,DI), \ NISCap(f,DI)) \end{cases}$$

where:

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

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

(c)   NISCap(f,DI) is the Not In-Service Capacity quantity determined for Facility f in Dispatch Interval DI under clause 7.13A.1;

(d)   RTMSuspFlag(DI) is the RTM Suspension Flag for Dispatch Interval DI; and

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

26.7   Clause 4.26.1E is deleted and replaced by the following:

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

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

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.

26.8   Clause 4.26.1F is deleted and replaced by the following:

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

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

where:

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

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

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

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

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

26.9   Clause 4.26.1G is deleted and replaced by the following:

4.26.1G.   AEMO must determine the shortfall in Peak Capacity offered into the Real-Time Market ("Peak Real-Time Market Offer Shortfall") for each Scheduled Facility or Semi-Scheduled Facility f for each Trading Interval t in which AEMO considers the Facility to have been in Commercial Operation as:

$$PRTMOSF(f,t) =$$
$$max\left(0, \frac{\sum_{DI \in t} \text{PRTMOSF(f,DI)}}{6} - PCAFO(f,t) - PNISCRQ(f,t)\right.$$
$$\left. - PESRCSF(f,t)\right)$$

where:

(a)   PRTMOSF(f,DI) is the shortfall in Peak Capacity offered into the Real-Time Market determined for Facility f in Dispatch Interval DI under clause 4.26.1H;

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

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

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

26.10   Clause 4.26.1H is deleted and replaced by the following:

4.26.1H.   PRTMOSF(f,DI) for Facility f in Dispatch Interval DI is:

$$PRTMOSF(f,DI) = \begin{cases} 0 \text{ if RTMSuspFlag(DI) = 1, otherwise} \\ max(0, PRCOQ(f,DI) - OfferAvail(f,DI)) \end{cases}$$

where:

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

(b) OfferAvail(f,DI) is the total MW quantity included in Real-Time Market Offers for energy from Facility f in Dispatch Interval DI (whether offered as Available Capacity or In-Service Capacity) that were used to calculate Dispatch Instructions and Market Clearing Prices for that Dispatch Interval; and

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

26.11 Clause 4.26.1I is amended by inserting the word 'Peak':

(a) before the words ' Generation Reserve Capacity Deficit Refund';

(b) before the words ' Facility Reserve Capacity Deficit Refunds'; and

(c) before the words ' Capacity Credits in the Trading Interval'.

26.12 Clause 4.26.1J is deleted and replaced by the following:

4.26.1J. If a Scheduled Facility or a Semi-Scheduled Facility that has a Peak Reserve Capacity Obligation Quantity greater than zero for a Dispatch Interval:

(a) has been issued a Dispatch Instruction with a Dispatch Target or a Dispatch Cap less than or equal to its Peak Reserve Capacity Obligation Quantity and did not Inject at a level of the Dispatch Cap or Dispatch Target during the Dispatch Interval; or

(b) has been issued a Dispatch Instruction with a Dispatch Target or a Dispatch Cap greater than its Peak Reserve Capacity Obligation Quantity and did not Inject at least at a level of the Peak Reserve Capacity Obligation Quantity during the Dispatch Interval,

the Market Participant for the Facility must, as soon as practicable at the end of the Dispatch Interval, or in any event, within 24 hours of the end of the Dispatch Interval, submit a Forced Outage for the energy Outage Capability in accordance with the WEM Procedure specified in clause 3.21.10.

26.13 Clause 4.26.2AA is amended by inserting the word ' Peak' after the word 'holding'.

26.14 Clause 4.26.2AC(b) is amended by inserting the word 'Peak' after the word 'holds'.

26.15 Clause 4.26.2AD is deleted and replaced by the following:

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

$$STEMFREQ(f, DI) = STEMPRCOQ(f, DI) - Max(0, STEMPCAFO(f, DI) - PCAFO(f, DI))$$

where:

(a)   STEMPRCOQ(f,DI) is the STEM Peak Reserve Capacity Obligation Quantity determined for Facility f in Dispatch Interval DI;

(b)   STEMPCAFO(f,DI) is the estimate of the Peak Capacity Adjusted Forced Outage Quantity for Facility f in Dispatch Interval DI determined on the Scheduling Day for the relevant Trading Day under clause 6.3A.3(g); and

(c)   PCAFO(f,DI) is the Peak Capacity Adjusted Forced Outage Quantity determined for Facility f in Dispatch Interval DI under clause 3.21.7C.

26.16   Clause 4.26.2AE(a) is deleted and replaced by the following:

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

$$CAPASTEM(p,t) = STEMREQ(p,t)$$

26.17   Clause 4.26.2AG is deleted and replaced by the following:

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

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

where:

(a)   LossFactor(f,DI) is the Loss Factor for Facility f in Dispatch Interval DI;

(b)   STEMPRCOQ(f,DI) is the STEM Peak Reserve Capacity Obligation Quantity determined for Facility f in Dispatch Interval DI; and

(c)   f∈SFFacilities(p,DI) denotes all Scheduled Facilities and Semi-Scheduled Facilities for which Market Participant p holds Peak Capacity Credits in Dispatch Interval DI and which AEMO considers to be in Commercial Operation in Dispatch Interval DI.

26.18   Clause 4.26.2AH is deleted and replaced by the following:

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

$$RTCR(p,t) = \sum_{f \in SFFacilities(p,t)} (PCAFO(f,t) + PNISCRQ(f,t) + PESRCSF(f,t) \\ + PRTMOSF(f,t) \\ + \max(0, PNIMGRPPO(f,t) + PESRRPPO(f,t) \\ - STEMPCAPO(f,t)))$$

where:

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

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

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

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

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

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

(g)   STEMPCAPO(f,t) is the estimate of the Peak Capacity Adjusted Planned Outage Quantity for Facility f in Trading Interval t determined on the Scheduling Day for the relevant Trading Day under clause 6.3A.3(g); and

(h)   f∈SFFacilities(p,t) denotes all Scheduled Facilities and Semi-Scheduled Facilities for which Market Participant p holds Peak Capacity Credits in Trading Interval t and which AEMO considers to be in Commercial Operation in Trading Interval t.

26.19   Clause 4.26.2D is deleted and replaced by the following:

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

(a)   if AEMO has issued a Dispatch Instruction with a non-zero MW quantity under section 7.6 to the Demand Side Programme f for the Trading Interval:

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

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 curtail the absolute value of its

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Withdrawal in Trading Interval t as specified by AEMO in accordance with clause 7.13.5;

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

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

(b) zero, if AEMO has issued a Dispatch Instruction with a zero MW quantity under section 7.6 to the Demand Side Programme f for Trading Interval t.

26.20 Clause 4.26.2E is amended by:

(a) deleting the words '("**Capacity Cost Refund**")' and replacing them with the words '("**Peak Capacity Cost Refund**")'; and

(b) inserting the word 'Peak' after the words 'as the sum of the '.

26.21 Clause 4.26.2F is deleted and replaced by the following:

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

(a) either:

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

ii. zero; otherwise,

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

26.22 Clause 4.26.3 is deleted and replaced by the following:

4.26.3. The Peak Generation Capacity Cost Refund for Trading Interval t in Capacity Year y for a Market Participant p holding Peak Capacity Credits associated with an Energy Producing System is the lesser of:

(a) the Maximum Peak Participant Generation Refund determined for Market Participant p and Capacity Year y less all Peak Generation Capacity Cost Refunds applicable to Market Participant p in previous Trading Intervals falling in Capacity Year y; and

(b)   the Peak Generation Reserve Capacity Deficit Refund for Market
        Participant p and Trading Interval t, plus the Net STEM Refund in Trading
        Interval t for Market Participant p, where the Net STEM Refund is
        calculated as follows:

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

where:

i.   N STEM Refund(p, t) is the Net STEM Refund for Market
        Participant p in Trading Interval t;

ii.   PTIRR weighted(p, t) is the weighted average of the Peak Trading
        Interval Refund Rate in Trading Interval t for each Registered
        Facility that Market Participant p holds Peak Capacity Credits for
        and is calculated as follows:

$$\text{PTIRR weighted}(p,t) = \sum_{f \epsilon F} \frac{\text{PTIRR}(f,t) \times \text{PCC}(f,t)}{\sum_{f \epsilon F} \text{PCC}(f,t)}$$

where:

1.   F denotes the set of all Registered Facilities registered to
        Market Participant p in Trading Interval t, for which Market
        Participant p holds Capacity Credits in Trading Interval t,
        excluding Demand Side Programmes and f is a Facility
        within that set;

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

3.   PCC(f,t) is the number of Peak Capacity Credits
        associated with Facility f in Trading Interval t; and

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

26.23   Clause 4.26.3A is deleted and replaced by the following:

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

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

(b)   the sum of:

i.   either:

1.   if Facility f is a Registered Facility:

$$\mathrm{PTIRR(f, t) \times PCS}$$

where:

PCS is the Peak Capacity Shortfall in MW for Facility f determined in accordance with clause 4.26.2D in Trading Interval t, and

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

2.   otherwise; zero; and

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

27.   Section 4.28 amended

27.1   Clause 4.28.1 is deleted and replaced with the following:

4.28.1.   AEMO must separate the total costs of Peak Capacity Credits acquired by it for a AEMO must separate the total costs of Peak Capacity Credits acquired by it for a Trading Day into the following two sets:

(a)   the Peak Targeted Reserve Capacity Cost, which is the cost of acquiring enough Peak Capacity Credits to ensure, to the extent possible given the number of Peak Capacity Credits AEMO has acquired, that the lesser of:

i.   the Peak Reserve Capacity Requirement applicable to that Trading Day; and

ii.   total Peak Capacity Credits assigned to Facilities,

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

(b)   the Peak Shared Reserve Capacity Cost, calculated in accordance with clause 4.28.4, which is the cost of other Peak Capacity Credits acquired but not allocated to the set referred to in clause 4.28.1(a),

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

27.2   Clause 4.28.2 is deleted and replaced by the following:

4.28.2.   For the purposes of clause 4.28.1:

(a)   AEMO is taken to have acquired a Capacity Credit held by a Market Participant in respect of a Facility for a Trading Day if that Capacity Credit has not been allocated by that Market Participant to another Market Participant for settlement purposes under sections 4.30 and 4.31;

(b)   any Capacity Credits that have been allocated to a Market Participant in excess of that Market Participant's Individual Reserve Capacity Requirements must be:

i.   deemed to be Capacity Credits acquired by AEMO from the Market Participant; and

ii.   not counted as Capacity Credits traded bilaterally;

(c)   [Blank]

(d)   [Blank]

(e)   the cost of a Peak Capacity Credit deemed to be acquired by AEMO from a Market Participant under clause 4.28.2(b)(i) is the Peak Excess Allocation Price for that Market Participant in that Trading Day; and

(f)   the cost of each other Peak Capacity Credit acquired by AEMO from a Market Participant is the Entity Daily Peak Reserve Capacity Price for the relevant Facility in that Trading Day.

27.3   Clause 4.28.3 is amended by inserting the word ' Peak' immediately after the words 'AEMO must calculate the'.

27.4   Clause 4.28.4 is deleted and replaced by the following:

4.28.4   For each Trading Day, AEMO must calculate a Peak Shared Reserve Capacity Cost being the sum of:

(a)   the cost defined under clause 4.28.1(b); and

(b)   the net payments to be made by AEMO under Supplementary Capacity Contracts less any amount drawn under a Reserve Capacity Security or a DSP Reserve Capacity Security by AEMO and distributed in accordance with clauses 4.13.11A(a) or 4.13A.16(a) for that Trading Day; less

(c)   the sum of all Intermittent Load Refunds, calculated under clause 4.28A.1, paid by all Market Participants for that Trading Day; less

(cA)   the sum of all Peak Capacity Cost Refunds, calculated under clause 4.26.2E, paid by all Market Participants for that Trading Day; less

(d)   any amount drawn under a Reserve Capacity Security or a DSP Reserve
        Capacity Security by AEMO and distributed in accordance with clauses
        4.13.11A(b) or 4.13A.16(b) for that Trading Day,

and AEMO must allocate this total cost to Market Participants in proportion to each
Market Participant's Peak Individual Reserve Capacity Requirement.

27.5   Clause 4.28.5 is amended by inserting the word 'Peak ' immediately before the words 'Shared
        Reserve'.

27.6   Insert the following new clause 4.28.5B:

        4.28.5B. To determine the Peak IRCR Intervals for use in the Relevant Level Method, AEMO
                 must:

        (a)   identify the 12 Trading Intervals with the highest Total Sent Out Generation in
                the most recently completed Hot Season;

        (b)   select the Trading Days on which the Trading Intervals identified in clause
                4.28.5B(a) fell;

        (c)   if fewer than three Trading Days are selected in clause 4.28.5B(b), select
                additional Trading Days containing Trading Intervals with the highest Total
                Sent Out Generation, to make a total of three Trading Days; and

        (d)   for each Trading Day selected under clauses 4.28.5B(b) and 4.28.5B(c):

                i.   select the Trading Interval with the highest Total Sent Out
                        Generation;

                ii.   select all other Trading Intervals that were identified in clause
                        4.28.5B(a);

                iii.   if the Trading Intervals selected in clauses 4.28.5B(d)(i) and
                        4.28.5B(d)(ii) are not contiguous, identify any gaps of three hours or
                        less, and select all Trading Intervals in those gaps; and

                iv.   if fewer than three Trading Intervals have been selected, select the
                        Trading Intervals with the highest Total Sent Out Generation
                        immediately before or after the selected Trading Intervals to select
                        three Trading Intervals for the Trading Day.

27.7   Clause 4.28.6 is deleted and replaced by the following:

        4.28.6 For each Trading Month, AEMO must determine and provide to each Market
                Participant that Market Participant's Indicative Peak Individual Reserve Capacity
                Requirement by the date and time specified in clause 4.1.23C, and this Indicative
                Peak Individual Reserve Capacity Requirement must be determined using the
                method described in Appendix 5.

27.8   Clause 4.28.7 is deleted and replaced by the following:

4.28.7   For each Trading Month, AEMO must determine and provide to each Market Participant that Market Participant's Peak Individual Reserve Capacity Requirement by the date and time specified in clause 4.1.24, and this Peak Individual Reserve Capacity Requirement must be determined using the method described in Appendix 5.

27.9   Clause 4.28.8 is amended by inserting the word 'Peak' immediately before the words 'Individual Reserve Capacity Requirements' in each of the two occasions they appear in the clause.

27.10   Clause 4.28.11A is amended by:

(a)   inserting the word 'Peak' immediately before the words 'Individual Reserve Capacity Requirements' in each of the two occasions they appear in the clause ;

(b)   deleting the word 'methodology' and replacing it with 'method'.

28.   Section 4.28A amended

28.1   Clause 4.28A.1(a) is amended by inserting the word 'IML' before the words 'Trading Interval Refund Rate'.

28.2   Clause 4.28A.1(c)(ii) is amended by deleting the word '4.28.8(c)' and replacing it with the word '4.28.8'.

28.3   Clause 4.28A.1(c)(iii) is amended by deleting the word '4.28.8(c)' and replacing it with the word '4.28.8'.

28.4   Clause 4.28A.1A is deleted and replaced by the following:

4.28A.1A. The IML Trading Interval Refund Rate for an Intermittent Load f in the Trading Interval t is determined as follows:

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

where:

(a)   IML Trading Interval Refund Rate (f,t) is the IML Trading Interval Refund Rate for Intermittent Load f in Trading Interval t;

(b)   RF(f,t) is the refund factor for Intermittent Load f in Trading Interval t, which is the lesser of:

i.   six; and

ii.   the greater of 1 and the Peak Capacity dynamic refund factor PRF dynamic(t) as determined under clause 4.26.1(d); and

(c)   Y(f,t) is the per Trading Interval Peak Capacity price associated with Intermittent Load f in Trading Interval t, which equals the Floating Daily Peak Reserve Capacity Price divided by 48.

28.5   Clause 4.28A.2(a) is amended by deleting the words 'clause 4.28A' and replacing it with the words 'section 4.28A'.

28.6   Clause 4.28C.5(b) is amended by inserting the words ', including whether the application relates to Peak Early Certified Reserve Capacity or both Peak Early Certified Reserve Capacity and Flexible Early Certified Reserve Capacity' after the words 'to which the application relates to'.

28.7   Clause 4.28C.7 is deleted and replaced by the following:

4.28C.7. If AEMO has received an application under clause 4.28C.2 prior to the date and time under clause 4.1.11, AEMO must set Peak Early Certified Reserve Capacity and Flexible Early Certified Reserve Capacity for the Facility:

(a)   to the quantities it would normally grant the Facility if processing an application for Certified Reserve Capacity in accordance with section 4.11; and

(b)   at the time AEMO next processes applications for Certified Reserve Capacity in accordance with section 4.11.

28.8   Clause 4.28C.7B is amended by:

(a)   inserting the word 'Peak' between the words 'sets the' and Early'; and

(b)   inserting the words 'and Flexible Early Certified Reserve Capacity' after the words 'Certified Reserve Capacity'.

28.9   Clause 4.28C.8 is deleted and replaced by the following:

4.28C.8. Within 30 Business Days of the applicant receiving notification by AEMO under clause 4.1.12 of the quantity of the Peak Early Certified Reserve Capacity and Flexible Early Certified Reserve Capacity assigned to the Facility under clause 4.28C.7 the applicant must ensure that AEMO holds the benefit of a Reserve Capacity Security equal to the amount specified in clause 4.28C.9

28.10   Clause 4.28C.8A is amended by:

(a)   inserting the word 'Peak' before the words ' Early Certified Reserve Capacity';

(b)   inserting the words 'and Flexible Early Certified Reserve Capacity' before the words 'assigned to that Facility'; and

(c)   inserting the words 'under clause 4.28C.7' before the words 'and the Indicative Network Access Quantity'.

28.11   Clause 4.28C.9 is amended by:

(a)   inserting the word 'Peak' before the words 'Benchmark Reserve Capacity Price';

(b)   inserting the word 'Peak' before words 'Early Certified Reserve Capacity'; and

(c)   inserting the words 'under clause 4.28C.7' after the words 'assigned to the Facility'.

29.   Section 4.29 amended

29.1   Clause 4.29.1 is deleted and replaced by:

4.29.1   The Reserve Capacity Prices for a Reserve Capacity Cycle to apply during the period specified in clause 4.1.29 are to be calculated as follows:

(a) The Peak Reserve Capacity Price is

$$PRCP = \max(\text{Peak Segment 1, Peak Segment 2}, 0) \times PBRCP$$

where:

i. $\text{Peak Segment 1} = \frac{\text{EZ BRCP Factor} - \text{BRCP Cap Factor}}{\text{EZ}} \times \text{Psurplus}$

$+\text{BRCP Cap Factor}$

ii. $\text{Peak Segment 2} = \frac{\text{EZ BRCP Factor}}{\text{EZ} - \text{AZ}} \times (\text{Psurplus} - \text{AZ})$

iii.   PBRCP is the Peak Benchmark Reserve Capacity Price determined in accordance with section 4.16;

iv.   BRCP Cap Factor is 1.3;

v.   EZ BRCP Factor is 0.5;

vi.   EZ is 0.1;

vii.   AZ is 0.3; and

viii.   Psurplus is the pro rata excess capacity calculated as follows:

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

$$\text{Psurplus} = [\max(0, (\frac{\text{PCC} - \text{PRCR}}{\text{PRCR}}))]$$

where:

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

2.   PRCR is the Peak Reserve Capacity Requirement for the Reserve Capacity Cycle.

(b)   The Flexible Reserve Capacity Price is:

$$FRCP = \max(0, \max(\text{Flexible Segment 1, Flexible Segment 2}, 0) \times FBRCP - PRCP)$$

where:

i. $\text{Flexible Segment 1} = \frac{\text{EZ BRCP Factor} - \text{BRCP Cap Factor}}{\text{EZ}} \times \text{Fsurplus}$

$$+\text{BRCP Cap Factor}$$

ii. $\text{Flexible Segment 2} = \dfrac{\text{EZ BRCP Factor}}{\text{EZ}-\text{AZ}}\,\text{x}\,(\text{Fsurplus} - \text{AZ})$

iii. FBRCP is the Flexible Benchmark Reserve Capacity Price determined in accordance with section 4.16;

iv. PRCP is the Peak Reserve Capacity Price determined in accordance with clause 4.29.1(a).

v. BRCP Cap Factor, EZ BRCP Factor, EZ and AZ are as defined in clause 4.29.1(a); and

vi. Fsurplus is the pro rata excess capacity calculated as follows:

$$\text{Fsurplus} = \max(0, (\dfrac{\text{FCC} - \text{FRCR}}{\text{FRCR}}))$$

where:

1. FCC is the total number of Flexible Capacity Credits assigned by AEMO in accordance with clause 4.20.5A for the Reserve Capacity Cycle;

2. FRCR is the Flexible Reserve Capacity Requirement for the Reserve Capacity Cycle.

29.2 Clause 4.29.1A is deleted and replaced by the following:

4.29.1A. The Entity Daily Peak 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 equal to:

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

(b) for a Non-Scheduled Facility that is a Fixed Price Facility during a Fixed Price Reserve Capacity Cycle for that Non-Scheduled Facility, the Fixed Daily Peak Reserve Capacity Price for that Facility;

(c) for all other Non-Scheduled Facilities, the Floating Daily Peak Reserve Capacity Price;

(d) for a Transitional Component during a Transitional Reserve Capacity Cycle, the Transitional Daily Peak Reserve Capacity Price;

(e) for a Fixed Price Component during a Fixed Price Reserve Capacity Cycle for that Fixed Price Component, the Fixed Daily Peak Reserve Capacity Price for that Fixed Price Component;

(f) for all other Separately Certified Components, the Floating Daily Peak Reserve Capacity Price;

(g)   for all Demand Side Programmes, the Floating Daily Peak Reserve
        Capacity Price.

29.3   Insert the following new clause 4.29.1AA:

        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.

29.4   Clause 4.29.1B is deleted and replaced by the following:

        4.29.1B.   The Transitional Daily Peak Reserve Capacity Price is:

        $$\text{TDPRCP} = \frac{\min\left(\max\left(\text{PRCP}, \text{Trans\_Floor}\right), \text{Trans\_Ceiling}\right)}{\text{TDCY}}$$

        where:

        (a)   PRCP is the Peak Reserve Capacity Price as determined in accordance
                with clause 4.29.1(a) for the Reserve Capacity Cycle;

        (b)   Trans_Ceiling equals $140,000 for the 2019 Reserve Capacity Cycle and
                for each subsequent Transitional Reserve Capacity Cycle, the value as
                escalated in accordance with clause 4.29.1C(a);

        (c)   Trans_Floor equals $114,000 for the 2019 Reserve Capacity Cycle and for
                each subsequent Transitional Reserve Capacity Cycle, the value as
                escalated in accordance with clause 4.29.1C(b); and

        (d)   TDCY is the number of Trading Days in the relevant Capacity Year.

29.5   Clause 4.29.1C is amended by deleting the words 'clause 4.29.1B' and replacing it with the
        words 'clauses 4.29.1B and 4.29.1G'.

29.6   Clause 4.29.1CA is deleted and replaced by the following:

        4.29.1CA. AEMO must publish on the WEM Website:

        (a)   the values determined for Trans_Ceiling and Trans_Floor in accordance
                with clause 4.29.1C;

        (b)   the value determined by multiplying the Transitional Daily Peak Reserve
                Capacity Price by the number of Trading Days in the Capacity Year; and

        (c)   the value determined by multiplying the Transitional Daily Flexible Reserve
                Capacity Price by the number of Trading Days in the Capacity Year.

29.7   Clause 4.29.1D is deleted and replaced by the following:

4.29.1D. The Fixed Daily Peak Reserve Capacity Price for a Fixed Price Facility or a Fixed Price Component during a Fixed Price Reserve Capacity Cycle for the Fixed Price Facility or Fixed Price Component is:

(a) for the first Reserve Capacity Cycle for which a Facility is classified as a Fixed Price Facility or a Separately Certified Component is classified as a Fixed Price Component, the Floating Daily Peak Reserve Capacity Price; and

(b) for each subsequent Fixed Price Reserve Capacity Cycle for the Fixed Price Facility or Fixed Price Component:

$$\text{FDPRCP} = \frac{\text{FDPRCP}_{\text{previous}} \times \text{TDCM}_{\text{previous}} \times \max(1, (1 + \text{CPI}))}{\text{TDCM}}$$

where:

i. $\text{FDPRCP}_{\text{previous}}$ is the Fixed Daily Peak Reserve Capacity Price for the Fixed Price Facility or Fixed Price Component in the previous Reserve Capacity Cycle;

ii. $\text{TDCM}_{\text{previous}}$ is the number of Trading Days in the relevant Capacity Year for the previous Reserve Capacity Cycle;

iii. CPI is the consumer price index value determined in accordance with clause 4.29.2; and

iv. TDCM is the number of Trading Days in the relevant Capacity Year for the current Reserve Capacity Cycle.

29.8 Insert the following new clause 4.29.1E:

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

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

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

29.9 Insert the following new clause 4.29.1F:

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

29.10   Insert the following new clause 4.291G:

4.29.1G. The Transitional Daily Flexible Reserve Capacity Price is:

$$\text{TDFRCP} = \frac{\max(\text{FRCP} + \text{PRCP}, \text{Trans\_Floor})}{\text{TDCY}} - \text{TDPRCP}$$

where:

    i.   FRCP is the Flexible Reserve Capacity Price as determined in accordance with clause 4.29.1(b) for the Reserve Capacity Cycle;

    ii.   PRCP is the Peak Reserve Capacity Price as determined in accordance with clause 4.29.1(a) for the Reserve Capacity Cycle;

    iii.   Trans_Floor equals $114,000 for the 2019 Reserve Capacity Cycle and for each subsequent Transitional Reserve Capacity Cycle, the value as escalated in accordance with clause 4.29.1C(b);

    iv.   TDCY is the number of Trading Days in the relevant Capacity Year; and

    v.   TDPRCP is the Transitional Daily Peak Reserve Capacity Price for the current Transitional Reserve Capacity Cycle, as determined under clause 4.29.1B.

29.11   Insert the following new clause 4.29.1H:

4.29.1H   The Fixed Daily Flexible Reserve Capacity Price for a Fixed Price Component during a Fixed Price Reserve Capacity Cycle for the Fixed Price Component is:

    (a)   for the first Reserve Capacity Cycle for which a Separately Certified Component is classified as a Fixed Price Component, the Floating Daily Flexible Reserve Capacity Price; and

    (b)   for each subsequent Fixed Price Reserve Capacity Cycle for the Fixed Price Component:

$$\text{FDFRCP} = \frac{\text{FDFRCP}_{\text{previous}} \times \text{TDCM}_{\text{previous}} \times \max(1, (1 + \text{CPI}))}{\text{TDCM}}$$

where:

    i. $\text{FDFRCP}_{\text{previous}}$ is the Component Monthly Flexible Reserve Capacity Price for the Fixed Price Component in the previous Reserve Capacity Cycle;

    ii. $\text{TDCM}_{\text{previous}}$ is the number of Trading Days in the relevant Capacity Year for the previous Reserve Capacity Cycle;

iii.   CPI is the consumer price index value determined in accordance with clause 4.29.2; and

iv.   TDCM is the number of Trading Days in the relevant Capacity Year for the current Reserve Capacity Cycle.

29.12   Clause 4.29.2 is amended by deleting '[Blank]' and replacing it with 'The consumer price index value to be used in clauses 4.29.4D and 4.29.1H is the latest published value of the Reserve Bank of Australia's Statement of Monetary Policy forecast Consumer Price Index for June of Year 3 of the relevant Fixed Price Reserve Capacity Cycle; or if that value is not available, the mid-point of the Reserve Bank's latest published target range of inflation at that time, at the time AEMO determines the information required under clause 4.29.2B.'.

29.13   Clause 4.29.2B is deleted and replaced by the following:

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

(a)   if the Reserve Capacity Cycle is a Transitional Reserve Capacity Cycle, the Entity Daily Peak Reserve Capacity Price for each Transitional Facility or Transitional Component;

(b)   the Fixed Daily Peak Reserve Capacity Price for each Fixed Price Facility and each Fixed Price Component for which the Reserve Capacity Cycle is a Fixed Price Reserve Capacity Cycle;

(c)   the Entity Daily Peak Reserve Capacity Price for all other Facilities and Separately Certified Components;.

(d)   if the Reserve Capacity Cycle is a Transitional Reserve Capacity Cycle, the Entity Daily Flexible Reserve Capacity Price for each Transitional Component;

(e)   the Fixed Daily Flexible Reserve Capacity Price for each Fixed Price Component for which the Reserve Capacity Cycle is a Fixed Price Reserve Capacity Cycle; and

(f)   the Entity Daily Flexible Reserve Capacity Price for all other Separately Certified Components.

29.14   Clause 4.29.3 is deleted and replaced by the following:

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

(a)   the Entity Daily Peak Reserve Capacity Price for each Demand Side Programme, Non-Scheduled Facility, and Separately Certified Component applying during that Trading Day;

(aA)   the Entity Daily Flexible Reserve Capacity Price for each Demand Side
        Programme and Separately Certified Component applying during that
        Trading Day;

(b)   the Peak Targeted Reserve Capacity Cost for that Trading Day as defined
        in clause 4.28.3;

(bA)   the Flexible Targeted Reserve Capacity Cost for that Trading Day as
        defined in clause 4.28.3A;

(c)   the Peak Shared Reserve Capacity Cost for that Trading Day as defined in
        clause 4.28.4;

(cA)   the Flexible Shared Reserve Capacity Cost for that Trading Day as
        defined in clause 4.28.4A;

(d)   for each Market Participant p and for Trading Day d:

        i.   the quantity of Peak Capacity Credits (including Capacity Credits
                from Facilities subject to NCESS Contracts) for each Facility
                acquired by AEMO;

        iA.   the quantity of Peak Capacity Credits (including Capacity Credits
                from Facilities subject to NCESS Contracts) for each Separately
                Certified Component acquired by AEMO;

        iB.   the quantity of Flexible Capacity Credits (including Capacity Credits
                from Facilities subject to NCESS Contracts) for each Facility
                acquired by AEMO;

        iC.   the quantity of Flexible Capacity Credits (including Capacity Credits
                from Facilities subject to NCESS Contracts) for each Separately
                Certified Component acquired by AEMO;

        ii.   the quantity of Peak Capacity Credits for each Demand Side
                Programme for Trading Day d;

        iii.   the quantity of Flexible Capacity Credits for each Demand Side
                Programme for Trading Day d;

        iv.   the quantity of Peak Capacity Credits for each Facility traded
                bilaterally in accordance with section 4.30;

        ivA.   the quantity of Peak Capacity Credits for each Separately Certified
                Component traded bilaterally in accordance with section 4.30;

        ivB.   the quantity of Flexible Capacity Credits for each Facility traded
                bilaterally in accordance with section 4.30;

ivC.   the quantity of Flexible Capacity Credits for each Separately Certified Component traded bilaterally in accordance with section 4.30;

v.   the Peak Individual Reserve Capacity Requirement for the Trading Month in which Trading Day d falls;

vA.   the Flexible Individual Reserve Capacity Requirement for the Trading Month in which Trading Day d falls;

vi.   the total Peak Capacity Cost Refund to be paid by Market Participant p to AEMO for all Trading Intervals in Trading Day d; and

vii.   the total Flexible Capacity Cost Refund to be paid by Market Participant p to AEMO for all Trading Intervals in Trading Day d;

(dA)   for each Market Participant, the sum over all of Market Participant p's Intermittent Loads, deemed to be Intermittent Loads under clause 1.48.2, of the Intermittent Load Refund payable to AEMO by Market Participant p in respect of each of its Intermittent Loads for Trading Day d; and

(e)   for each Supplementary Capacity Contract:

i.   the net payment to be made by AEMO under that contract for the Trading Day d;

ii.   to whom the payment is to be made; and

iii.   whether that contract relates to a shortfall of solely Peak Capacity, both Peak Capacity and Flexible Capacity, or solely Flexible Capacity.

29.15   Clause 4.29.5 is deleted and replaced by the following:

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.

30. Section 4.30 amended

30.1   Clause 4.30.1 is amended by inserting the words ' or a Separately Certified Component' after the words 'in respect of a Facility'.

30.2   Clause 4.30.4 is deleted and replaced by the following:

4.30.4.   AEMO must reject a Capacity Credit Allocation Submission in respect of a Facility or a Separately Certified Component if the sum of the Peak Capacity Credits:

(a)   proposed to be allocated in the Capacity Credit Allocation Submission; and

(b)   proposed to be allocated in any other Capacity Credit Allocation Submission for that Facility or Separately Certified Component by that Market Participant for the relevant Trading Day,

exceeds the number of Peak Capacity Credits that are able to be traded bilaterally for that Facility or Separately Certified Component by that Market Participant under the WEM Rules for the Trading Day.

30.3   Insert the following new clause 4.30.4A:

4.30.4A.   AEMO must reject a Capacity Credit Allocation Submission in respect of a Facility or a Separately Certified Component if the sum of the Flexible Capacity Credits:

(a)   proposed to be allocated in the Capacity Credit Allocation Submission; and

(b)   proposed to be allocated in any other Capacity Credit Allocation Submission for that Facility or Separately Certified Component by that Market Participant for the relevant Trading Day,

exceeds the number of Flexible Capacity Credits that are able to be traded bilaterally for that Facility or Separately Certified Component by that Market Participant under the WEM Rules for the Trading Day.

30.4   Clause 4.30.5 is amended by inserting the words ' or clause 4.30.4A.' after the words 'in accordance with clause 4.30.4'.

30.5   Clause 4.30.6 is amended by inserting the words ' or Separately Certified Component' after the words 'in respect of a Facility'.

30.6   Clause 4.30.8 is amended by inserting the words 'or Separately Certified Component':

(a)   after the words ' Capacity Credit Allocation Submission in respect of a Facility'; and

(b)   after the words 'Capacity Credit Allocation Submission for that Facility'.

30.7   Clause 4.30.9 is amended by inserting the words ' or Separately Certified Component' after the words:

(a)   'Allocations for that Facility'; and

(b)   after the words 'Capacity Credits held for that Facility'.

30.8   Clause 4.30.10 is amended by inserting the words 'or Separately Certified Component' after the words 'allocated in respect of the relevant Facility'.

30.9   Clause 4.30.11 is deleted and replaced by the following:

4.30.11.   If, at 5:00 PM on the Scheduling Day, the number of Peak Capacity Credits allocated in Capacity Credit Allocations for a Market Participant with respect to a Facility or Separately Certified Component exceeds the number of Peak Capacity Credits held for the Facility or Separately Certified Component, AEMO must, by 5:00 PM on the Trading Day for which the Capacity Credit Allocation relates:

(a)   amend all of the relevant Capacity Credit Allocations proportionally, to ensure that the sum of the Peak Capacity Credit Allocations in respect of the relevant Facility or Separately Certified Component for the Market Participant for the Trading Day equal the number of Peak Capacity Credits held for that Facility or Separately Certified Component; and

(b)   for each amended Capacity Credit Allocation, notify each affected Market Participant of the details of the amendment.

30.10   Insert the following new clause 4.30.11A:

4.30.11A.   If, at 5:00 PM on the Scheduling Day, the number of Flexible Capacity Credits allocated in Capacity Credit Allocations for a Market Participant with respect to a Facility or Separately Certified Component exceeds the number of Flexible Capacity Credits held for the Facility or Separately Certified Component, AEMO must, by 5:00 PM on the Trading Day for which the Capacity Credit Allocation relates:

(a)   amend all of the relevant Capacity Credit Allocations proportionally, to ensure that the sum of the Flexible Capacity Credit Allocations in respect of the relevant Facility or Separately Certified Component for the Market Participant for the Trading Day equal the number of Flexible Capacity Credits held for that Facility or Separately Certified Component; and

(b)   for each amended Capacity Credit Allocation, notify each affected Market Participant of the details of the amendment.

31.   Section 4.31 amended

31.1   Clause 4.31.1 is deleted and replaced by the following:

4.31.1.   A Capacity Credit Allocation Submission must set out:

(a)   the identity of the submitting Market Participant, which must be the holder of the Capacity Credits;

(b)   the identity of the Facility from which the Capacity Credits are to be allocated for settlement purposes;

(bA)   where applicable, the identity of the Separately Certified Component from which the Capacity Credits are to be allocated for settlement purposes;

(c)   the identity of the Market Participant to which the Capacity Credits are to be allocated for settlement purposes, which may be the submitting Market Participant;

(cA)   whether the Capacity Credit Allocation Submission relates to Peak Capacity Credits or Flexible Capacity Credits; and

(d)   the number of Peak Capacity Credits or Flexible Capacity Credits to be allocated for settlement purposes from the Market Participant which was the holder of the Capacity Credits to the Market Participant which was allocated Capacity Credits, which may be the same Market Participant.

32.   Section 6.3 amended

32.1   The heading of section 6.3 is amended by inserting the words 'Mid Peak' between the words 'Determination of' and the words 'Electric Storage'.

32.2   Clause 6.3.1(a) is amended by:

(a)   inserting the words 'Mid Peak' before the words 'Electric Storage Resource Obligation'; and

(b)   deleting the word 'Intervals' and replacing it with the word 'Interval'.

32.3   Clause 6.3.1(b) is amended by inserting the words 'Mid Peak' before the words 'Electric Storage Resource Obligation'.

33.   Section 6.3A amended

33.1   Clause 6.3A.2(a) is amended by:

(a)   inserting the words 'Mid Peak' before the words 'Electric Storage Resource Obligation'; and

(b)   deleting the word 'Intervals' and replacing it with the word 'Interval'.

33.2   Clause 6.3A.2(b) is amended by inserting the words 'Mid Peak' before the words 'Electric Storage Resource Obligation'.

33.3   Clause 6.3A.3(g) is amended by:

(a)   inserting the word 'Peak' before the words ' Capacity Adjusted Forced Outage Quantity'; and

(b)   inserting the word 'Peak' before the words ' Capacity Adjusted Planned Outage Quantity'.

33.4   Clause 6.3A.3(h) is amended by inserting the word 'Peak' before the words ' Reserve Capacity Obligation Quantity'.

33.5   Clause 6.3A.4 is amended by:

(a)   inserting the word 'Peak' before the words ' Capacity Adjusted Planned Outage Quantity;

(b)   inserting the word 'Peak' before the words ' Capacity Adjusted Forced Outage Quantity'; and

(c)   inserting the word 'Peak' before the words ' Reserve Capacity Obligation Quantity'.

33.6   Clause 6.3A.4(a) is amended by inserting the words 'Mid Peak' before the words 'Electric Storage Resource Obligation'.

33.7   Clause 6.3A.4(e) is amended by:

(a)   inserting the word 'Peak' before the words ' Reserve Capacity Obligation Quantity'; and

(b)   deleting the words 'clause 4.12.5(g)' and replacing them with the words 'clauses 4.12.5(g) or 4.12.5(h)'.

33.8   Clause 6.3A.5(b)(i) is amended by inserting the word 'Peak' before the words ' Capacity Adjusted Forced Outage Quantity'.

33.9   Clause 6.3A.5(b)(ii) is amended by inserting the word 'Peak' before the words ' Capacity Adjusted Planned Outage Quantity'.

33.10   Clause 6.3A.5(c)(i) is amended by inserting the word 'Peak' before the words ' Capacity Adjusted Forced Outage Quantity'.

33.11   Clause 6.3A.5(c)(ii) is amended by inserting the word 'Peak' before the words ' Capacity Adjusted Planned Outage Quantity'.

33.12   Clause 6.3A.5(c)(iii) is amended by inserting the word 'Peak' before the words ' Reserve Capacity Obligation Quantity'.

34.   Section 7.8A amended

34.1   Clause 7.8A.3 is deleted and replaced by the following:

7.8A.3.   The DSP Forecast Capacity for a Demand Side Programme in a Dispatch Interval is:

$$DSPForecastCapacity = max(0, DSPUWQ - max(MinLoad, RD - PRCOQ))$$

where:

(a)   DSPUWQ is the Unconstrained Withdrawal Quantity provided by the Market Participant in its DSP Withdrawal Profile Submission for the Demand Side Programme and Dispatch Interval;

(b)   MinLoad is AEMO's reasonable estimate, based on the information available to it, of the sum of Minimum Consumption of each Associated Load of the Demand Side Programme in the applicable Trading Interval;

(c)   RD is AEMO's reasonable estimate, based on the information available to it, of the Relevant Demand of the Demand Side Programme in the applicable Trading Interval; and

(d)   PRCOQ is AEMO's reasonable estimate, based on the information available to it, of the Peak Reserve Capacity Obligation Quantity of the Demand Side Programme in the Dispatch Interval.

35.   Section 7.13A amended

35.1   Clause 7.13A.1 is deleted and replaced by the following:

7.13A.1.   Subject to clause 7.11D.5, AEMO must determine the Not In-Service Capacity for each Scheduled Facility or Semi-Scheduled Facility f for which a Market Participant holds Capacity Credits, in the Dispatch Interval DI as:

(a)   if AEMO has failed to use the Dispatch Algorithm for the purposes of the Central Dispatch Process for Dispatch Interval DI or AEMO has determined that Dispatch Interval DI is an Affected Dispatch Interval:

$$NISCap(f,DI) = 0$$

(b)   if clause 7.13A.1(a) does not apply and AEMO has directed a Registered Facility to offer its capacity as In Service:

$$NISCap(f,DI) = Max(0, Min(PRCOQ(f,DI), ReqDispEnergy(f,DI)) - Max(ISSDCEnergy(f,DI), ISDispEnergy(f,DI))$$

or

(c)   otherwise:

$$NISCap(f,DI) = Max(0, Min(PRCOQ(f,DI), EstDispEnergy(f,DI)) - Max(ISSDCEnergy(f,DI), ISDispEnergy(f,DI))$$

where:

i.   NISCap(f,DI) is the Not In-Service Capacity quantity for the relevant Facility f in Dispatch Interval DI;

ii.   EstDispEnergy(f,DI) is the quantity of estimated energy dispatch immediately prior to the Start Decision Cutoff time for the relevant

Facility f in Dispatch Interval DI, calculated in accordance with clause 7.13A.2;

    iii.   ISSDCEnergy(f,DI) is the quantity of In-Service Capacity offered immediately after the Start Decision Cutoff time for the relevant Facility f in Dispatch Interval DI, calculated in accordance with clause 7.13A.3;

    iv.   ISDispEnergy(f,DI) is the total MW quantity of In-Service Capacity for the relevant Facility f included in the Real-Time Market Offers for energy that were used to formulate Dispatch Instructions and calculate Market Clearing Prices for Dispatch Interval DI;

    v.   ReqDispEnergy(f,DI) is the quantity of In-Service Capacity for the relevant Facility f required by AEMO in Dispatch Interval DI.; and

    vi.   PRCOQ(f,DI) is the Peak Reserve Capacity Obligation Quantity for Facility f in Dispatch Interval DI.

36.   Section 9.8 amended

36.1   Clause 9.8.2 is deleted and replaced by the following:

9.8.2.   The Reserve Capacity settlement amount for Market Participant p for Trading Day d is:

RC_SA(p,d)

= Peak_Capacity_Provider_Payment(p,d) – Peak_Capacity_Purchaser_Payment(p,d)

where:

    (a)   Peak_Capacity_Provider_Payment(p,d) is calculated in accordance with clause 9.8.3; and

    (b)   Peak_Capacity_Purchaser_Payment(p,d) is calculated in accordance with clause 9.8.4.

36.2   Clause 9.8.3 is deleted and replaced by the following:

9.8.3.   For the purposes of clause 9.8.2, Peak_Capacity_Provider_Payment(p,d) for Market Participant p for Trading Day d is:

Peak_Capacity_Provider_Payment(p,d)

= Peak_Capacity_Payments(p,d) – Intermittent_Load_Refund(p,d)

+ Peak_Supplementary_Capacity_Payment(p,d) – Peak_Capacity_Cost_Refund(p,d)

+ Peak_Over_Allocation_Payment(p,d)

where:

(a)   [Blank]

(b)   Peak_Capacity_Payments(p,d) is calculated in accordance with clause 9.8.3A;

(c)   Intermittent_Load_Refund(p,d) is the total Intermittent Load Refund payable to AEMO by Market Participant p in respect of each of its Intermittent Loads, deemed to be an Intermittent Load under clause 1.48.2, for Trading Day d, as determined in accordance with clause 4.29.3(dA);

(d)   Peak_Supplementary_Capacity_Payment(p,d) is the net payment to be made by AEMO under a Supplementary Capacity Contract to Market Participant p for Trading Day d, as specified by AEMO in accordance with clause 4.29.3(e)(i), for a contract relating to Peak Capacity or to both Peak Capacity and Flexible Capacity as specified by AEMO in accordance with clause 4.29.3(e)(iii);

(e)   Peak_Capacity_Cost_Refund(p,d) is the Peak Capacity Cost Refund payable to AEMO by Market Participant p in respect of that Market Participant's Peak Capacity Credits for Trading Day d, as specified in clause 4.29.3(d)(vi); and

(f)   Peak_Over_Allocation_Payment(p,d) is calculated in accordance with clause 9.8.3B.

36.3   Insert the following new clause 9.8.3A:

9.8.3A.   For the purposes of clause 9.8.3, Peak_Capacity_Payments(p,d) is calculated as:

$$Peak\_Capacity\_Payments(p,d)$$
$$= \sum_{e \in PCCEntities(p,d)} \left((PCC(e,d) - PCCA(e,d)) \times EDPRCP(e,d) \right)$$

where:

(a)   e∈PCCEntities(p,d) denotes all:

   i.   Scheduled Facilities;

   ii.   Semi-Scheduled Facilities;

   iii.   Non-Scheduled Facilities; and

   iv.   Demand Side Programmes,

   registered to Market Participant p on Trading Day d, and e is an entity in that set;

(b)   PCC(e,d) is the number of Peak Capacity Credits assigned to entity e for Trading Day d;

(c) PCCA(e,d) is the sum of the Peak Capacity Credits associated with entity e for Trading Day d that have been allocated in Capacity Credit Allocations; and

(d) EDPRCP(c,d) is the Entity Daily Peak Reserve Capacity Price associated with entity e in Trading Day d.

36.4 Insert the following new clause 9.8.3B:

9.8.3B For the purposes of clause 9.8.3, Peak_Over_Allocation_Payment(p,d) is calculated as:

Peak_Over_Allocation_Payment(p,d) =
max (0, Participant_PCCA(p,d) – PIRCR(p,d)) × Peak_Excess_Allocation _Price(p,d);

where:

(a) Participant_PCCA(p,d) is the sum of Peak Capacity Credits allocated to Market Participant p in Trading Day d in Capacity Credit Allocations;

(b) PIRCR(p,d) is the Peak Individual Reserve Capacity Requirement for Market Participant p for the Trading Month in which Trading Day d falls, expressed in units of MW; and

(c) Peak_Excess_Allocation_Price(p,d) is zero if Participant_PCCA(p,d)=0, and otherwise:

$$Peak\_Excess\_Allocation\_Price(p,d)$$
$$= \frac{\sum_{c \in C(p,d)}\left(\sum_{e \in PCCEntities(d)}\left(PCCA(c,e,p,d) \times EDPRCP(e,d)\right)\right)}{\sum_{c \in C(p,d)}\left(\sum_{e \in PCCEntities(d)}\left(PCCA(c,e,p,d)\right)\right)}$$

where:

i. C(p,d) is the set of Capacity Credit Allocations made to Market Participant p in Trading Day d and c is a Capacity Credit Allocation within the set;

ii. e∈PCCEntities(d) denotes all registered:

1. Scheduled Facilities;

2. Semi-Scheduled Facilities;

3. Non-Scheduled Facilities; and

4. Demand Side Programmes,

on Trading Day d;

iii.   PCCA(c,e,p,d) is the number of Peak Capacity Credits associated with entity e that have been allocated to Market Participant p in Capacity Credit Allocation c in Trading Day d; and

iv.   EDPRCP(scc,d) is the Entity Daily Peak Reserve Capacity Price associated with entity e in Trading Day d.

36.5   Clause 9.8.4 is deleted and replaced by the following:

9.8.4.   For the purposes of clause 9.8.2, Peak_Capacity_Purchaser_Payment(p,d) for Market Participant p for Trading Day d is:

Peak_Capacity_Purchaser_Payment(p,d) = Peak_Targeted_Reserve_Capacity_Cost(p,d) + Peak_Shared_Reserve_Capacity_Cost(p,d)

where:

(a)   Peak_Targeted_Reserve_Capacity_Cost(p,d) = Peak_Targeted_Reserve_Capacity_Cost(d) × Peak_Shortfall_Share(p,d)

(b)   Peak_Shared_Reserve_Capacity_Cost(p,d) = Peak_Shared_Reserve_Capacity_Cost(d) × Peak_Capacity_Share(p,d)

(c)   Peak_Targeted_Reserve_Capacity_Cost(d) is the cost of Peak Capacity to be shared amongst those Market Participants who have not had sufficient Peak Capacity Credits allocated to them for Trading Day d where this cost is specified under clause 4.29.3(b);

(d)   Peak_Shortfall_Share(p,d) = (max(0, PIRCR(p,d) − Participant_PCCA(p,d))) / $\sum$p∈P(max(0, PIRCR(p,d) − Participant_PCCA(p,d)))

(e)   Peak_Shared_Reserve_Capacity_Cost(d) is the cost of Peak Capacity to be shared amongst all Market Participants for Trading Day d where this cost is specified under clause 4.29.3(c);

(f)   Peak_Capacity_Share(p,d) = PIRCR(p,d) / $\sum$p∈PPIRCR(p,d);

(g)   P is the set of all Market Participants where p is a member of that set;

(h)   PIRCR(p,d) is the Peak Individual Reserve Capacity Requirement for Market Participant p for the Trading Month in which the Trading Day d falls, expressed in units of MW; and

(i)   Participant_PCCA(p,d) is the sum of the Peak Capacity Credits allocated to Market Participant p in the Trading Day d, in a Capacity Credit Allocation.

37.   Chapter 11 (Glossary) amended

37.1 Insert each of the following new defined terms in Chapter 11 (Glossary) in the appropriate alphabetical order:

Candidate Fixed Price Component: Means a component of a Facility that has been nominated to be classified as a Fixed Price Component in accordance with clause 4.14.1B.

Entity Daily Flexible Reserve Capacity Price: In respect of a Reserve Capacity Cycle, the price per Flexible Capacity Credit for a Trading Day calculated in accordance with clause 4.29.1E in respect of:

      (a)   a Demand Side Programme;

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

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

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

Fixed Daily Flexible Reserve Capacity Price: For a Fixed Price Facility or Fixed Price Component in a Fixed Price Reserve Capacity Cycle, the dollar price per Flexible Capacity Credit per Trading Day calculated in accordance with clause 4.29.1H.

Fixed Daily Peak Reserve Capacity Price: For a Fixed Price Facility or Fixed Price Component in a Fixed Price Reserve Capacity Cycle, the dollar price per Peak Capacity Credit per Trading Day calculated in accordance with clause 4.29.1D.

Fixed Price Component: Means a Separately Certified Component assigned Capacity Credits for a Reserve Capacity Cycle in which it was nominated in accordance with clause 4.14.1B to be classified as a Fixed Price Component.

Flexible Certified Reserve Capacity: In respect of a Reserve Capacity Cycle, for a Facility or a component of a Facility, the quantity of Flexible Capacity that AEMO has assigned to the Facility for the Reserve Capacity Cycle in accordance with section 4.11, as adjusted under these WEM Rules including clause 4.14.8.

Flexible Capacity Obligation Duration: 8 Trading Intervals.

Flexible Demand Side Programme Dispatch Requirement: For a Reserve Capacity Cycle, is the value determined by AEMO under clause 4.5.12(h).

Flexible Early Certified Reserve Capacity: Flexible Capacity assigned to a new Facility by AEMO for a future Reserve Capacity Cycle under section 4.28C.

Flexible Electric Storage Resource Obligation Interval: A Trading Interval determined in accordance with clause 4.11.3A(aA), in which a non-zero Flexible Reserve Capacity Obligation Quantity is applied to an Electrical Storage Resource which holds Flexible Capacity Credits.

Flexible Eligible Services: Has the meaning given in clause 4.24.3A.

Flexible Reserve Capacity Obligation Quantity: The specific amount of capacity required to be provided in a Dispatch Interval or Trading Interval as part of a Reserve Capacity Obligation set by AEMO in accordance with clauses 4.12.7 to 4.12.9.

Flexible Reserve Capacity Price: In respect of a Reserve Capacity Cycle, the price for Flexible Capacity determined in accordance with clause 4.29.1(b), where this price is expressed in units of dollars per Flexible Capacity Credit per year.

Flexible Reserve Capacity Requirement: Has the meaning given in clause 4.6.1A.

Flexible Reserve Capacity Target: In respect of a Capacity Year, AEMO's estimate of the total amount of Flexible Capacity required in the SWIS to satisfy clause 4.5.9(c) for that Capacity Year determined in accordance with clause 4.5.10(bA).

Floating Daily Flexible Reserve Capacity Price: In respect of a Reserve Capacity Cycle, the dollar per Flexible Capacity Credit for a Trading Day calculated in accordance with clause 4.29.1F.

Floating Daily Peak Reserve Capacity Price: In respect of a Reserve Capacity Cycle, the dollar per Peak Capacity Credit for a Trading Day calculated in accordance with clause 4.29.1AA.

Four-Hour Demand Increase: Means, the quantity, in MW, in a Trading Interval as determined by AEMO in accordance with the formula in clause 3.16.7A.

IML Trading Interval Refund Rate: The Peak Capacity refund rate applicable in a Trading Interval, and in respect of an Intermittent Load, as calculated in accordance with clause 4.28A.1A.

Peak Capacity Adjusted Forced Outage Quantity: Means, the quantity, in MW, of the derating of a Facility or Separately Certified Component in a Dispatch Interval or Trading Interval from the Peak Reserve Capacity Obligation Quantity for the Facility or Separately Certified Component as determined by AEMO in accordance with:

> (a)   for a Separately Certified Component in a Dispatch Interval, the formula in clause 3.21.7;

> (b)   for a Separately Certified Component in a Trading Interval, the formula in clause 3.21.7A;

(c)   for a Facility in a Trading Interval, the formula in clause 3.21.7B; and

(d)   for a Facility in a Dispatch Interval, the formula in clause 3.21.7C.

Peak Capacity Adjusted Planned Outage Quantity: Means, the quantity, in MW, of the derating of a Facility or Separately Certified Component in a Dispatch Interval or Trading Interval from the Peak Reserve Capacity Obligation Quantity for the Facility or Separately Certified Component as determined by AEMO in accordance with:

(a)   for a Separately Certified Component in a Dispatch Interval, the formula in clause 3.21.8;

(b)   for a Separately Certified Component in a Trading Interval, the formula in clause 3.21.8A;

(c)   for a Facility in a Trading Interval, the formula in clause 3.21.8B; and

(d)   for a Facility in a Dispatch Interval, the formula in clause 3.21.8C.

Peak Capacity Cost Refund: Has the meaning given in clause 4.26.2E.

Peak Capacity Outage Quantity: The quantity, in MW, of the derating of a Separately Certified Component in a Dispatch Interval as a result of a Planned Outage or Forced Outage for energy, determined in accordance with clause 3.21.6.

Peak Demand Side Programme Capacity Cost Refund: Has the meaning given in clause 4.26.3A.

Peak Eligible Services: Has the meaning given in clause 4.24.3.

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

Peak Excess Allocation Price: Means the price for a Market Participant as calculated in accordance with clause 9.8.3B(c).

Peak Generation Capacity Cost Refund: Has the meaning given in clause 4.26.3.

Peak Generation Reserve Capacity Deficit Refund: Has the meaning given in clause 4.26.1I.

Peak Not In-Service Capacity Refund Quantity: The MW quantity of Not In-Service Capacity of a Scheduled Facility or Semi-Scheduled Facility that is subject to a Peak Capacity refund in a Trading Interval, calculated in accordance with clause 4.26.1D.

Peak Real-Time Market Offer Shortfall: Has the meaning given in clause 4.26.1G.

Peak Real-Time Market Reserve Capacity Deficit: Has the meaning given in clause 4.26.1B.

Peak Refund Exempt Planned Outage Count: In respect of a Separately Certified Component of a Scheduled Facility or Semi-Scheduled Facility and a period of time, the sum over all Trading Intervals in that period of:

(a)   if the Trading Interval occurs on or after 8:00 AM on 1 June 2016 and before New WEM Commencement Day, the total MW quantity of Refund Exempt Planned Outage determined for the relevant Scheduled Generator (or Scheduled Generators) in the Trading Interval under the WEM Rules that were in force immediately before New WEM Commencement Day, divided by the number of Capacity Credits associated with the Scheduled Generator (or Scheduled Generators) in the Trading Interval;

(b)   if the Trading Interval occurs on or after New WEM Commencement Day and before RCM Reform Commencement, the total Refund Exempt Planned Outage Quantity determined by AEMO for the Separately Certified Component in the Trading Interval under the WEM Rules that were in force immediately before RCM Reform Commencement, divided by the number of Peak Capacity Credits associated with the Separately Certified Component in the Trading Interval; or

(c)   if the Trading Interval occurs on or after RCM Reform Commencement, the total Peak Refund Exempt Planned Outage Quantity determined by AEMO for the Separately Certified Component in the Trading Interval under clauses 4.26.1C or 4.26.1CA, divided by the number of Peak Capacity Credits associated with the Separately Certified Component in the Trading Interval.

Peak Refund Exempt Planned Outage Quantity: A Peak Capacity Adjusted Planned Outage Quantity for a Separately Certified Component of a Scheduled Facility or Semi-Scheduled Facility in a Trading Interval for which a Peak Facility Reserve Capacity Deficit Refund is not payable, as determined by AEMO under clauses 4.26.1C or 4.26.1CA.

Peak Refund Payable Planned Outage Quantity: A Peak Capacity Adjusted Planned Outage Quantity for a Separately Certified Component of a Scheduled Facility or Semi-Scheduled Facility in a Trading Interval for which a Peak Facility Reserve Capacity Deficit Refund is payable, as determined by AEMO under clauses 4.26.1C or 4.26.1CA.

Peak Reserve Capacity Deficit: Has the meaning given in clause 4.26.1A(a)(ii).

Peak Reserve Capacity Deficit Refund: Has the meaning given in clause 4.26.1A.

Peak Reserve Capacity Obligation Quantity: The specific amount of capacity required to be provided in a Dispatch Interval or Trading Interval as part of a Reserve Capacity Obligation set by AEMO in accordance with clauses 4.12.4 to 4.12.6.

Peak Reserve Capacity Price: In respect of a Reserve Capacity Cycle, the price for Peak Capacity determined in accordance with clause 4.29.1(a), where this price is expressed in units of dollars per Peak Capacity Credit per year.

Peak Shared Reserve Capacity Cost: For a Trading Day, the amount determined in accordance with clause 4.28.1(b).

Peak Targeted Reserve Capacity Cost: For a Trading Day, the cost defined under clause 4.28.1(a).

Peak Trading Interval Capacity Cost Refund: The refund a Market Participant holding Peak Capacity Credits incurs in a Trading Interval, as calculated in accordance with clause 4.26.2F.

Peak Trading Interval Refund Rate: The Peak Capacity refund rate applicable in a Trading Interval, and in respect of a Facility, as calculated in accordance with clause 4.26.1(a).

RLM Reference Period: For a Reserve Capacity Cycle, the five-year period ending at 8:00 AM on 1 October of Year 1 of the previous Reserve Capacity Cycle.

Transitional Daily Flexible Reserve Capacity Price: In respect of a Reserve Capacity Cycle, the price per Flexible Capacity Credit for a Trading Day calculated in accordance with clause 4.29.1G for a Transitional Facility or Transitional Component.

Transitional Daily Peak Reserve Capacity Price: In respect of a Reserve Capacity Cycle, the price per Peak Capacity Credit for a Trading Day calculated in accordance with clause 4.29.1B for a Transitional Facility or Transitional Component.

37.2   The definition for 'AZ' in Chapter 11 (Glossary) is amended by:

    (a)   deleting the words 'to the Reserve Capacity Requirement' and replacing them with the words 'to a Reserve Capacity Requirement'; and

    (b)   inserting the word 'relevant ' immediately before the words 'Reserve Capacity Price to be zero.'

37.3   The definition for 'BRCP Cap Factor' in Chapter 11 (Glossary) is deleted and replaced by the following:

> **BRCP Cap Factor:** Means the ratio of a Reserve Capacity Price to the Benchmark Reserve Capacity Price for the relevant Reserve Capacity Cycle if there was to be no excess Peak Capacity or Flexible Capacity (as applicable) in that Reserve Capacity Cycle.

37.4   The definition for 'Capacity Credit' in Chapter 11 (Glossary) is deleted and replaced with the following:

> **Capacity Credit:** A Peak Capacity Credit or a Flexible Capacity Credit or both (as the context requires).

37.5   The definition for 'Capacity Credit Allocation' in Chapter 11 (Glossary) is amended by inserting the words ' or a Separately Certified Component' immediately after the words 'Market Participant for a Facility'.

37.6   The definition for ' Capacity Credit Allocation Submission' in Chapter 11 (Glossary) is deleted and replaced with the following:

> **Capacity Credit Allocation Submission:** A submission from a Market Participant to AEMO made in accordance with clauses 4.30.1 and 4.30.2 to allocate Capacity Credits.

37.7   The definition for 'Certified Reserve Capacity' in Chapter 11 (Glossary) is deleted and replaced with the following:

> **Certified Reserve Capacity:** Peak Certified Reserve Capacity or Flexible Certified Reserve Capacity or both (as the context requires).

37.8   The definition for 'Early Certified Reserve Capacity' in Chapter 11 (Glossary) is deleted and replaced with the following:

> **Early Certified Reserve Capacity:** Peak Early Certified Reserve Capacity or both Peak Early Certified Reserve Capacity and Flexible Early Certified Reserve Capacity (as the context requires).

37.9   The definition for 'Eligible Services' in Chapter 11 (Glossary) is deleted and replaced with the following:

> **Eligible Services:** Peak Eligible Services or Flexible Eligible Services or both (as the context requires).

37.10   The definition for 'EZ' in Chapter 11 (Glossary) is amended by replacing the words 'to the Reserve Capacity Requirement' with the words 'to a Reserve Capacity Requirement'.

37.11   The definition for 'EZ BRCP Factor' in Chapter 11 (Glossary) is deleted and replaced with the following:

> **EZ BRCP Factor:** Means the ratio of a Reserve Capacity Price to the relevant Benchmark Reserve Capacity Price for a Reserve Capacity Cycle if the ratio of excess Reserve Capacity to the relevant Reserve Capacity Requirement for a Reserve Capacity Cycle was equal to EZ in that Reserve Capacity Cycle.

37.12   The definition for 'Fixed Price Facility' in Chapter 11 (Glossary) is deleted and replaced with the following:

> **Fixed Price Facility:** Means a Non-Scheduled Facility assigned Peak Capacity Credits for a Reserve Capacity Cycle in which it nominated in accordance with clause 4.14.1B to be classified as a Fixed Price Facility.

37.13   The definition for 'Fixed Price Reserve Capacity Cycle' in Chapter 11 (Glossary) is deleted and replaced with the following:

> **Fixed Price Reserve Capacity Cycle:** Means, for a Fixed Price Facility or Fixed Price Component:
>
> (a)   the Reserve Capacity Cycle in which the Fixed Price Facility or Fixed Price Component was first assigned Capacity Credits; and
>
> (b)   any of the subsequent four Reserve Capacity Cycles.

37.14   The definition of 'Flexible Capacity' is deleted and replaced with:

> **Flexible Capacity:** Reserve Capacity that meets the requirements determined under clause 4.10.1A for the relevant Reserve Capacity Cycle, such that it is able to respond at very short notice to manage changes in load during high ramp periods.

37.15   The definition for 'Indicative Individual Reserve Capacity Requirement' in Chapter 11 (Glossary) is deleted and replaced with the following:

> **Indicative Peak Individual Reserve Capacity Requirement:** Means the estimate of a Market Participant's Peak Individual Reserve Capacity Requirement for a Trading Month determined and provided to that Market Participant by AEMO in accordance with clause 4.28.6.

37.16   The definition for 'Maximum Facility Refund' in Chapter 11 (Glossary) is deleted and replaced with the following:

> **Maximum Peak Facility Refund:** The Facility Maximum Peak Refund Factor multiplied by the total amount of the Peak Capacity Credit payments paid or to be paid under these WEM Rules to a Market Participant in relation to a Facility and in relation to a Capacity Year assuming that:
>
> (a)   AEMO acquires all of the Peak Capacity Credits held by the Market Participant in relation to its Facility; and
>
> (b)   the cost of each Peak Capacity Credit so acquired is determined in accordance with clause 4.28.2(f).

37.17   The definition for 'Maximum Participation Generation Refund' in Chapter 11 (Glossary) is deleted and replaced with the following:

> **Maximum Peak Participant Generation Refund:** The total amount of the Peak Capacity Credit payments paid or to be paid under these WEM Rules to a Market Participant in relation to its Facilities (other than Facilities with a Facility Class or indicative Facility Class of Demand Side Programme) and in relation to a Capacity Year assuming that:

(a)   AEMO acquires all of the Peak Capacity Credits held by the Market Participant in relation to those Facilities; and

(b)   the cost of each Peak Capacity Credit so acquired is determined in accordance with clause 4.28.2(f).

37.18   The definition for 'Relevant Demand' in Chapter 11 (Glossary) is amended by inserting the words ' in a Trading Interval' immediately after the words 'Demand Side Programme'.

37.19   The definition for 'Reserve Capacity Price' in Chapter 11 (Glossary) is deleted and replaced with the following:

> **Reserve Capacity Price:** The Peak Reserve Capacity Price or the Flexible Reserve Capacity Price or both (as the context requires).

37.20   The definition for 'Reserve Capacity Price Factors' in Chapter 11 (Glossary) is deleted and replaced with the following:

> **Reserve Capacity Price Factors:** Means the BRCP Cap Factor, the EZ BRCP Factor, EZ and AZ used in the formulae specified in clause 4.29.1(a).

37.21   The definition for 'Reserve Capacity Requirement' in Chapter 11 (Glossary) is deleted and replaced with the following:

> **Reserve Capacity Requirement:** For a Reserve Capacity Cycle, the Peak Reserve Capacity Requirement or the Flexible Reserve Capacity Requirement or both (as the context requires).

37.22   The definition for 'Reserve Capacity Target' in Chapter 11 (Glossary) is deleted and replaced with the following:

> **Reserve Capacity Target:** For a Capacity Year, the Peak Reserve Capacity Target or the Flexible Reserve Capacity Target or both (as the context requires).

37.23   The definition for 'STEM Reserve Capacity Obligation Quantity' in Chapter 11 (Glossary) is amended by inserting the word 'Peak' immediately before the words 'Reserve Capacity Obligation Quantity' both times that they appear including in the term itself.

37.24   Delete each of the following defined terms in Chapter 11 (Glossary) in their entirety:

(a)   Capacity Adjusted Forced Outage Quantity;

(b)   Capacity Adjusted Planned Outage Quantity;

(c)   Capacity Cost Refund;

(d)   Demand Side Programme Capacity Cost Refund;

(e)   ESR Charge Shortfall;

(f)   Excess Allocation Price;

(g)   Facility Daily Reserve Capacity Price;

(h)   Facility Monthly Reserve Capacity Price;

(i)   Generation Capacity Cost Refund;

(j)   Generation Reserve Capacity Deficit Refund;

(k)   Individual Intermittent Load Reserve Capacity Requirement;

(l)   Not In-Service Capacity Refund Quantity;

(m)   Outage Quantity;

(n)   Real-Time Market Offer Shortfall;

(o)   Real-Time Market Reserve Capacity Deficit;

(p)   Refund Exempt Planned Outage Count;

(q)   Refund Exempt Planned Outage Quantity;

(r)   Refund Payable Planned Outage Quantity;

(s)   Reserve Capacity Deficit;

(t)   Reserve Capacity Obligation Quantity;

(u)   Shared Reserve Capacity Cost;

(v)   Targeted Reserve Capacity Cost;

(w)   Trading Interval Capacity Cost Refund; and

(x)   Trading Interval Refund Rate.

38.   Appendix 1: Standing Data amended

38.1   Amend clause (b)(vD) to insert the word 'Peak' immediately before the words 'Electric Storage Resource Obligation Duration'.

38.2   Insert a new clause (b)(xB) immediately after clause (b)(xA), as follows:

xB.   if the Facility has a Separately Certified Component that is a Non-Intermittent Generating System, the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from the Non-Intermittent Generating System under optimal conditions, while meeting the requirements determined under clause 4.10.1A(a)(i), expressed in MW;

38.3   Amend clause (b)(xii) to insert the word 'Peak' immediately before the words 'Electric Storage Resource Obligation Duration'.

38.4   Insert a new clause (b)(xiiA) immediately after clause (b)(xii), as follows:

xiiA.   if the Facility has a Separately Certified Component that is an Electric Storage Resource, the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply across the Peak Electric Storage Resource Obligation

Duration to the relevant Network from the Electric Storage Resource under optimal conditions, while meeting the requirements determined under clause 4.10.1A(a)(iii), expressed in MW;

38.5   Delete clause (b)(xviA) in its entirety.

38.6   Insert a new clause (b)(xviiiA) immediately after clause (b)(xviii), as follows:

xviiiA.   the minimum time to operation at the minimum stable loading level for each Facility Technology Type from each of the following states, if applicable:

1.   cold;

2.   warm; and

3.   hot;

38.7   Insert a new clause (b)(xixA) immediately after clause (b)(xix), as follows:

xixA.   the minimum time before each Facility Technology Type in the Facility can be shut down after it is started, excluding Loads;

38.8   Insert a new clause (b)(xxiiA) immediately after clause (b)(xxii), as follows:

xxiiA.   the minimum time required to ramp down from the minimum stable loading level to zero output;

38.9   Insert a new clause (b)(xxiiiA) immediately after clause (b)(xxiii), as follows:

xxiiiA.   the output range over which the Facility and each Separately Certified Component is capable of meeting the requirements for Flexible Capacity determined under clause 4.10.1A(a);

38.10   Amend clause (c)(vD) to insert the word 'Peak' immediately before the words 'Electric Storage Resource Obligation Duration'.

38.11   Insert a new clause (c)(xB) immediately after clause (c)(xA), as follows:

xB.   if the Facility has a Separately Certified Component that is a Non-Intermittent Generating System, the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from the Non-Intermittent Generating System under optimal conditions, while meeting the requirements determined under clause 4.10.1A(a)(i), expressed in MW;

38.12   Amend clause (c)(xii) to insert the word 'Peak' immediately before the words 'Electric Storage Resource Obligation Duration'.

38.13   Insert a new clause (c)(xiiA) immediately after clause (c)(xii), as follows:

xiiA.   if the Facility has a Separately Certified Component that is an Electric Storage Resource, the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply across the Peak Electric Storage Resource Obligation

Duration to the relevant Network from the Electric Storage Resource under optimal conditions, while meeting the requirements determined under clause 4.10.1A(a)(iii), expressed in MW;

38.14   Insert a new clause (c)(xviiA) immediately after clause (c)(xvii), as follows:

xviiA.   the minimum time to operation at the minimum stable loading level for each Facility Technology Type from each of the following states, if applicable:

1.   cold;

2.   warm; and

3.   hot;

38.15   Insert a new clause (c)(xviiiA) immediately after clause (c)(xviii), as follows:

xviiiA.   the minimum time before each Facility Technology Type in the Facility can be shut down after it is started, excluding Loads;

38.16   Insert a new clause (c)(xxiA) immediately after clause (c)(xxi), as follows:

xxiA.   the minimum time required to ramp down from the minimum stable loading level to zero output;

38.17   Insert a new clause (c)(xxiiA) immediately after clause (c)(xxii), as follows:

xxiiA.   the output range over which the Facility and each Separately Certified Component is capable of meeting the requirements for Flexible Capacity determined under clause 4.10.1A(a);

38.18   Amend clause (d)(vD) to insert the word 'Peak' immediately before the words 'Electric Storage Resource Obligation Duration'.

39.   Appendix 9: Relevant Level Determination amended

39.1   Appendix 9 is deleted and replaced with the following:

Appendix 9: Relevant Level Determination

Part A: Introduction

Interpretations and Definitions

A.1.   This Appendix 9 presents the method for determining the Relevant Levels for Facilities or components of Facilities ("**Candidates**") for which:

(a)   Market Participants have applied for:

i.   Peak Certified Reserve Capacity for a given Reserve Capacity Cycle ("**Current Reserve Capacity Cycle**") under section 4.9;

ii. Conditional Peak Certified Reserve Capacity for a future Reserve Capacity Cycle under section 4.9 and AEMO is required under clause 4.9.7A to process the application at the time it processes applications for Certified Reserve Capacity for the Current Reserve Capacity Cycle; or

iii. Peak Early Certified Reserve Capacity for a Reserve Capacity Cycle under clause 4.28C.2 and AEMO is required under clause 4.28C.7 to process the application at the time it processes applications for Peak Certified Reserve Capacity for the Current Reserve Capacity Cycle;

(b) the Market Participant's application includes all required supporting information and is deemed by AEMO to be complete; and

(c) the Peak Certified Reserve Capacity, Conditional Peak Certified Reserve Capacity or Peak Early Certified Reserve Capacity (as applicable) is required to be determined using the Relevant Level Method;

A.2. In this Appendix 9:

(a) a reference to a step is the process step so numbered in this Appendix 9;

(b) the steps in Parts B and C are to be carried out sequentially unless stated otherwise;

(c) the full operation date of a Candidate for the Current Reserve Capacity Cycle ("**Full Operation Date**") is:

i. if at the time the application is made the Candidate is yet to enter service, the date provided under clause 4.10.1(c)(iii)(7) or revised in accordance with clause 4.27.11A; or

ii. otherwise the date most recently provided for a Reserve Capacity Cycle under clause 4.10.1(k);

(d) a "**Committed Candidate**" is a Candidate which is the subject of an application for Peak Certified Reserve Capacity for the Current Reserve Capacity Cycle and has been allocated Peak Capacity Credits in a previous Reserve Capacity Cycle;

(e) a "**Proposed Candidate**" is a Candidate which is the subject of an application for Peak Certified Reserve Capacity for the Current Reserve Capacity Cycle and has not been allocated Peak Capacity Credits in a previous Reserve Capacity Cycle;

(f) an "**Early Candidate**" is a Candidate which is the subject of an application for Peak Early Certified Reserve Capacity for a future Reserve Capacity Cycle that AEMO is required, under clause 4.28C.7, to process at the time it processes applications for Peak Certified Reserve Capacity for the Current Reserve Capacity Cycle; and

(g)   a "**Conditional Candidate**" is a Candidate which is the subject of an application for Conditional Peak Certified Reserve Capacity for a future Reserve Capacity Cycle that AEMO is required, under clause 4.9.7A, to process at the time it processes applications for Peak Certified Reserve Capacity for the Current Reserve Capacity Cycle.

A.3.   AEMO must determine the Relevant Levels for Candidates for the Current Reserve Capacity Cycle by following each of the steps set out in Part B, using the subprocesses in Part C and Part D as specified.

Part B: Process Steps

Step B.1: Determine Candidate Historical Output

B.1.1.   For each Candidate, determine:

(a)   for each Trading Interval (if any) in the RLM Reference Period that falls after 8:00 AM on the Full Operation Date for the Candidate, the quantity of energy (in MWh) sent out by the Candidate using:

i.   Facility Sub-Metering, if the Candidate is a component of a Facility for which Facility Sub-Metering is required to be installed; and

ii.   Sent Out Metered Schedules, if the Candidate is not a component of a Facility for which Facility Sub-Metering is required to be installed;

(b)   for each Trading Interval (if any) in the RLM Reference Period that falls before 8:00 AM on the Full Operation Date for the Candidate, an estimate of the quantity of energy (in MWh) that would have been sent out by the Candidate in the Trading Interval, if it had been in operation with the configuration proposed under clause 4.10.1(dA) in the relevant application for certification of Reserve Capacity. The estimates must reflect the estimates in the expert report provided for the Candidate under clause 4.10.3, unless AEMO reasonably considers the estimates in the expert report to be inaccurate.

B.1.2.   For each Candidate, identify any Trading Intervals in the RLM Reference Period that fall after 8:00 AM on the Full Operation Date for the Candidate where the output of the parent Facility was restricted by a Dispatch Instruction or Network limitation, and estimate the output of that Candidate had it not been restricted by a Dispatch Instruction or Network limitation.

B.1.3.   For each Candidate and Trading Interval identified in step B.1.2 identify the higher of:

(a)   the actual quantity as determined in step B.1.1(a); and

(b)   AEMO's estimate made under clause 7.13.6 or AEMO's revised estimate made under clause 7.13.7 as applicable.

B.1.4.   Determine the "**Historical Output**" for each Candidate for each Trading Interval t in the RLM Reference Period as:

(a)   for Trading Intervals that fall after 8:00 AM on the Full Operation Date for the Candidate, the MWh quantity determined in step B.1.1(a) or estimated in step B.1.3 as applicable, multiplied by 2 to convert to units of MW; and

(b)   for Trading Intervals that fall before 8:00 AM on the Full Operation Date for the Candidate, the MWh quantity determined in step B.1.1(b) for the Candidate and Trading Interval, multiplied by 2 to convert to units of MW.

Step B.2: Determine Reference Demand Profile

B.2.1.   Determine the "**Observed Demand**" (in MW) for each Trading Interval in the RLM Reference Period as:

$$\text{Observed\_Demand}(t)$$
$$= (\text{Total\_Generation}(t) \ + \ \text{Interruptible\_Reduction}(t)$$
$$+ \ \text{Involuntary\_Reduction}(t) + \text{DSP\_Reduction}(t)) \ x \ 2$$

where:

(a)   Total_Generation(t) is the Total Sent Out Generation in Trading Interval t;

(b)   Interruptible_Reduction(t) is the quantity published under clause 7.13.1F(b) for Trading Interval t;

(c)   Involuntary_Reduction(t) is the quantity published under clause 7.13.1F(a) for Trading Interval t; and

(d)   DSP_Reduction(t) is the quantity published under clause 7.13.1F(c) for Trading Interval t.

B.2.2.   Determine the "**DER Adjusted Demand Profile**" for the RLM Reference Period by adjusting the Observed Demand for each Trading Interval determined under step B.2.1 to account for the change in behind-the-meter photovoltaic capacity in the SWIS over time, so that the resulting system demand is equal to AEMO's best estimate of what the Observed Demand would have been in that Trading Interval if the level of behind-the-meter photovoltaic capacity had been equal to the level that AEMO expects to exist on 1 October in Year 3 of the Current Reserve Capacity Cycle.

B.2.3.   Identify the Capacity Year in the RLM Reference Period with the lowest maximum demand in the DER Adjusted Demand Profile.

B.2.4.   Determine the "**ELCC Reference Period**" by selecting all Trading Intervals in the RLM Reference Period except those in the Capacity Year identified in step B.2.3.

B.2.5.   Determine the "**Reference Demand Profile"** for the ELCC Reference Period by adjusting the DER Adjusted Demand Profile so that the peak demand and total annual energy for each Capacity Year in the ELCC Reference Period matches the values determined for the Capacity Year commencing on 1 October of the Current Reserve Capacity Cycle in the scenario described in clause 4.5.10(a)(iv).

Step B.3:   Determine Non-Candidate fleet parameters

B.3.1.   Identify all Facilities or components of Facilities ("**Non-Candidates**") that:

(a)   were allocated Peak Capacity Credits in a previous Reserve Capacity Cycle;

(b)   AEMO expects to assign Peak Certified Reserve Capacity for the Current Reserve Capacity Cycle; and

(b)   are not Candidates.

B.3.2.   Determine the "**Non-Candidate Forced Outage Rate**" for each Non-Candidate that is a Non-Intermittent Generating System or an Electric Storage Resource as the Forced Outage rate for that Non-Candidate:

(a)   as determined under clause 4.11.1A for the Current Reserve Capacity Cycle; or

(b)   if a Forced Outage rate has not been determined for the Non-Candidate under clause 4.11.1A, the expected forced outage rate provided for the Non-Candidate under clause 4.10.1(e)(vi) or clause 4.10.1(fA)(v).

B.3.3.   Determine the Non-Candidate Forced Outage Rate for each Non-Candidate that is a Demand Side Programme or a Non-Scheduled Facility as zero.

B.3.4   Determine at least 50 "**Non-Candidate Availability Scenarios**", which identify, for each Non-Candidate, in each Trading Interval of the Part D ELCC Period, whether the Non-Candidate is available. The likelihood of a Non-Candidate being unavailable in each Trading Interval of a Non-Candidate Availability Scenario must match the Non-Candidate Forced Outage Rate for that Non-Candidate.

B.3.5.   Determine the "**Default Capacity Obligation Quantity**" for each Non-Candidate nc for each Trading Interval t in the RLM Reference Period as follows:

(a)   the quantity of Peak Certified Reserve Capacity that AEMO expects to assign to Non-Candidate f for the Current Reserve Capacity Cycle if:

i.   Non-Candidate nc is a Non-Intermittent Generating System;

ii.   Non-Candidate nc is an Electric Storage Resource and Trading Interval t is a Peak Electric Storage Resource Obligation Interval for Non-Candidate nc;

iii.   Non-Candidate nc is a Non-Scheduled Facility consisting solely of an Electric Storage Resource and Trading Interval t is a Default Peak Electric Storage Resource Obligation Interval; or

iv.   Non-Candidate nc is a Demand Side Programme and Trading Interval t falls in a period specified for the Facility under clause 4.10.1(f)(vi); and

(b)   zero otherwise.

Step B.4:   Determine the Facility Average Performance Level

B.4.1.   Identify all Peak IRCR Intervals for each Capacity Year in the ELCC Reference Period.

B.4.2.   Count the number of Trading Intervals identified in step B.4.1.

B.4.3.   For each Candidate, determine the "**Facility Average Performance Level**" as:

$$FAPL(c) = \frac{\sum_{t \in IRCRIntervals} HistoricalOutput(c, t)}{IntervalCount}$$

where:

(a)   HistoricalOutput(c,t) is the Historical Output for Candidate c in Trading Interval t determined in step B.1.4;

(b) $t \in IRCRIntervals$ denotes the set of Trading Intervals identified in step B.4.1; and

(c)   IntervalCount refers to the number of Trading Intervals determined in step B.4.2.

Step B.5:   Determine Relevant Levels for Committed Candidates

B.5.1.   Determine the "**Committed Fleet Capacity**" for the ELCC Reference Period, by applying the subprocess in Part C using the fleet of Committed Candidates as the Part C Candidate Fleet;

B.5.2.   Determine the "**Committed Candidate Scaling Factor**" as:

$$CCSF = \frac{CFC}{\sum_{c \in CC} FAPL(c)}$$

where:

(a)   CFC is the Committed Fleet Capacity determined in step B.5.1;

(b) $c \in CC$ denotes all Committed Candidates; and

> (c)   FAPL(c) is the Facility Average Performance Level for Candidate c
> determined in step B.4.3.

B.5.3.   Determine the Relevant Level for each Committed Candidate c as:

$$\mathrm{RelevantLevel}(c) \; = \; \max(0, \mathrm{FAPL}(c) \; \times \mathrm{CCSF})$$

where:

(a)   FAPL(c) is the Facility Average Performance Level of Candidate c
determined in step B.4.3; and

(b)   CCSF is the Committed Candidate Scaling Factor determined in step
B.5.2.

Step B.6:   Determine Relevant Levels for Proposed Candidates

B.6.1.   Determine the "**Committed and Proposed Fleet Capacity**" for the ELCC
Reference Period as:

(a)   if the sum of the nameplate capacities of all Proposed Candidates is
greater than or equal to 5 MW, by applying the subprocess in Part C using
the fleet of Committed Candidates and Proposed Candidates as the Part C
Candidate Fleet; and

(b)   otherwise, the Committed Fleet Capacity determined in step B.5.1, plus:

   i.   the sum of the Facility Average Performance Levels of all
   Proposed Candidates; multiplied by

   ii.   the Committed Candidate Scaling Factor determined in step B.5.2.

B.6.2.   Determine the "**Proposed Fleet Capacity**" for the ELCC Reference Period as:

$$\mathrm{PFC} = \mathrm{CPFC} - \mathrm{CFC}$$

where:

(a)   CPFC is the Committed and Proposed Fleet Capacity determined in step
B.6.1; and

(b)   CFC is the Committed Fleet Capacity determined in step B.5.1.

B.6.3.   Determine the "**Proposed Candidate Scaling Factor**" as:

(a)   if the sum of the nameplate capacities of all Proposed Candidates is
greater than or equal to 5 MW:

$$\mathrm{PCSF} \; = \; \frac{\mathrm{PFC}}{\sum_{c \in \mathrm{PC}} \mathrm{FAPL(c)}}$$

where:

   i.   PFC is the Proposed Fleet Capacity determined in step B.6.2;

        ii.   c ∈ PC denotes all Proposed Candidates; and

        iii.   FAPL(c) is the Facility Average Performance Level for Candidate c determined in step B.4.3; and

(b)   otherwise, the Committed Candidate Scaling Factor determined in step B.5.2.

B.6.4.   Determine the Relevant Level for each Proposed Candidate c as:

$$\mathrm{RelevantLevel_c} = \max(0, \mathrm{FAPL(c)} \times \mathrm{PCSF})$$

where:

(a)   FAPL(c) is the Facility Average Performance Level of Candidate c determined in step B.4.3; and

(b)   PCSF is the Proposed Candidate Scaling Factor determined in step B.6.3.

Step B.7: Determine Relevant Levels for Early Candidates

B.7.1.   Determine the "**Committed Proposed and Early Fleet Capacity**" for the ELCC Reference Period as:

(a)   if the sum of the nameplate capacities of all Early Candidates is greater than or equal to 5 MW, by applying the subprocess in Part C using the fleet of Committed Candidates, Proposed Candidates, and Early Candidates as the Part C Candidate Fleet; and

(b)   otherwise, the Committed and Proposed Fleet Capacity determined in step B.6.1, plus:

        i.   the sum of the Facility Average Performance Levels of all Early Candidates; multiplied by

        ii.   the Committed Candidate Scaling Factor determined in step B.5.2.

B.7.2.   Determine the "**Early Fleet Capacity**" for the ELCC Reference Period as:

$$\mathrm{EFC} = \mathrm{CPEFC} - \mathrm{CPFC}$$

where:

(a)   CPEFC is the Committed and Proposed and Early Fleet Capacity determined in step B.7.1; and

(b)   CPFC is the Committed and Proposed Fleet Capacity determined in step B.6.1.

B.7.3.   Determine the "**Early Candidate Scaling Factor**" as:

(a)   if the sum of the nameplate capacities of all Early Candidates is greater than or equal to 5 MW:

$$ECSF = \frac{EFC}{\sum_{c \in EC} FAPL(c)}$$

where:

      i.   EFC is the Early Fleet Capacity determined in step B.7.2;

      ii. $c \in EC$ denotes all Early Candidates; and

      iii.   FAPL(c) is the Facility Average Performance Level for Candidate c determined in step B.4.3.

(b)   otherwise, the Committed Candidate Scaling Factor determined in step B.5.2.

B.7.4.   Determine the Relevant Level for each Early Candidate c as:

$$RelevantLevel_c = \max(0, FAPL(c) \times ECSF)$$

where:

(a)   FAPL(c) is the Facility Average Performance Level of Candidate c determined in step B.4.3; and

(b)   ECSF is the Early Candidate Scaling Factor determined in step B.7.3.

Step B.8: Determine Relevant Levels for Conditional Candidates

B.8.1.   Determine the "**Committed Proposed Early and Conditional Fleet Capacity**" for the ELCC Reference Period as:

(a)   if the sum of the nameplate capacities of all Conditional Candidates is greater than or equal to 5 MW, by applying the subprocess in Part C using the fleet of Committed Candidates, Proposed Candidates, Early Candidates, and Conditional Candidates as the Part C Candidate Fleet;

(b)   otherwise, the Committed and Proposed and Early Fleet Capacity determined in step B.7.1, plus:

      i.   the sum of the Facility Average Performance Levels of all Committed Candidates; multiplied by

      ii.   the Committed Candidate Scaling Factor determined in step B.5.2.

B.8.2.   Determine the "**Conditional Fleet Capacity**" for the ELCC Reference Period as:

$$ConFC = CPEConFC - CPEFC$$

where:

(a)   CPEConFC is the Committed and Proposed and Early and Conditional Fleet Capacity determined in step B.8.1; and

(b) CPEFC is the Committed and Proposed and Early Fleet Capacity determined in step B.7.1.

B.8.3. Determine the "**Conditional Candidate Scaling Factor**" as:

(a) if the sum of the nameplate capacities of all Conditional Candidates is greater than or equal to 5 MW:

$$\mathrm{ConCSF} \ = \ \frac{\mathrm{ConFC}}{\sum_{c \in \mathrm{ConC}} \mathrm{FAPL(c)}}$$

where:

i. ConFC is the Conditional Fleet Capacity determined in step B.8.2;

ii. c ∈ ConC denotes all Conditional Candidates; and

iii. FAPL(c) is the Facility Average Performance Level for Candidate c determined in step B.4.3.

(b) otherwise, the Committed Candidate Scaling Factor determined in step B.5.2.

B.8.4. Determine the Relevant Level for each Conditional Candidate c as:

$$\mathrm{RelevantLevel}_c \ = \ \max(0, \mathrm{FAPL(c)} \ \times \mathrm{ConCSF})$$

where:

(a) FAPL(c) is the Facility Average Performance Level of Candidate c determined in step B.4.3; and

(b) ConCSF is the Conditional Candidate Scaling Factor determined in step B.8.3.

Step B.9: Publish Inputs and Results on the WEM Website

B.9.1. Publish on the WEM Website by the date specified in clause 4.1.9 (as modified or extended) for the relevant Reserve Capacity Cycle:

(a) the Observed Demand for the RLM Reference Period determined in step B.2.1;

(b) the estimated historical and future levels of behind-the-meter photovoltaic capacity in the SWIS that AEMO used to determine the DER Adjusted Demand Profile for the RLM Reference Period in step B.2.2;

(c) the DER Adjusted Demand Profile for the RLM Reference Period determined in step B.2.2;

(d) the Reference Demand Profile for the RLM Reference Period determined in step B.2.5; and

       (e)   for each Committed Candidate which is in Commercial Operation:

              i.   the Historical Output values determined in step B.1.4 for each Trading Interval in the RLM Reference Period; and

              ii.   the Facility Average Performance Level determined in step B.4.3.

B.9.2.   Publish on the WEM Website by the date specified in clause 4.1.16 (as modified or extended) for the Current Reserve Capacity Cycle:

       (a)   the Committed Fleet Capacity determined in step B.5.1;

       (b)   the Proposed Fleet Capacity determined in step B.6.1;

       (c)   the Early Fleet Capacity determined in step B.7.1;

       (d)   the Conditional Fleet Capacity determined in step B.8.1; and

       (e)   for each Candidate:

              i.   whether the Candidate is a Committed Candidate, a Proposed Candidate, an Early Candidate or a Conditional Candidate;

              ii.   the Historical Output values determined in step B.1.4 for each Trading Interval in the RLM Reference Period; and

              iii.   the Facility Average Performance Level determined in step B.4.3.

Part C: Subprocess to determine total capacity to be allocated to a given Candidate Fleet

C.1.   This Part C subprocess requires as input a fleet of Candidates for which a capacity quantity is to be determined ("**Part C Candidate Fleet**").

C.2.   Determine the "**Whole Period ELCC**" by applying the subprocess in Part D using:

       (a)   the Part C Candidate Fleet set under clause C.1 as the Part D Candidate Fleet; and

       (b)   the ELCC Reference Period as the Part D ELCC Period.

C.3.   Determine the "**Capacity Year ELCC**" for each Capacity Year in the ELCC Reference Period by applying the subprocess in Part D using:

       (a)   the Part C Candidate Fleet set under clause C.1 as the Part D Candidate Fleet; and

       (b)   the Capacity Year as the Part D ELCC Period.

C.4.   Determine the "**Mean Capacity Year ELCC**" for the ELCC Reference Period as:

$$MCYELCC = \frac{\sum_{cy \in ELCCRP} CapacityYearELCC(cy)}{4}$$

where:

(a)   CapacityYearELCC(cy) is the Capacity Year ELCC for Capacity Year cy; and

(b)   cy ∈ ELCCRP denotes all Capacity Years in the ELCC Reference Period.

C.5.   Determine the total capacity to be allocated to the Part C Candidate Fleet as the lesser of:

(a)   the Whole Period ELCC determined in step C.2; and

(b)   the Mean Capacity Year ELCC determined in step C.4.

Part D: Subprocess to Calculate Effective Load Carrying Capacity of a Candidate Fleet for a Given Time Period

D.1.   This Part D subprocess requires the following inputs:

(a)   a fleet of Candidates for which an ELCC is to be determined ("**Part D Candidate Fleet**"); and

(b)   a period of time over which the ELCC is to be determined ("**Part D ELCC Period**").

D.2   Determine the "**Reference Unserved Energy Target**" for the Part D ELCC Period as:

$$\text{RUET} = \text{PCUET} \times \sum_{t \in EP} \text{ReferenceDemand}(t)$$

where:

(a)   PCUET is the Planning Criterion unserved energy target percentage in clause 4.5.9(b);

(b)   ReferenceDemand(t) is the demand in Trading Interval t in the Reference Demand Profile; and

(c)   t ∈ EP denotes all Trading Intervals in the Part D ELCC Period.

D.3.   Determine the "**Initial Demand Adjustment**" as the MW quantity (which may be positive or negative) which gives Mean Initial Unserved Energy equal to the Reference Unserved Energy Target for the Part D ELCC Period, where:

(a)   The "**Mean Initial Unserved Energy**" is:

$$\text{MIUE} = \frac{\sum_{s \in NCAS} \text{SIUE}(s)}{Count(\text{NCAS})}$$

where:

i.   SIUE(s) is the Scenario Initial Unserved Energy for Non-Candidate Availability Scenario s as calculated in step D.3(b);

ii.   s ∈ NCAS denotes all Non-Candidate Availability Scenarios; and

iii.   Count(NCAS) denotes the number of Non-Candidate Availability Scenarios.

(b)   The "**Scenario Initial Unserved Energy**" for each Non-Candidate Availability Scenario s is:

$$\text{SIUE(s)} = \sum_{t \in ERP} \max\left(0, \text{ReferenceDemand(t)} + \text{InitialDemandAdjustment} - \sum_{nc \in ANC(s,t)} \text{DCOQ(nc, t)} \right)$$

where:

i.   ReferenceDemand(t) is the demand in Trading Interval t in the Reference Demand Profile;

ii.   InitialDemandAdjustment is the Initial Demand Adjustment;

iii.   DCOQ(nc,t) is the Default Capacity Obligation Quantity of Non-Candidate nc in Trading Interval t;

iv.   t ∈ ERP denotes all Trading Intervals in the Part D ELCC Reference Period; and

v.   nc ∈ ANC(s,t) denotes all Non-Candidates which are available in Trading Interval t in Non-Candidate Availability Scenario s.

D.4.   Determine the "**Final Demand Adjustment**" as the MW quantity (which may be positive or negative) which gives Mean Final Unserved Energy equal to the Reference Unserved Energy Target for the Part D ELCC Period, where:

(a)   the "**Mean Final Unserved Energy**" is:

$$\text{MFUE} = \frac{\sum_{s \in NCAS} \text{SFUE(s)}}{Count(\text{NCAS})}$$

where:

i.   SFUE(s) is the Scenario Final Unserved Energy for Non-Candidate Availability Scenario s as calculated in step D.4(b);

ii.   s ∈ NCAS denotes all Non-Candidate Availability Scenarios; and

iii.   Count(NCAS) denotes the number of Non-Candidate Availability Scenarios.

(b)   the "**Scenario Final Unserved Energy**" for each Non-Candidate Availability Scenario s is:

$$SFUE(s) = \sum_{t \in ERP} Max \left(0, ReferenceDemand(t) + FinalDemandAdjustment \right.$$

$$\left. - \sum_{nc \in ANC(s,t)} DCOQ(nc, t) - \sum_{c \in Candidates} HistoricalOutput(c, t) \right)$$

where:

i.   ReferenceDemand(t) is the demand in Trading Interval t in the Reference Demand Profile;

ii.   FinalDemandAdjustment is the Final Demand Adjustment;

iii.   DCOQ(nc,t) is the Default Capacity Obligation Quantity of Non-Candidate nc in Trading Interval t;

iv.   HistoricalOutput(c,t) is the Historical Output of Candidate c in Trading Interval t;

v.   t ∈ ERP denotes all Trading Intervals in the Part D ELCC Reference Period;

vi.   c ∈ ANC(s,t) denotes all Non-Candidates which are available in Trading Interval t in Non-Candidate Availability Scenario s; and

vii.   c ∈ Candidates denotes all Candidates in the Part D Candidate Fleet.

D.5.   Determine the effective load carrying capacity of the Part D Candidate Fleet over the Part D ELCC Period as:

$$FleetELCC = FinalDemandAdjustment - InitialDemandAdjustment$$

where:

(a)   FinalDemandAdjustment is the Final Demand Adjustment determined instep D.4; and

(b)   InitialDemandAdjustment is the Initial Demand Adjustment determined in step D.3.

Schedule 3

1.   Clause 2.29.5E amended

1.1   Clause 2.29.5E(f)(i) is amended by deleting the words 'or a Verification Test'.

2.   Clause 2.30B.9 amended

2.1   Clause 2.30B.9(a) is amended by deleting the word 'where' and replacing it with the word 'if'.

2.2   Clause 2.30B.9(b) is amended by deleting the word 'where' and replacing it with the word 'if'.

2.3   Clause 2.30B.9(c) is amended by deleting the words ', which may be Temperature Dependent or Non Temperature Dependent'.

3.   Clause 4.1.23A amended

3.1   Clause 4.1.23A is deleted and replaced by the following:

4.1.23A.   For each Hot Season, AEMO must determine and publish the Peak IRCR Intervals in accordance with clause 4.28.5B within five Business Days after the Interval Meter Deadline for the Trading Week containing the last Trading Day of the last Trading Month in the relevant Hot Season. For the avoidance of doubt, AEMO must not revise the Peak IRCR Intervals after their publication.

4.   Clause 4.13A.20 amended

4.1   Clause 4.13A.20(b) is amended by deleting the words 'or Verification Tests'.

5.   Section 4.25 amended

5.1   Clause 4.25.1 is deleted and replaced by the following:

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 consumption 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.

5.2   Insert the following new clause 4.25.1B:

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

(a)   in the case of a Non-Intermittent Generating System or an Electric Storage Resource, during the period the Reserve Capacity Obligations apply, start from a cold state and ramp to provide Injection at a MW quantity matching the number of Flexible Capacity Credits currently held (converted to a sent out basis to 41 degrees Celsius using temperature dependence information submitted to AEMO under clause 4.10.1(e)(i) or provided in Standing Data (if available)) while meeting the minimum standards set under clause 4.10.1A(d), at least once during each of the following periods:

   i.   1 October to 31 March; and

   ii.   1 April to 30 September; and

(b)   in the case of a Demand Side Programme, during the period the Reserve Capacity Obligations apply, decrease its consumption to operate at a level equivalent to its Relevant Demand minus the Flexible Capacity Credits assigned to the Facility, while meeting the minimum standards set under clause 4.10.1A(d) at least once during each of the following periods:

   i.   1 October to 31 March; and

   ii.   1 April to 30 September.

5.3   Insert the following new clause 4.25.1C

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

(a)   in the case of a Facility that is not required to install Facility Sub-Metering in accordance with clause 2.29.12:

        i.   observing the Facility operate as part of normal market operations as determined from Meter Data Submissions; or

        ii.   subject to clause 4.25.2B, testing, in accordance with clause 4.25.9, and the Facility successfully passing that test as determined from Meter Data Submissions;

(b)   in the case of a Demand Side Programme, testing, in accordance with clause 4.25.9, and the Facility successfully passing that test as determined from metered consumption;

(c)   in the case of a Facility required to install Facility Sub-Metering in accordance with clause 2.29.12:

        i.   observing the Facility operate, in respect of each Separately Certified Component, as part of normal operations as determined from Meter Data Submissions and meter data recorded by the Facility Sub-Metering; or

        ii.   subject to clause 4.25.2B, testing, in accordance with clause 4.25.9, in respect of each Separately Certified Component, as determined from Meter Data Submissions and meter data recorded by the Facility Sub-Metering and that Separately Certified Component successfully passing the test.

5.4   Clause 4.25.2 is amended by inserting the word 'Peak' immediately before the words 'Electric Storage Resource Obligation Duration' on each of the four occasions they appear in the clause.

5.5   Clause 4.25.2A is amended by inserting the words ' or clause 4.25.1C(c)(i) immediately after the words 'with clause 4.25.2(e)(i)'.

5.6   Clause 4.25.2B is deleted and replaced by the following:

4.25.2B   AEMO must subject a Facility or Separately Certified Component to a Reserve Capacity Test under clauses 4.25.2(a)(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; or

(c)   AEMO is conducting a re-test in accordance with clause 4.25.4, 4.25.6(a)(i), 4.25.6(b)(i) or 4.25.6(c)(i).

5.7   Insert the following new clause 4.25.2BA:

4.25.2BA   AEMO must subject a Facility or Separately Certified Component to a Reserve Capacity Test under clause 4.25.1C(a)(ii) or 4.25.1C(c)(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 4.25.1C(a)(i) or 4.25.1C(c)(i), that the Facility or Separately Certified Component of the Facility, as applicable, did not demonstrate the capability specified in clause 4.25.1B(a) 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; or

(c)   AEMO is conducting a re-test in accordance with clause 4.25.3F, 4.25.6(a)(ii), 4.25.6(b)(ii) or 4.25.6(c)(ii).

5.8   Clause 4.25.2C is amended by deleting the words 'clauses 4.25.2(e)(ii), 4.25.4 or 4.25.6' and replacing them with the words 'clauses 4.25.1C(c)(ii), 4.25.2(e)(ii), 4.25.3F, 4.25.4 or 4.25.6'.

5.9   Clause 4.25.2D is amended by deleting the word 'Where' and replacing it with the word 'If'.

5.10   Clause 4.25.2E is amended by:

(a)   inserting the words 'for Peak Capacity' immediately after the words 'Separately Certified Component tested';

(b)   inserting the word 'Peak' immediately before the words 'Electric Storage Resource Obligation Duration'; and

(c)   deleting the word 'eight' immediately before the words 'Trading Intervals'.

5.11   Insert the following new clause 4.25.3B:

4.25.3B.   A Market Participant may request that AEMO tests its Facility or Separately Certified Component under clauses 4.25.1C(a) and 4.25.2(a)(ii), clauses 4.25.1C(b) and 4.25.2(b)(ii), or clauses 4.25.1C(c)(ii) and 4.25.2(e)(ii) in a single Reserve Capacity Test.

5.12   Insert the following new clause 4.25.3C:

4.25.3C.   If a Market Participant makes a request under clause 4.25.3B, AEMO must comply
with that request unless AEMO, acting reasonably, consider that doing so may
endanger Power System Security or Power System Reliability.

5.13   Insert the following new clause 4.25.3D:

4.25.3D.   If a Demand Side Programme fails a Reserve Capacity Test requested by AEMO
under clause 4.25.2, AEMO must determine the Peak DSP Test Shortfall (to apply
from the following Trading Day until the end of the Trading Day on which the Demand
Side Programme passes a Reserve Capacity Test for Peak Capacity) as the Peak
Capacity Credits held by the relevant Market Participant for that Facility less the
maximum level of reduction achieved in the Reserve Capacity Test.

5.14   Insert the following new clause 4.25.3E:

4.25.3E.   If a Demand Side Programme fails a Reserve Capacity Test requested by AEMO
under clause 4.25.1C, AEMO must determine the Flexible DSP Test Shortfall (to
apply from the following Trading Day until the end of the Trading Day on which the
Demand Side Programme passes a Reserve Capacity Test for Flexible Capacity) as
the Flexible Capacity Credits held by the relevant Market Participant for that Facility
less the maximum level of reduction achieved in the Reserve Capacity Test while still
meeting the minimum standards set under clause 4.10.1A(d).

5.15   Insert the following new clause 4.25.3F:

4.25.3F.   Subject to clause 4.25.4G, if a Facility, or a Separately Certified Component of a
Facility, fails a Reserve Capacity Test requested by AEMO under clause 4.25.1C,
AEMO must re-test that Facility, or Separately Certified Component of that Facility, as
applicable, in accordance with clause 4.25.1C, not earlier than 14 days and not later
than 28 days after the first Reserve Capacity Test.

5.16   Insert the following new clause 4.25.3G:

4.25.3G.   If a Facility, or Separately Certified Component of that Facility, as applicable, fails a
second Reserve Capacity Test under clause 4.25.3F, then AEMO must, from the
second Trading Day following the Scheduling Day on which AEMO determines that
the second Reserve Capacity Test was failed:

(a)   if the Reserve Capacity Test related to a Non-Intermittent Generating
System or an Electric Storage Resource, reduce the number of Flexible
Capacity Credits held by the relevant Market Participant for that Facility or
Separately Certified Component of that Facility to reflect the maximum
capabilities achieved in either of the Reserve Capacity Tests performed; or

(b)   if the Reserve Capacity Test related to a Demand Side Programme, calculate the Flexible DSP Test Shortfall (to apply from the following Trading Day until the end of the Trading Day on which the Demand Side Programme passes a Reserve Capacity Test for Flexible Capacity) as the number of Flexible Capacity Credits held by the relevant Market Participant for that Facility less the maximum level of reduction achieved in either of the two Reserve Capacity Tests while still meeting the minimum standards set under clause 4.10.1A(d).

5.17   Clause 4.25.4 is deleted and replaced by the following:

4.25.4.   Subject to clause 4.25.4G, if a Facility, or a Separately Certified Component of a Facility, fails a Reserve Capacity Test requested by AEMO under clause 4.25.2, AEMO must re-test that Facility, or Separately Certified Component of that Facility, as applicable, in accordance with clause 4.25.2, not earlier than 14 days and not later than 28 days after the first Reserve Capacity Test. If the Facility, or Separately Certified Component of that Facility, as applicable, fails this second Reserve Capacity Test, then AEMO must, from the second Trading Day following the Scheduling Day on which AEMO determines that the second Reserve Capacity Test was failed:

(a)   if the Reserve Capacity Test related to a Non-Intermittent Generating System, reduce the number of Peak Capacity Credits held by the relevant Market Participant for that Facility or Separately Certified Component of that Facility to reflect the maximum capabilities achieved in either Reserve Capacity Test performed, in accordance with 4.25.2E(b) (after adjusting these results to the equivalent values at a temperature of 41 degrees Celsius and allowing for the capability provided by operation on different types of fuels);

(b)   if the Reserve Capacity Test related to a Demand Side Programme, calculate the Peak DSP Test Shortfall (to apply from the following Trading Day until the end of the Trading Day on which the Demand Side Programme passes a Reserve Capacity Test for Peak Capacity) as the number of Peak Capacity Credits held by the relevant Market Participant for that Facility less the maximum level of reduction achieved in either of the two Reserve Capacity Tests; or

(c)   if the Reserve Capacity Test related to an Electric Storage Resource, reduce the number of Peak Capacity Credits held by the relevant Market Participant for that Facility or Separately Certified Component of that Facility to reflect the higher average performance achieved over the Peak Electric Storage Resource Obligation Duration in either Reserve Capacity Test, in accordance with 4.25.2E(a) (after adjusting these results to performance at a temperature of 41 degrees Celsius).

5.18 Clause 4.25.4B is deleted and replaced by the following:

4.25.4B. In order for an application under clause 4.25.4A to be assessed by AEMO, it must:

    (a)   be in writing;

    (b)   relate to:

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

        ii.   a Demand Side Programme that AEMO has determined is in Commercial Operation;

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

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

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

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

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

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

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

5.19 Clause 4.25.4C(c) is amended by deleting the word 'amount' and replacing it with the word 'quantity'.

5.20 Clause 4.25.4CA is amended by inserting the word 'Peak' immediately before the words 'Capacity Credits' on each of the four occasions they appear in the clause.

5.21 Insert the following new clause 4.25.4CB:

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 WEM Rules.

5.22 Insert the following new clause 4.25.4CC:

4.25.4CC. If AEMO reduces Peak Capacity Credits for Demand Side Programme f with effect from Trading Day d under clause 4.25.4C(c), AEMO must calculate a Peak Capacity Payment Reduction Ratio as:

$$\mathrm{PeakCapacityPaymentReductionRatio}(f, d)$$
$$= \left(1 - \frac{\mathrm{DaysComplete}(d)}{\mathrm{TDTY}(d)}\right) \times \frac{\mathrm{ReductionQuantity}(f, d)}{\mathrm{InitialQuantity}(f, d)}$$

where:

(a) DaysComplete(d) is the number of Trading Days up to, but excluding, Trading Day d since 1 October of the Capacity Year in which Trading Day d falls; and

(b) TDTY(d) is the number of Trading Days in the Capacity Year in which Trading Day d falls; and

(c) ReductionQuantity(f,d) is the quantity of Peak Capacity Credits that AEMO reduced Demand Side Programme f by under clause 4.25.4(c) in Trading Day d which, for the avoidance of doubt, excludes any previous reductions in relation to the same Capacity Year under clause 4.25.4(c); and

(d) InitialQuantity(f,d) is the quantity of Peak Capacity Credits assigned by AEMO to Demand Side Programme f in accordance with clause 4.20.5A in relation to the Capacity Year in which Trading Day d falls.

5.23 Insert the following new clause 4.25.4CD:

4.25.4CD. If AEMO reduces Peak Capacity Credits for Demand Side Programme f with effect from Trading Day d under clause 4.25.4C(c), the relevant Market Participant must, within 10 Business Days of being informed of the reduction by AEMO in accordance with clause 4.25.4C(b), pay to AEMO an amount equal to:

$$\mathrm{PeakCapacityPaymentReductionRatio}(f, d) \times \mathrm{DSPSecurity}(f)$$

where:

(a) PeakCapacityPaymentReductionRatio(f,d) is the Peak Capacity Payment Reduction Ratio calculated in accordance with clause 4.25.4CC; and

(b) DSPSecurity(f) is the amount of DSP Reserve Capacity Security originally required by AEMO in relation to Demand Side Programme f

in accordance with clause 4.13A.2(b) which, for the avoidance of doubt, excludes any previous reductions in relation to the same Capacity Year resulting from previous payments made under this clause 4.25.4CD.

5.24   Insert the following new clause 4.25.4CE:

4.25.4CE. The payment obligation under clause 4.25.4CD may be satisfied by AEMO drawing upon the DSP Reserve Capacity Security for the Demand Side Programme, and applying the amount claimed (after meeting AEMO's costs associated with doing so) so as to:

(a)   firstly, offset the cost of funding Supplementary Capacity Contracts for any capacity shortage stemming entirely or in part from the Demand Side Programme not being available; and

(b)   secondly, once all costs to which clause 4.25.4CE(a) refers are covered, make a rebate payment to Market Participants in proportion to their Peak Individual Reserve Capacity Requirements during the relevant Trading Day in accordance with Chapter 9.

5.25   Clause 4.25.4D is amended by inserting the word 'Peak' immediately before the words 'Capacity Credits' on each of the two occasions they appear in the clause.

5.26   Clause 4.25.4E is amended by deleting '[Blank]' and replacing it with 'A Market Participant may not apply to AEMO for an increase in the number of Flexible Capacity Credits for a Facility during a Capacity Year if the Facility has had its Flexible Capacity Credits reduced in accordance with clause 4.25.4C for any part of that Capacity Year.'

5.27   Clause 4.25.4G is amended by inserting:

(a)   the words 'clause 4.25.1C or ' immediately before the words 'clause 4.25.2'; and

(b)   the words 'clause 4.25.3F or ' immediately before the words 'clause 4.25.4'.

5.27   Clause 4.25.4H is amended by inserting the words 'clause 4.25.1C or ' immediately before the words 'clause 4.25.2'.

5.28   Clause 4.25.4I is deleted and replaced by the following:

4.25.4I.   In the event that a Demand Side Programme has failed up to three Reserve Capacity Tests, a Market Participant may request, prior to the end of the Capacity Year, that AEMO performs a re-test of the Facility during the seven days following that request.

5.29   Clause 4.25.6 is deleted and replaced by the following:

4.25.6. If AEMO receives a request for a Reserve Capacity re-test in accordance with clause 4.25.4I or clause 4.25.5, then:

(a)   if the re-test relates to a Non-Intermittent Generating System, AEMO must ,
        as applicable:

   i.   conduct such a re-test in accordance with clauses 4.25.2(a)(ii) or
           4.25.2(e)(ii) and, following the re-test, set the number of Peak
           Capacity Credits held by the relevant Market Participant for the
           Facility or Separately Certified Component of the Facility to reflect the
           maximum capabilities achieved in the re-test (after adjusting these
           results to the equivalent values at a temperature of 41 degrees
           Celsius and allowing for the capability provided by operation on
           different types of fuel), but not to exceed the number of Peak
           Capacity Credits originally confirmed by AEMO for the Facility or
           Separately Certified Component of the Facility under section 4.20 in
           respect of the relevant Reserve Capacity Cycle; or

   ii.   conduct such a re-test in accordance with clauses 4.25.1C(a)(ii) or
           4.25.1C(c)(ii) and, following the re-test, set the number of Flexible
           Capacity Credits held by the relevant Market Participant for the
           Facility or Separately Certified Component of the Facility to reflect the
           maximum capabilities achieved in the re-test, but not to exceed the
           number of Flexible Capacity Credits originally confirmed by AEMO for
           the Facility or Separately Certified Component under section 4.20 in
           respect of the relevant Reserve Capacity Cycle;

(b)   if the re-test relates to a Demand Side Programme, AEMO must , as
        applicable:

   i.   conduct such a re-test in accordance with clause 4.25.2(b)(ii) and,
           following the re-test, recalculate the Peak DSP Test Shortfall as the
           number of Peak Capacity Credits held by the relevant Market
           Participant for the Facility less the maximum reduction in its
           consumption achieved in the re-test; or

   ii.   conduct such a re-test in accordance with clauses 4.25.1C(b) and,
           following the re-test, recalculate the Flexible DSP Test Shortfall as
           the number of Flexible Capacity Credits held by the relevant Market
           Participant for the Facility less the maximum level of reduction
           achieved in the re-test while still meeting the minimum standards set
           under clause 4.10.1A(d); and

(c)   if the re-test relates to an Electric Storage Resource, AEMO must, as
        applicable:

   i.   conduct such a re-test in accordance with clauses 4.25.2(a)(ii) or
           4.25.2(e)(ii) and, following the re-test, set the number of Peak

Capacity Credits held by the relevant Market Participant for the Facility or Separately Certified Component of the Facility to reflect the average performance achieved over the Peak Electric Storage Resource Obligation Duration in the re-test (after adjusting these results to performance at a temperature of 41 degrees Celsius) but not to exceed the number of Capacity Credits originally confirmed by AEMO for the Facility or Separately Certified Component of the Facility under section 4.20 in respect of the relevant Reserve Capacity Cycle; or

    ii.   conduct such a re-test in accordance with clauses 4.25.1C(a)(ii) or 4.25.2(c)(ii) and, following the re-test, set the number of Flexible Capacity Credits held by the relevant Market Participant for the Facility or Separately Certified Component to reflect the maximum capabilities achieved in the re-test, but not to exceed the number of Flexible Capacity Credits originally confirmed by AEMO for the Facility under clause 4.20.5A(a) in respect of the relevant Reserve Capacity Cycle.

5.30   Clause 4.25.9 is deleted and replaced by the following:

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

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

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

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

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

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

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

(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 the time that the Reserve Capacity Test must be performed, 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, and the ramp rate required.

6.   Section 4.25A amended

6.1   Section 4.25A is deleted.

7.   Section 4.26 amended

7.1   Clause 4.26.1(b)(ii) is amended by deleting the words ', the Entity Daily Peak Reserve Capacity Price for Facility f in Trading Interval t divided by 48;' and replacing them with the following:

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

where:

1. $c \in f$ denotes all Separately Certified Components c of Facility f;

2.   EDPRCP(c,t) is the Entity Daily Peak Reserve Capacity Price for Separately Certified Component c in Trading Interval t;

3.   PCC(c,t) is the Peak Capacity Credits associated with Separately Certified Component c in Trading Interval t; and

4.   PCC(f,t) is the Peak Capacity Credits associated with Facility f in Trading Interval t;

7.2   Clause 4.26.1(b)(iii) is amended by:

(a)   deleting the formula and replacing it with

$$PY(f,t) = \left(\sum_{c \in ESR(f,t)} \frac{PESROI(c,t) \times PCC(c,t)}{PCC(f,t)} \times \frac{EDPRCP(c,t)}{PESROD(c,t)} \right)$$

$$+ \left(\sum_{c \in NonESR(f,t)} \frac{PCC(c,t)}{PCC(f,t)} \times \frac{EDPRCP(c,t)}{48} \right)$$

(b)   deleting (b)(iii)(5) and replacing it with

     5.   EDPRCP(c,t) is the Entity Daily Peak Reserve Capacity Price for Separately Certified Component c in Trading Interval t;

7.3   Clause 4.26.2CA is deleted and replaced with the following:

4.26.2CA.   The Relevant Demand of a Demand Side Programme for a Trading Interval in a Capacity Year:

    (a)   if the Demand Side Programme has at least two Associated Loads, the number of Peak Capacity Credits assigned to the Demand Side Programme plus the sum of the Minimum Consumption of the Demand Side Programme's Associated Loads; or

    (b)   if the Demand Side Programme has a single Associated Load, the Peak Individual Reserve Capacity Requirement Contribution of the Associated Load for Trading Day d.

7.4   Clause 4.26.2CB is deleted.

7.5   Clause 4.26.2CC is deleted.

7.6   Clause 4.26.CD is deleted.

7.7   Clause 4.26.2CE is deleted.

7.8   Clause 4.26.2CF is deleted.

7.9   Clause 4.26.2CG is deleted.

7.10   Clause 4.26.2CH is deleted.

8.   Section 4.28 amended

8.1   Clause 4.28.2 is amended by inserting the words 'or Separately Certified Component' immediately after the words 'Entity Daily Peak Reserve Capacity Price for the relevant Facility'.

8.2   Clause 4.28.4 is amended by inserting the following new clause 4.28.4(cB):

(cB)   any payments made by Market Participants under clause 4.25.4CD; less;

8.3   Clause 4.28.4(d) is amended by deleting the words 'clauses 4.13.11A(b) or 4.13A.16(b) for that Trading Day' and replacing them with the words ' clauses 4.13.11A(b), 4.13A.16(b), or 4.25.4CE for that Trading Day'.

8.3   Clause 4.28.5B is amended by deleting the words 'for use in the Relevant Level Method'.

8.4   Clause 4.28.8 is deleted and replaced with the following:

4.28.8.   To assist AEMO in determining Indicative Peak Individual Reserve Capacity Requirements in accordance with clause 4.28.6 and Peak Individual Reserve Capacity Requirements in accordance with clause 4.28.7 for the Capacity Year starting on 1 October of Year 3 of a Reserve Capacity Cycle, Market Participants must, by the date and time specified in clause 4.1.23, provide to AEMO nominations of capacity requirements for Intermittent Loads, deemed to be Intermittent Loads under clause 1.48.2, expressed in MW, where the nominated quantity cannot exceed the greater of:

(a)   the maximum allowed level of Intermittent Load specified in Standing Data for that Intermittent Load at the time of providing the data; and

(b)   the maximum Contract Maximum Demand expected to be associated with that Intermittent Load during the Capacity Year to which the nomination relates. The Market Participant must provide evidence to AEMO of this Contract Maximum Demand level unless AEMO has previously been provided with that evidence.

8.5   Clause 4.28.8B is amended by deleting the word '4.28.8(c)(ii)' and replacing it with the word '4.28.8(b).

8.6   Clause 4.28.8C is deleted.

8.7   Clause 4.28.9 is deleted and replaced with the word '[Blank]'.

8.8   Clause 4.28.9A is deleted.

8.9   Clause 4.28.9B is deleted.

8.10   Clause 4.28.9C is deleted.

8.11   Clause 4.28.9D is deleted.

8.12   Clause 4.28.9E is deleted.

8.13   Clause 4.28.9F is deleted.

8.14   Clause 4.28.11 is amended by deleting the words 'clauses 4.28.8, 4.28.8A and 4.28.8C' and replacing is with the word 'clause 4.28.8'.

8.15   Clause 4.28.13 is deleted.

9.   Section 7.4A amended

9.1   Clause 7.4A.5(a) is amended by inserting the words 'and the Minimum Consumptions for the Associated Loads of the Demand Side Programme' immediately after the words 'for the Demand Side Programme'.

9.2   Clause 7.4A.6(a) is amended by inserting the words 'and the Minimum Consumptions for the Associated Loads of the Demand Side Programme' immediately after the words 'for the Demand Side Programme'.

9.3   Clause 7.4A.7(a) is amended by inserting the words 'and the Minimum Consumptions for the Associated Loads of the Demand Side Programme' immediately after the words 'for the Demand Side Programme'.

9.4   Clause 7.4A.8 is deleted and replaced with the following:

7.4A.8.   If a Market Participant receives a notification relating to a Reserve Capacity Test of a Demand Side Programme under clause 4.25.9(h), the Market Participant must:

(a)   as soon as practicable and, in the case of a Reserve Capacity Test under clause 4.25.2(b)(ii), clause 4.25.4 or clause 4.25.6(b)(i), no later than one hour before the Reserve Capacity Test is due to commence, review and update the DSP Withdrawal Profile Submissions for the Demand Side Programme and the Minimum Consumptions for the Associated Loads of the Demand Side Programme for, subject to clause 7.4A.9A, each future Dispatch Interval in the Trading Day in which the Reserve Capacity Test will be conducted; and

(b)   take the information provided in the notification under clause 4.25.9(h) into account in determining the relevant DSP Constrained Withdrawal Quantities.

9.5   Clause 7.4A.9 is deleted and replaced by the following:

7.4A.9.   A Market Participant must make reasonable endeavours to ensure that when any of the conditions specified in clauses 7.4A.5, 7.4A.6, 7.4A.7 or 7.4A.8 apply:

(a)   the DSP Unconstrained Withdrawal Quantities and DSP Constrained Withdrawal Quantities in its DSP Withdrawal Profile Submissions for the Demand Side Programme accurately reflect the Market Participant's reasonable expectation of the Withdrawal of the Demand Side Programme during the applicable Dispatch Intervals under the required assumptions.; and

(b)   the Minimum Consumptions of the Associated Loads of its Demand Side Programmes accurately reflect the Market Participant's reasonable expectations of the quantity below which the Associated Loads do not wish to be curtailed if the Demand Side Programme is dispatched.

9.6   Clause 7.4A.12 is amended by inserting the words ' and updating the Minimum Consumptions of its Associated Loads' immediately after the words 'DSP Withdrawal Profile Submissions'.

10.   Section 7.13 amended

10.1   Clause 7.13.1F is amended by:

(a)   deleting the full stop at the end of paragraph (b) and inserting the words '; and'; and

(b)   inserting a new paragraph (c) as follows:

    (c)   an estimate of the change in Withdrawal (in MWh) of Demand Side
        Programmes in response to any Dispatch Instructions.

10.2   Insert the following new clause 7.13.5A:

7.13.5A.   If AEMO estimates a non-zero quantity for a Trading Interval under clause
        7.13.1F(c), AEMO must estimate, for the purposes of clause 10 of Appendix 4 and
        clause 11 of Appendix 5, the quantity in MWh by which each Associated Load of
        each Demand Side Programme reduced its consumption in the Trading Interval.

11.   Section 9.8 amended

11.1   Clause 9.8.3A(a)(i) is amended by inserting the words 'Separately Certified Components of'
    before the words 'Scheduled Facilities'.

11.2   Clause 9.8.3A(a)(ii) is amended by inserting the words 'Separately Certified Components of'
    before the words 'Semi-Scheduled Facilities'.

11.3   Clause 9.8.3B(c)(ii)(1) is amended by inserting the words 'Separately Certified Components
    of' before the words 'Scheduled Facilities'.

11.4   Clause 9.8.3B(c)(ii)(2) is amended by inserting the words 'Separately Certified Components
    of' before the words 'Semi-Scheduled Facilities'.

11.5   Clause 9.8.3B(c)(iv) is amended by deleting the words 'entity e' and replacing them with the
    words 'Separately Certified Components ssc'.

12.   Chapter 11 (Glossary) amended

12.1   Insert each of the following new defined terms in Chapter 11 (Glossary) in the appropriate
    alphabetical order:

Facility Maximum Peak Refund Factor: For a Facility:

        (a)   if the Facility is a Demand Side Programme, 1.25;

        (b)   otherwise, 1.

New Notional Wholesale Meter: A notional interval meter representing Non-Dispatchable
Loads without interval meters that are served by Synergy and which came into existence after
the end of the previous Hot Season.

Peak Capacity Payment Reduction Ratio: For a Demand Side Programme on a Trading
Day, the value calculated by AEMO in accordance with clause 4.25.4CC.

Peak DSP Test Shortfall: For a Demand Side Programme in a Trading Interval, the quantity
in MW by which it failed a Reserve Capacity Test for Peak Capacity, calculated under clause
4.25.3D, clause 4.25.4(b) or clause 4.25.6(b)(i).

Peak Individual Reserve Capacity Requirement: The MW quantity determined by AEMO in respect of a Market Participant for a Trading Month, in accordance with clause 4.28.7 and, if applicable, as revised in accordance with clause 4.28.11A.

Peak Individual Reserve Capacity Requirement Contribution: Means the contribution of an Associated Load to a Market Participant's Indicative Individual Reserve Capacity Requirement determined in accordance with step 1 of Appendix 5.

12.2   The definition for 'Minimum Consumption' in Chapter 11 (Glossary) is deleted and replaced with the following:

Minimum Consumption: For an Associated Load in a Trading Interval means the amount specified under clause 2.29.5B(c) or updated in accordance with the WEM Procedure referred to in clause 7.4A.12 as the amount below which the Associated Load does not wish to be curtailed in the course of dispatching the Demand Side Programme.

12.3   The definition of 'Peak IRCR Intervals' in Chapter 11 (Glossary) is amended by deleting the words ', which are used solely in the Relevant Level Method in Appendix 9'.

12.4   Delete each of the following defined terms in Chapter 11 (Glossary) in their entirety:

(a)   12 Peak SWIS Trading Intervals;

(b)   Consumption Deviation Application;

(c)   Individual Reserve Capacity Requirement Contribution;

(d)   Non-Temperature Dependent Load;

(e)   Temperature Dependent Load; and

(f)   Verification Test.

13.   Appendix 4A: Individual Intermittent Load Reserve Capacity Requirements deleted.

13.1   Appendix 4A is deleted in its entirety.

14.   Appendix 5: Individual Reserve Capacity Requirements amended

14.1   Appendix 5 is deleted and replaced with the following:

Appendix 5: Peak Individual Reserve Capacity Requirements

This Appendix presents the method that must be used by AEMO to determine, for a Trading Month n:

- Peak Individual Reserve Capacity Requirement Contributions as required for the determination of Relevant Demands under clause 4.26.2CA;

- Indicative Peak Individual Reserve Capacity Requirements as required under clause 4.28.6;

- Peak Individual Reserve Capacity Requirements as required under clause 4.28.7; and

- revised Peak Individual Reserve Capacity Requirements as required under clause 4.28.11A.

AEMO must perform steps 1 to 3 to determine the Indicative Peak Individual Reserve Capacity Requirements, Peak Individual Reserve Capacity Requirements or revised Peak Individual Reserve Capacity Requirements for Trading Month n.

AEMO must perform step 1 as required to determine the Peak Individual Reserve Capacity Requirement Contribution of an individual metered Associated Load for Trading Month n, using as input the relevant values calculated by AEMO when it determined the Indicative Peak Individual Reserve Capacity Requirements for Trading Month n.

For the purpose of this Appendix:

1. All references, apart from those in step 1(c), to meters are interval meters.

2. The Notional Wholesale Meter is to be treated as a registered interval meter. This meter is denoted by meter $m=m^*$.

3. The New Notional Wholesale Meter, determined in accordance with step 1(c), is to be treated as a registered interval meter. This meter is denoted by $m=m^+$.

4. A meter measuring a Facility containing an Intermittent Load, that is and continues to be deemed to be an Intermittent Load under clause 1.48.2, is to be included in these calculations as if it were two meters, one representing the Intermittent Load and processed in step 1(d) and one representing other load at the Facility and processed in step 1(a), with metered consumption calculated according to clause 2.30B.10 and clause 9 of this Appendix 5.

5. A meter measuring a Facility containing an Intermittent Load, for which an application was approved under clause 2.30B.6 on or after New WEM Commencement Day, is to be included in these calculations as a single meter representing a Non-Dispatchable Load, with metered consumption calculated according to clause 2.30B.11 and clause 10 of this Appendix 5.

6. The meter registration data to be used in the calculations is to be the most current complete set of meter registration data as at the time of commencing the calculations.

7. When calculating the Indicative Peak Individual Reserve Capacity Requirements AEMO must assume all meters registered to a Market Participant on the day of calculation will remain registered to that Market Participant for all future Trading Intervals.

8. A meter measuring a Scheduled Facility, Semi-Scheduled Facility or Non-Scheduled Facility not containing an Intermittent Load is to be included in these calculations with metered consumption calculated in accordance with clause 10 of this Appendix 5.

9. Each meter measuring an Aggregated Facility is to be included as a separate meter with metered consumption calculated in accordance with clause 10 of this Appendix 5.

10. Metered consumption for meter m, in Trading Interval t, is zero when AEMO issues a direction under clause 7.7.5 in respect of an Electric Storage Resource associated with m for a Dispatch Interval within t, otherwise it is -1 x min(0, SOMS(m, t)), where SOMS(m, t) is the Sent Out Metered Schedule of m in t.

11. If meter m measures an Associated Load of a Demand Side Programme, then its metered consumption in Trading Interval t is:

   (a)   negative one multiplied by the quantity estimated by AEMO under clause 7.13.5A for that Associated Load for Trading Interval t; plus

   (b)   negative one multiplied by min(0, SOMS(m, t)), where SOMS(m, t) is the Sent Out Metered Schedule of m in t.

Step 1:   Determine the contribution of each meter m to the Peak Reserve Capacity Requirement as:

   (a)   for a meter, including the Notional Wholesale Meter, that is not an Intermittent Load meter and for which Sent Out Metered Schedules exist for all Peak IRCR Intervals for the relevant Capacity Year,

$$PRCRC(m) = 2 \times MedianIRCRIntervals(m)$$

   where MedianIRCRIntervals(m) is the median metered consumption of meter m in the Peak IRCR Intervals for the relevant Capacity Year;

   (b)   for a meter, excluding the New Notional Wholesale Meter, that is not an Intermittent Load meter and for which Sent Out Metered Schedules do not exist for all of the Peak IRCR Intervals, but for which Sent Out Metered Schedules do exist for all Trading Intervals in Trading Month n-3:

$$PRCRC(m) = 2 \times \max_{M \in PTM}(Median4Peaks(m, M))$$

   where:

   i.   M∈PTM refers to all Trading Months from the first month after the end of the previous Hot Season to Trading Month n-3 inclusive; and

   ii.   Median4Peaks(m,M) is the median metered consumption of meter m in the 4 Peak SWIS Trading Intervals of Trading Month M.

   (c)   for the New Notional Wholesale Meter:

$$PRCRC(m^+) = \frac{PRCRC(m^*)}{NIMCount(FMPHS)} \times (NIMCount(n-3) - NIMCount(FMHPS))$$

   where:

i. PRCRC(m*) is the contribution to the Peak Reserve Capacity Requirement by the Notional Wholesale Meter calculated under step 2(a);

ii. NIMCount(n-3) is the number of non-interval or accumulation meters that existed at the end of month n-3; and

iii. NIMCount(FMHPS) is the number of non-interval or accumulation meters that existed at the end of the final Trading Month of the previous Hot Season; and

(d) for an Intermittent Load meter defined under clause 2.30B.9(b):

i. if the Intermittent Load is registered and operating or AEMO reasonably expects it to be registered and operating during the relevant Trading Month (based on information provided to AEMO in accordance with clause 4.28.8:

$$\text{PRCRC(m)} = \text{MaxL(m)} \times \text{RM}$$

where:

1. MaxL(m) is the nominated load level for Intermittent Load m to apply for Trading Day d as specified in clause 4.28.8; and

2. RM is the reserve margin for the Reserve Capacity Cycle defined as negative one plus the ratio of the Peak Reserve Capacity Requirement for the relevant Capacity Year as described in clause 4.6.1 and the expected peak demand for the relevant Capacity Year as described in clause 4.6.2; and

ii. otherwise zero.

Step 2: For each Market Participant p, calculate the contribution to the Peak Reserve Capacity Requirement as:

$$\text{PRCRC(p)} = \sum_{m \in \text{Meters(p)}} \text{PRCRC(m)}$$

where:

(a) PRCRC(m) is the contribution to the Peak Reserve Capacity Requirement by meter m calculated under step 1; and

(b) m∈Meters(p) refers to all meters registered to Market Participant p.

Step 3: For each Market Participant p, calculate the Indicative Peak Individual Reserve Capacity Requirement or Peak Individual Reserve Capacity Requirement, as applicable, as:

$$\text{PIRCR(p)} = \frac{\text{PRCRC(p)}}{\sum_{p} \text{PRCRC(p)}} \times \min{(\text{PRCR}, \text{PCC})}$$

where:

(a)   PRCRC(p) is the contribution to the Peak Reserve Capacity Requirement by Market Participant p calculated under step 2;

(b)   PRCR is the Peak Reserve Capacity Requirement for the Capacity Year in which the relevant Trading Month falls;

(c)   PCC is the number of Peak Capacity Credits held by Market Participants for the relevant Trading Month.

15.   Appendix 5A: Non-Temperature Dependent Load Requirements deleted

15.1   Appendix 5A is deleted.

16.   Appendix 10: Relevant Demand Determination amended

16.1   Appendix 10 is deleted and replaced with [Blank].

Schedule 4

1.   Clause 2.29.13 amended

1.1   Clause 2.29.13(c) is amended by deleting the word 'and'

1.2   Clause 2.29.13(d) is amended by deleting the full stop at the end of paragraph (d) and inserting the words '; and'.

1.3   Insert the following new clause 2.29.13(e):

    (e)   monitoring compliance with clause 7.10.6B in accordance with the WEM Procedure referred to in clause 7.10.6C.

2.   Clause 3.16.7 amended

2.1   Clause 3.16.7 is amended by:

    (a)   deleting the words 'the following forecast demand information for the SWIS' and replacing them with the words 'for each Trading Day in the 36 month period included in the most recently published Medium Term PASA';

    (b)   deleting the word 'and' at the end of paragraph (a);

    (c)   deleting the full stop at the end of paragraph (b) and inserting the words '; and';

    (d)   inserting a new paragraph (c) as follows:

        (c)   AEMO's determination of the most probable daily highest Four-Hour Demand Increase.

    (e)   deleting the words ' for each Trading Day in the 36 month period included in the most recently published Medium Term PASA' at the end of the clause.

3.   Clause 3.18.4 amended

3.1   Insert the following new clause 3.18.4(gA):

    (gA)   the method for assessing whether there would be a shortfall of Flexible Capacity if an Outage Plan is approved;

1.   Section 3.21 amended

4.1   Insert the following new clause 3.21.11:

    3.21.11.   The Flexible Capacity Outage Quantity for a Planned Outage or Forced Outage o of a Separately Certified Component c of a Registered Facility that is a Non-Intermittent Generating System or Electric Storage Resource for a Dispatch Interval DI that is included in Planned Outage or Forced Outage o is:

$$FCQ(c,DI,o) = PrevRAC(c,DI,o) - RAC(c,DI,o)$$

        where:

        (a)   PrevRAC(c,DI,o) is equal to:

i.   MaxCap(c,DI), if Planned Outage or Forced Outage o was the first relevant outage to be submitted; or

ii.   otherwise, the applicable Remaining Available Capacity for the relevant outage that was submitted most recently prior to the submission time of Planned Outage or Forced Outage o,

where relevant outage means a Planned Outage or Forced Outage for Flexible Capacity for Separately Certified Component c that includes Dispatch Interval DI;

(b)   RAC(c,DI,o) is the applicable Remaining Available Capacity for Planned Outage or Forced Outage o;

(c)   MaxCap(c,DI) is:

i.   if Separately Certified Component c is a Non-Intermittent Generating System, the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from the Non-Intermittent Generating System under optimal conditions, as specified under Appendix 1(b)(xB) or Appendix 1(c)(xB) as applicable; or

ii.   if Separately Certified Component c is an Electric Storage Resource, the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply across the Peak Electric Storage Resource Obligation Duration for Separately Certified Component c in Dispatch Interval DI to the relevant Network from the Electric Storage Resource under optimal conditions, as specified under Appendix 1(b)(xiiA) or Appendix 1(c)(xiiA) as applicable; and

(d)   the applicable Remaining Available Capacity for a Planned Outage or Forced Outage is the Remaining Available Capacity under the Planned Outage or Forced Outage for Separately Certified Component c in Dispatch Interval DI for the applicable Flexible Capacity Outage Capability, which is:

i.   if Separately Certified Component c is a Non-Intermittent Generating System, sent out capacity, net of embedded and Parasitic Loads, available for supply to the relevant Network from the Non-Intermittent Generating System; or

ii.   if Separately Certified Component c is an Electric Storage Resource, sent out capacity, net of embedded and Parasitic Loads, available for supply across the Flexible Electric Storage Resource Obligation Intervals to the relevant Network from the Electric Storage Resource.

4.2   Insert the following new clause 3.21.12:

3.21.12.   The Flexible Capacity Adjusted Forced Outage Quantity for Dispatch Interval DI for Separately Certified Component c of a Registered Facility is:

(a)   if Separately Certified Component c is an Intermittent Generating System:

$$FCAFO(c, DI) = 0$$

(b)   otherwise:

$$FCAFO(c, DI) =$$

$$max\left(0, \sum_{o \in FO} FCQ(c, DI, o) - (MaxCap(c, DI) - DefFRCOQ(c, DI))\right)$$

where:

i. $o \in FO$ denotes all Forced Outages o for Separately Certified Component c that include Dispatch Interval DI;

ii.   FCQ(c,DI,o) is the Flexible Capacity Outage Quantity for Outage o of Separately Certified Component c in Dispatch Interval DI as calculated in clause 3.21.11;

iii.   MaxCap(c,DI) is:

    i.   if Separately Certified Component c is a Non-Intermittent Generating System, the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from the Non-Intermittent Generating System under optimal conditions, as specified under Appendix 1(b)(xB) or Appendix 1(c)(xB) as applicable; or

    ii.   if Separately Certified Component c is an Electric Storage Resource, the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply across the Peak Electric Storage Resource Obligation Duration for Separately Certified Component c in Dispatch

Interval DI to the relevant Network from the Electric Storage Resource under optimal conditions, as specified under Appendix 1(b)(xiiA) or Appendix 1(c)(xiiA) as applicable; and

iv. DefFRCOQ(c,DI) is the Flexible Reserve Capacity Obligation Quantity that would apply to Separately Certified Component c in Dispatch Interval DI if the Separately Certified Component was not subject to an Outage or an approved Commissioning Test Plan.

4.3 Insert the following new clause 3.21.13:

3.21.13. The Flexible Capacity Adjusted Forced Outage Quantity for Trading Interval t for Separately Certified Component c of a Registered Facility is:

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

where:

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

(b) FCAFO(c,DI) is the Flexible Capacity Adjusted Forced Outage Quantity for Separately Certified Component c in Dispatch Interval DI as calculated in clause 3.21.12.

4.4 Insert the following new clause 3.21.14:

3.21.14. The Flexible Capacity Adjusted Forced Outage Quantity for Trading Interval t for Registered Facility f is:

(a) if no Flexible Capacity Credits are assigned to Registered Facility f in Trading Interval t:

$$\text{FCAFO}(f, t) = 0$$

(b) otherwise:

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

where:

i. c ∈ f denotes all Separately Certified Components c of Facility f; and

ii. FCAFO(c,t) is the Flexible Capacity Adjusted Forced Outage Quantity for Separately Certified Component c in Trading Interval t as calculated in clause 3.21.13.

4.5 Insert the following new clause 3.21.15:

3.21.15.   The Flexible Capacity Adjusted Forced Outage Quantity for Dispatch Interval DI for Registered Facility f is:

(a)   if no Flexible Capacity Credits are assigned to Registered Facility f in Dispatch Interval DI:

$$FCAFO(f, DI) = 0$$

(b)   otherwise:

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

where:

i.   c ∈ f denotes all Separately Certified Components c of Facility f; and

ii.   FCAFO(c,DI) is the Flexible Capacity Adjusted Forced Outage Quantity for Separately Certified Component c in Dispatch Interval DI as calculated in clause 3.21.12.

4.6   Insert the following new clause 3.21.16:

3.21.16.   The Flexible Capacity Adjusted Planned Outage Quantity for Dispatch Interval DI for Separately Certified Component c of a Registered Facility is:

(a)   if Separately Certified Component c is an Intermittent Generating System:

$$FCAPO(c, DI) = 0$$

(b)   otherwise:

$$FCAPO(c, DI) = max\left(0, \sum_{o \in PO} FCQ(c, DI, o) \right.$$
$$- max\left(0, MaxCap(c, DI) - DefFRCOQ(c, DI) \right.$$
$$\left. \left. - \sum_{o \in FO} FCQ(c, DI, o) \right) \right)$$

where:

i.   o ∈ PO denotes all Planned Outages o for Separately Certified Component c that include Dispatch Interval DI;

ii.   o ∈ FO denotes all Forced Outages o for Separately Certified Component c that include Dispatch Interval DI;

    iii. FCQ(c,DI,o) is the Flexible Capacity Outage Quantity for Outage o of Separately Certified Component c in Dispatch Interval DI as calculated in clause 3.21.11;

    iv. MaxCap(c,DI) is:

      1. if Separately Certified Component c is a Non-Intermittent Generating System, the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply to the relevant Network from the Non-Intermittent Generating System under optimal conditions, as specified under Appendix 1(b)(xB) or Appendix 1(c)(xB) as applicable; or

      2. if Separately Certified Component c is an Electric Storage Resource, the maximum sent out capacity, net of embedded and Parasitic Loads, that can be available for supply across the Peak Electric Storage Resource Obligation Duration for Separately Certified Component c in Dispatch Interval DI to the relevant Network from the Electric Storage Resource under optimal conditions, as specified under Appendix 1(b)(xiiA) or Appendix 1(c)(xiiA) as applicable; and

    v. DefFRCOQ(c,DI) is the Flexible Reserve Capacity Obligation Quantity that would apply to Separately Certified Component c in Dispatch Interval DI if the Separately Certified Component was not subject to an Outage or an approved Commissioning Test Plan.

4.7 Insert the following new clause 3.21.17:

3.21.17. The Flexible Capacity Adjusted Planned Outage Quantity for Trading Interval t for Separately Certified Component c of a Registered Facility is:

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

where:

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

(b) FCAPO(c,DI) is the Flexible Capacity Adjusted Planned Outage Quantity for Separately Certified Component c in Dispatch Interval DI as calculated in clause 3.21.16.

4.8   Insert the following new clause 3.21.18:

3.21.18.   The Flexible Capacity Adjusted Planned Outage Quantity for Trading Interval t for Registered Facility f is:

(a)   if no Flexible Capacity Credits are assigned to Registered Facility f in Trading Interval t:

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

(b)   otherwise:

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

where:

i. $c \in f$ denotes all Separately Certified Components c of Facility f; and

ii.   FCAPO(c,t) is the Flexible Capacity Adjusted Planned Outage Quantity for Separately Certified Component c in Trading Interval t as calculated in clause 3.21.17.

4.9   Insert the following new clause 3.21.19:

3.21.19.   The Flexible Capacity Adjusted Planned Outage Quantity for Dispatch Interval DI for Registered Facility f is:

(a)   if no Flexible Capacity Credits are assigned to Registered Facility f in Dispatch Interval DI:

$$FCAPO(f, DI) = 0$$

(b)   otherwise:

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

where:

i. $c \in f$ denotes all Separately Certified Components c of Facility f; and

ii.   FCAPO(c,DI) is the Flexible Capacity Adjusted Planned Outage Quantity for Separately Certified Component c in Dispatch Interval DI as calculated in clause 3.21.16.

2.   Section 3.22 amended

5.1   Clause 3.22.3 is amended by:

(a)   inserting the word 'Peak' immediately before the words ' Refund Exempt Planned Outage Count '.and

(b)   inserting the words 'and Flexible Refund Exempt Planned Outage Count' immediately after the words 'Refund Exempt Planned Outage Count'.

3.   Clause 4.1.16A amended

6.1   Insert the following new clause 4.1.16A(bA):

(bA)   determine in accordance with clause 4.20.5A(aB) whether the Flexible Reserve Capacity Requirement has been met or exceeded with the Flexible Capacity Credits assigned for Year 3 of the Reserve Capacity Cycle:

i.   to Facilities to which section 4.13 applies, for which no Reserve Capacity Security was required to be provided under section 4.13; or

ii.   to Demand Side Programmes determined by AEMO to be in Commercial Operation;

4.   Section 4.1.23 amended

7.1   Insert the following new clause 4.1.23AA:

4.1.23AA. For each Capacity Year, AEMO must determine and publish the Flexible IRCR Intervals in accordance with clause 4.28.5C within five Business Days after the last Trading Day of the relevant Capacity Year. For the avoidance of doubt, AEMO must not revise the Flexible IRCR Intervals after their publication.

7.2   Insert the following new clause 4.1.23BA:

4.1.23BA. For each Trading Month, AEMO must determine and publish:

(a)   the 3 High-Ramp Trading Days; and

(b)   for each of those Trading Days, the Trading Interval with the highest Four-Hour Demand Increase,

within five Business Days after the last Trading Day of the relevant Trading Month. For the avoidance of doubt, AEMO must not revise the 3 High-Ramp Trading Days after their publication.

7.3   Clause 4.1.23C is deleted and replaced with the following:

4.1.23C. For each Trading Month, AEMO must determine and provide to each Market Participant that Market Participant's:

(a)   Indicative Peak Individual Reserve Capacity Requirement in accordance with clause 4.28.6.; and

(b)   Indicative Flexible Individual Reserve Capacity Requirement in accordance with clause 4.28.6A,

by 5:00 PM on the Business Day that is 10 Business Days prior to the start of the relevant Trading Month.

8.   Clause 4.1.24 amended

8.1   Clause 4.1.24 is deleted and replaced with the following:

4.1.24.   For each Trading Month, AEMO must determine and provide to each Market Participant that Market Participant's:

(a)   Peak Individual Reserve Capacity Requirement in accordance with clause 4.28.7; and

(b)   Flexible Individual Reserve Capacity Requirement in accordance with clause 4.28.7A,

by 5:00 PM on the Settlement Statement Date for the Trading Week containing the first Trading Day in the relevant Trading Month.

9.   Clause 4.23A.4 amended

9.1   Clause 4.23A.4(b) is deleted and replaced with the following:

(b)   AEMO must allocate to the Aggregated Facility the Peak Certified Reserve Capacity, Flexible Certified Reserve Capacity, Network Access Quantity, Peak Capacity Credits, Flexible Capacity Credits, Peak Reserve Capacity Obligation Quantity, and Flexible Reserve Capacity Obligation Quantity it can provide based on information provided in the original application for Certified Reserve Capacity for the Registered Facilities;

10.   Section 4.26 amended

10.1   Clause 4.26.1(f)(i)(3) is amended by deleting the word 'and'

10.2   Clause 4.26.1(g)(ii) is amended by deleting the '.' and replacing it with ';'.

10.3   Insert new clauses 4.26.1(h) to (k) as follows:

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

Flexible Trading Interval Refund Rate$(f,t) = FRF(f,t) \times FY(f,t)$

where:

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

ii. $FRF(f,t)$ is the Flexible Capacity refund factor for Facility f in Trading Interval t and is calculated in accordance with clause 4.26.1(j); and

iii. FY(f,t) is the per Trading Interval price for Flexible Capacity associated with Facility f in Trading Interval t and is determined in accordance with clause 4.26.1(i);

(i) For a Facility f, for which a Market Participant holds Flexible Capacity Credits, in the Trading Interval t, FY(f,t) is zero if Trading Interval t falls in the Hot Season, and is otherwise determined as follows:

i. if Facility f is not a Registered Facility in Trading Interval t:

$$FY(f,t) = \frac{12}{8} \times \frac{\text{EDFRCP}(f,t)}{48}$$

where EDFRCP(f,t) is the Entity Daily Flexible Reserve Capacity Price for Facility f in Trading Interval t;

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

$$FY(f,t) = \frac{12}{8} \times \frac{\sum_{c \in f} \text{EDFRCP}(c,t) \times \text{FCC}(c,t)}{\text{FCC}(f,t) \times 48}$$

where:

1. $c \in f$ refers to all Separately Certified Components c of Facility f in Trading Interval t;

2. EDFRCP(c,t) is the Entity Daily Flexible Reserve Capacity Price for Separately Certified Component c in Trading Interval t;

3. FCC(c,t) is the quantity of Flexible Capacity Credits associated with Separately Certified Component c in Trading Interval t; and

4. FCC(f,t) is the quantity of Flexible Capacity Credits associated with Facility f in Trading Interval t;

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

$$FY(f,t) = \frac{12}{8} \times \left(\left(\sum_{c \in ESR(f,t)} \frac{FESROI(t) \times FCC(c,t)}{FCC(f,t)} \times \frac{EDFRCP(c,t)}{FCOD(t)} \right) + \left(\sum_{c \in NonESR(f,t)} \frac{FCC(c,t)}{FCC(f,t)} \times \frac{EDFRCP(c,t)}{48} \right) \right)$$

where:

1.   12/8 is the number of months in a year divided by the number of months outside the Hot Season;

2.   c∈ESR(f,t) refers to all Separately Certified Components c of Facility f in Trading Interval t which are Electric Storage Resources;

3.   FESROI(t) is 1 if Trading Interval t is a Flexible Electric Storage Resource Obligation Interval and 0 otherwise;

4.   FCC(c,t) is the Flexible Capacity Credits associated with Separately Certified Component c in Trading Interval t;

5.   FCC(f,t) is the total Flexible Capacity Credits held by Facility f in Trading Interval t;

6.   EDFRCP(c,t) is the Entity Daily Flexible Reserve Capacity Price for Separately Certified Component c in Trading Interval t;

7.   FCOD(t) is the number of Trading Intervals in the Flexible Capacity Obligation Duration in the Trading Day containing Trading Interval t; and

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

iv.   if Facility f is a Demand Side Programme:

$$FY(f,t) = \frac{12}{8} \times EDFRCP(f,t) \times \frac{TICY(t)}{DSPTICY(f,t)}$$

where:

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

2.   TICY(t) is the number of Trading Intervals in the Capacity Year in which Trading Interval t falls; and

3.   DSPTICY(f,t) is the number of Trading Intervals in the Capacity Year in which Trading Interval t falls which fall in the period specified under clause 4.10.1(f)(vi) for Demand Side Programme f;

(j)   The Flexible Capacity refund factor FRF(f,t) for a Facility f in the Trading Interval t is the lesser of:

i.   six; and

ii.   the greater of the Flexible Capacity dynamic refund factor FRF_dynamic(t) as determined under clause 4.26.1(k) and one; and

(k)   The Flexible Capacity dynamic refund factor FRF_dynamic(t) in the Trading Interval t is determined as follows:

$$\text{FRF\_dynamic(t)} = 2 \times \frac{2 \times (OD(t) - OD(t-1))}{0.25 \times EHFHDI}$$

where:

i.   OD(t) is the Operational Demand for Trading Interval t; and

ii.   EHFHDI is the expected highest Four-Hour Demand Increase determined under clause 4.5.10(bA)(ii) for the Reserve Capacity Cycle.

10.4   Clause 4.26.2 is amended by deleting '[Blank]' and replacing it with the following:

'If a Scheduled Facility or a Semi-Scheduled Facility that has a Flexible Reserve Capacity Obligation Quantity greater than zero for a Dispatch Interval:

(a)   has been issued a Dispatch Target or a Dispatch Cap less than or equal to its Flexible Reserve Capacity Obligation Quantity and did not Inject at a level of the Dispatch Cap or Dispatch Target during the Dispatch Interval; or

(b)   has been issued a Dispatch Target or a Dispatch Cap greater than its Flexible Reserve Capacity Obligation Quantity and did not Inject at least at a level of the Flexible Reserve Capacity Obligation Quantity during the Dispatch Interval,

the Market Participant for the Facility must, as soon as practicable at the end of the Dispatch Interval, or in any event, within 24 hours of the end of the Dispatch Interval, submit a Forced Outage for the Flexible Capacity Outage Capability in accordance with the WEM Procedure specified in clause 3.21.10.'

10.5   Insert the following new clause 4.26.4:

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

(a)   the product of:

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

ii.   the Flexible Reserve Capacity Deficit for Facility f in Trading Interval t, which is zero if Trading Interval t is in the Hot Season, and otherwise equal to:

1.   if Facility f is not a Registered Facility, the number of Flexible Capacity Credits associated with Facility f in Trading Interval t;

2. if Facility f is considered by AEMO to have not been in Commercial Operation in Trading Interval t, the number of Flexible Capacity Credits associated with Facility f in Trading Interval t;

3. if Facility f is considered by AEMO to have been in Commercial Operation in Trading Interval t, and is not a Demand Side Programme:

$$\min(FCCIG(f,t),$$
$$\max(0, \min(RL(f,t) - 2 \times MAX2(f,t), RL(f,t)$$
$$- A(f,t))))$$
$$+ FRTMRCD(f,t)$$

where:

i. FCCIG(f,t) is the number of Flexible Capacity Credits held for Facility f associated with Separately Certified Components of Facility f which are Intermittent Generating Systems of the Facility in Trading Interval t;

ii. RL(f,t) is the Required Level for Facility f, adjusted to 100 percent of the level of Peak Capacity Credits held for Facility f in Trading Interval t;

iii. MAX2(f,t) is the second highest value of the output for Facility f (in MWh) achieved for a Trading Interval during the Trading Day in which Trading Interval t falls, as measured in Meter Data Submissions received by AEMO in accordance with section 8.4, that has been achieved since the date AEMO determined the Facility to be in Commercial Operation up to the relevant Trading Day, where this value must be set equal to or greater than the Max2 applied by AEMO for the previous Trading Day;

iv. A(f,t) is the level of output (in MW) detailed in the most recent report provided prior to Trading Interval t by the Market Participant for Facility f under clause 4.13.10C; and

           v.   FRTMRCD(f,t) is the Flexible Real-Time Market Reserve Capacity Deficit determined for Facility f in Trading Interval t under clause 4.26.5;

    4.   if Facility f is a Demand Side Programme, the capacity shortfall calculated as zero if DSPConstrainedFlag = 1, and otherwise:

$$\max (0, FDSPTS(f,t), FRCOQ(f,t) - \max(0, (2 \times DSPLoad(f,t) - DSPMinLoad(f,t))))$$

where:

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

    ii.   FDSPTS(f,t) is the Flexible DSP Test Shortfall determined by AEMO under clause 4.25.3E, clause 4.25.3G(b) or clause 4.25.6(b)(ii);

    iii.   DSPLoad(f,t) is the Demand Side Programme Load for the Demand Side Programme f in the Trading Interval t as determined under clause 9.5.4;

    iv.   DSPMinLoad is the sum of the MW quantities of Minimum Consumption for Facility f's Associated Loads in Trading Interval t; and

    v.   DSPConstrainedFlag is equal to zero, except if the Demand Side Programme was responding to a Dispatch Instruction, or if one of its Associated Loads was unable to withdraw due to a Network limitation, or if one of its Associated Loads that is also associated with an Interruptible Load was responding to a Contingency Event, when it is equal to one; and

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

10.6   Insert the following new clause 4.26.5:

4.26.5. AEMO must calculate the Flexible Real-Time Market Reserve Capacity Deficit for each Scheduled Facility or Semi-Scheduled Facility f for each Trading Interval t in which AEMO considers the Facility to have been in Commercial Operation as zero if Trading Interval t is in the Hot Season, and otherwise:

$$FRTMRCD(f,t) = min(FRCOQ(f,t),$$
$$FCAFO(f,t) + FNISCRQ(f,t) + FESRCSF(f,t) + FRTMOSF(f,t))$$
$$+ FNIMGRPPO(f,t) + FESRRPPO(f,t)$$

where:

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

(b)   FCAFO(f,t) is the Flexible Capacity Adjusted Forced Outage Quantity determined for Facility f in Trading Interval t under clause 3.21.14;

(c)   FNISCRQ(f,t) is the Flexible Not In-Service Capacity Refund Quantity determined for Facility f in Trading Interval t under clause 4.26.8;

(d)   FESRCSF(f,t) is the Flexible ESR Charge Shortfall determined for Facility f in Trading Interval t under clause 4.26.9;

(e)   FRTMOSF(f,t) is the Flexible Real-Time Market Offer Shortfall determined for Facility f in Trading Interval t under clause 4.26.11;

(f)   FNIMGRPPO(f,t) is the total Flexible Refund Payable Planned Outage Quantity determined for Separately Certified Components of Facility f which are Non-Intermittent Generating Systems in Trading Interval t under clause 4.26.6; and

(g)   FESRRPPO(f,t) is the total Flexible Refund Payable Planned Outage Quantity determined for Separately Certified Components of Facility f which are Electric Storage Resources in Trading Interval t under clause 4.26.7.

10.7   Insert the following new clause 4.26.6:

4.26.6. If the Flexible Capacity Adjusted Planned Outage Quantity in a Trading Interval for a Separately Certified Component of a Scheduled Facility or Semi-Scheduled Facility which is a Non-Intermittent Generating System is greater than zero, then AEMO must determine that Flexible Capacity Adjusted Planned Outage Quantity to be:

(a)   if the Flexible Refund Exempt Planned Outage Count for the Separately Certified Component, calculated over the 1000 Trading Days preceding the Trading Day in which the Trading Interval falls, is less than 8400, a Flexible Refund Exempt Planned Outage Quantity; or

(b)   otherwise, a Flexible Refund Payable Planned Outage Quantity.

10.8   Insert the following new clause 4.26.7:

4.26.7.   If the Flexible Capacity Adjusted Planned Outage Quantity in a Trading Interval for a Separately Certified Component of a Scheduled Facility or Semi-Scheduled Facility which is an Electric Storage Resource is greater than zero, then AEMO must determine that Flexible Capacity Adjusted Planned Outage Quantity to be:

(a)   if the Flexible Refund Exempt Planned Outage Count for the Separately Certified Component, calculated over the 1000 Trading Days preceding the Trading Day in which the Trading Interval falls, is less than 1400, a Flexible Refund Exempt Planned Outage Quantity; or

(b)   otherwise, a Flexible Refund Payable Planned Outage Quantity.

10.9   Insert the following new clause 4.26.8:

4.26.8.   AEMO must calculate the Flexible Not In-Service Capacity Refund Quantity for each Scheduled Facility or Semi-Scheduled Facility f for each Trading Interval t in which AEMO considers the Facility to have been in Commercial Operation as zero if Trading Interval t is in the Hot Season, and otherwise:

$$\text{FNISCRQ(f, t)} = \frac{1}{6} \times \sum_{DI \in t} \min \begin{pmatrix} NISCap(f, DI), \\ FRCOQ(f, DI) - FCAFO(f, DI) \end{pmatrix}$$

where:

(a)   FRCOQ(f,DI) is the Flexible Reserve Capacity Obligation Quantity determined for Facility f in Dispatch Interval DI;

(b)   FCAFO(f,DI) is the Flexible Capacity Adjusted Forced Outage Quantity determined for Facility f in Dispatch Interval DI under clause 3.21.15;

(c)   NISCap(f,DI) is the Not In-Service Capacity quantity determined for Facility f in Dispatch Interval DI under clause 7.13A.1; and

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

10.10   Insert the following new clause 4.26.9:

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

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

where:

(a)   FESRCSF(c,DI) is the Flexible Capacity shortfall in MW determined for Separately Certified Component c in Dispatch Interval DI under clause 4.26.10;

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

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

10.11   Insert the following new clause 4.26.10:

4.26.10.   FESRCSF(c,DI) for Separately Certified Component c (which is an Electric Storage Resource) for Dispatch Interval DI is:

$$FESRCSF(c,DI) = max(0, FRCOQ(c,DI) - FCAFO(c,DI) - 12 \times$$
$$max(0, ChargeLevel(c,DI) - MinChargeLevel(c,DI)))$$

where:

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

(b)   FCAFO(c,DI) is the Flexible Capacity Adjusted Forced Outage Quantity determined for Separately Certified Component c in Dispatch Interval DI under clause 3.21.12;

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

10.12   Insert the following new clause 4.26.11:

4.26.11.   AEMO must determine the shortfall in Flexible Capacity offered into the Real-Time Market ("**Flexible Real-Time Market Offer Shortfall**") for each Scheduled Facility or Semi-Scheduled Facility f for each Trading Interval t in which AEMO considers the Facility to have been in Commercial Operation as:

$$FRTMOSF(f,t) =$$
$$max\left(0, \frac{\sum_{DI∈t} FRTMOSF(f, DI)}{6} - FCAFO(f,t) - FNISCRQ(f,t) \right.$$
$$\left. - FESRCSF(f,t)\right)$$

where:

(a)   FRTMOSF(f,DI) is the shortfall in Flexible Capacity offered into the Real-Time Market determined for Facility f in Dispatch Interval DI under clause 4.26.12;

(b)   FCAFO(f,t) is the Flexible Capacity Adjusted Forced Outage Quantity determined for Facility f in Trading Interval t under clause 3.21.14;

(c)   FNISCRQ(f,t) is the Flexible Not In-Service Capacity Refund Quantity determined for Facility f in Trading Interval t under clause 4.26.8; and

(d)   FESRCSF(f,t) is the Flexible ESR Charge Shortfall determined for Facility f in Trading Interval t under clause 4.26.9.

10.13   Insert the following new clause 4.26.12:

4.26.12.   FRTMOSF(f,DI) for Facility f in Dispatch Interval DI is:

$$FRTMOSF(f,DI) = max \begin{pmatrix} 0, \\ FRCOQ(f,DI) - OfferAvail(f,DI) \end{pmatrix}$$

where:

(a)   FRCOQ(f,DI) is the Flexible Reserve Capacity Obligation Quantity determined for Facility f in Dispatch Interval DI; and

(b)   OfferAvail(f,DI) is the total MW quantity included in Real-Time Market Offers for energy from Facility f in Dispatch Interval DI (whether offered as Available Capacity or In-Service Capacity) that were used to calculate Dispatch Instructions and Market Clearing Prices for that Dispatch Interval.

10.14   Insert the following new clause 4.26.13:

4.26.13.   AEMO must calculate the Flexible Generation Reserve Capacity Deficit Refund for each Market Participant for each Trading Interval as the sum of the Flexible Facility Reserve Capacity Deficit Refunds for the Trading Interval for each Facility with a Facility Class (or, for an unregistered Facility, an indicative Facility Class) of Scheduled Facility or Semi-Scheduled Facility, for which the Market Participant holds Flexible Capacity Credits in the Trading Interval.

10.15   Insert the following new clause 4.26.14:

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

(a)   if AEMO has issued a Dispatch Instruction with a non-zero MW quantity under section 7.6 to the Demand Side Programme f for the Trading Interval:

$$\max(0, \min(FRCOQ(f,t), DIMW(f,t)) - \max(0, RD(f,t) - DSPLMW(f,t)))$$

where:

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

ii.   DIMW(f,t) is the quantity by which the Demand Side Programme f was instructed by AEMO to curtail the absolute value of its Withdrawal in Trading Interval t as specified by AEMO in accordance with clause 7.13.5;

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

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

(b)   zero, if AEMO has issued a Dispatch Instruction with a zero MW quantity under section 7.6 to the Demand Side Programme f for Trading Interval t.

10.16   Insert the following new clause 4.26.15:

4.26.15.   For each Market Participant holding Flexible Capacity Credits, AEMO must determine the amount of the refund ("**Flexible Capacity Cost Refund**") to be applied for Trading Day d as the sum of the Flexible Trading Interval Capacity Cost Refunds of every Trading Interval in the Trading Day d, as calculated in accordance with clause 4.26.16.

10.17   Insert the following new clause 4.26.16:

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

(a)   either:

i.   if Market Participant p holds Flexible Capacity Credits associated with an Energy Producing System, the Flexible Generation Capacity Cost Refund for Market Participant p for Trading Interval t, determined in accordance with clause 4.26.17; or

ii.   zero, otherwise; and

(b)   the sum of the Flexible Demand Side Programme Capacity Cost Refunds for Trading Interval t for each Facility with a Facility Class (or, for an unregistered Facility, an indicative Facility Class) of Demand Side

Programme for which Market Participant p holds Flexible Capacity Credits in Trading Interval t.

10.18   Insert the following new clause 4.26.17:

4.26.17.   The Flexible Generation Capacity Cost Refund for Trading Interval t in Capacity Year y for a Market Participant p holding Flexible Capacity Credits associated with an Energy Producing System is the lesser of:

(a)   the Maximum Flexible Participant Generation Refund determined for Market Participant p and Capacity Year y less all Flexible Generation Capacity Cost Refunds applicable to Market Participant p in previous Trading Intervals falling in Capacity Year y; and

(b)   the Flexible Generation Reserve Capacity Deficit Refund for Market Participant p and Trading Interval t.

10.19   Insert the following new clause 4.26.18:

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

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

(b)   the sum of:

i.   either:

1.   if Facility f is a Registered Facility:

$$FTIRR(f, t) \times FCS(f, t)$$

where:

FCS(f,t) is the Flexible Capacity Shortfall in MW for Facility f determined in accordance with clause 4.26.14 in Trading Interval t, and

FTIRR(f,t) is the Flexible Trading Interval Refund Rate for Facility f in Trading Interval t; or

2.   otherwise, zero; and

ii.   the Flexible Facility Reserve Capacity Deficit Refund for Trading Interval t for Facility f, determined in accordance with clause 4.26.4.

11.   Section 4.28 amended

11.1   Insert the following new clause 4.28.1A:

4.28.1A.   AEMO must separate the total costs of Flexible Capacity Credits acquired by it for a Trading Day into the following two sets:

(a)   the Flexible Targeted Reserve Capacity Cost, which is the cost of acquiring enough Flexible Capacity Credits to ensure, to the extent possible given the number of Flexible Capacity Credits AEMO has acquired, that the lesser of:

i.   the Flexible Reserve Capacity Requirement applicable to that Trading Day; and

ii.   total Flexible Capacity Credits assigned to Facilities,

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

(b)   the Flexible Shared Reserve Capacity Cost, calculated in accordance with clause 4.28.4A, which is the cost of other Flexible Capacity Credits acquired but not allocated to the set referred to in clause 4.28.1A(a),

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

11.2   Clause 4.28.2 is amended by deleting the words 'clause 4.28.1' and replacing them with the words ' clauses 4.28.1 and 4.28.1A';

11.3   Clause 4.28.2(b) is amended by deleting the word ' Requirements' and replacing it with the word 'Requirements'.

11.4   Clause 4.28.2(c) is amended by deleting the word '[Blank]' and replacing it with the words 'the cost of a Flexible Capacity Credit deemed to be acquired by AEMO from a Market Participant under clause 4.28.2(b)(i) is the Flexible Excess Allocation Price for that Market Participant in that Trading Day;'.

11.5   Clause 4.28.2(d) is amended by deleting the word '[Blank]' and replacing it with the words 'the cost of each other Flexible Capacity Credit acquired by AEMO from a Market Participant is the Entity Daily Flexible Reserve Capacity Price for the relevant Facility or Separately Certified Component in that Trading Day.'

11.6   Insert the following new clause 4.28.3A:

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

11.7 Claus 4.28.4(b) is amended by inserting the words 'relating to shortfalls of Peak Capacity or both Peak Capacity and Flexible Capacity, as identified by AEMO under clause 4.24.1(aA),' after the words 'Supplementary Capacity Contracts'.

11.8 Insert the following new clause 4.28.4A:

4.28.4A. For each Trading Day, AEMO must calculate a Flexible Shared Reserve Capacity Cost being the sum of:

(a) the cost defined under clause 4.28.1A(b); and

(b) the net payments to be made by AEMO under Supplementary Capacity Contracts relating to shortfalls of Flexible Capacity which are not also shortfalls of Peak Capacity, as identified by AEMO under clause 4.24.1AA; less

(c) the sum of all Flexible Capacity Cost Refunds, calculated under clause 4.26.15, paid by all Market Participants for that Trading Day,

and AEMO must allocate this total cost to Market Participants in proportion to each Market Participant's Flexible Individual Reserve Capacity Requirement.

11.9 Insert the following new clause 4.28.5A:

4.28.5A. The Flexible Shared Reserve Capacity Cost may have a negative value.

11.10 Insert the following new clause 4.28.5C:

4.28.5C. To determine the Flexible IRCR Intervals, AEMO must:

(a) select the three Trading Days in the previous Capacity Year containing the Trading Intervals with the highest Four-Hour Demand Increase; and

(b) for each Trading Day selected in clause 4.28.5C(a) select the Trading Interval with the largest Four-Hour Demand Increase and the seven previous Trading Intervals.

11.11 Insert the following new clause 4.28.6A:

4.28.6A. For each Trading Month, AEMO must determine and provide to each Market Participant that Market Participant's Indicative Flexible Individual Reserve Capacity Requirement by the date and time specified in clause 4.1.23C, and this Indicative Flexible Individual Reserve Capacity Requirement must be determined using the method described in Appendix 4.

11.12 Insert the following new clause 4.28.7A:

4.28.7A. For each Trading Month, AEMO must determine and provide to each Market Participant that Market Participant's Flexible Individual Reserve Capacity Requirement by the date and time specified in clause 4.1.24, and this Flexible Individual Reserve Capacity Requirement must be determined using the method described in Appendix 4.

11.13 Insert the following new clause 4.28.11B:

4.28.11B. When undertaking the Adjustment Process for a Trading Week, which Trading Week contains the first Trading Day of a Trading Month, under clause 9.3.5 in accordance with the settlement cycle timeline, AEMO must recalculate the Flexible Individual Reserve Capacity Requirements applicable for each Trading Day in that Trading Month, using the method described in Appendix 4, and must provide to each Market Participant the recalculated Flexible Individual Reserve Capacity Requirements for that Market Participant applicable for each Trading Day in that Trading Month by the Relevant Settlement Statement Date for the Trading Week.

12. Section 7.3 amended

12.1 Clause 7.3.3 is amended by deleting the word '[Blank]' and replacing it with the words 'For each Trading Day in each Week Ahead Schedule Horizon, AEMO must identify the Trading Interval in which the Highest Four-Hour Demand Increase is expected to occur, and the size of that Four-Hour Demand Increase.'.

12.2 Clause 7.3.4 is amended by:

(a)   replacing the word 'methodology' with the word 'method'; and

(b)   inserting the words ' and the forecast highest Four-Hour Demand Increase' after the words ' Forecast Unscheduled Operational Demand'.

13. Clause 7.611(b) amended

13.1 Clause 7.6.11(b) is amended by deleting paragraph (b) and replacing it as follows:

(b)   a Dispatch Target, if:

i.   the Registered Facility has a non-zero Essential System Service Enablement Quantity for Contingency Reserve or Regulation; or

ii.   Flexible Capacity Credits are associated with the Semi-Scheduled Facility and the Dispatch Instruction is for a Dispatch Interval which is within a Flexible Electric Storage Resource Obligation Interval.

14. Section 7.10 amended

14.1 Insert the following new clause 7.10.6B:

7.10.6B. If a Market Participant holds Capacity Credits associated with an Energy Producing System for a Facility that also includes a Non-Dispatchable Load, the

Market Participant must not operate the Energy Producing System in a manner that results in, or has the effect of, reducing the Peak Individual Reserve Capacity Requirement or Flexible Individual Reserve Capacity Requirement for the relevant Facility unless operating under a Dispatch Instruction or AEMO direction.

14.2   Insert the following new clause 7.10.6C:

7.10.6C.   AEMO must document in a WEM Procedure its method for assessing compliance with clause 7.10.6B.

15.   Section 9.8 amended

15.1   Clause 9.8.2 is deleted and replaced by the following:

9.8.2.   The Reserve Capacity settlement amount for Market Participant p for Trading Day d is:

RC_SA(p,d)

= Peak_Capacity_Provider_Payment(p,d) – Peak_Capacity_Purchaser_Payment(p,d)

+ Flexible_Capacity_Provider_Payment(p,d) – Flexible_Capacity_Purchaser_Payment(p,d)

where:

(a)   Peak_Capacity_Provider_Payment(p,d) is calculated in accordance with clause 9.8.3;

(b)   Peak_Capacity_Purchaser_Payment(p,d) is calculated in accordance with clause 9.8.4;

(c)   Flexible_Capacity_Provider_Payment(p,d) is calculated in accordance with clause 9.8.6; and

(d)   Flexible_Capacity_Purchaser_Payment(p,d) is calculated in accordance with clause 9.8.9.

15.2   Insert the following new clause 9.8.6:

9.8.6.   For the purposes of clause 9.8.2, Flexible_Capacity_Provider_Payment(p,d) for Market Participant p for Trading Day d is:

Flexible_Capacity_Provider_Payment(p,d)
= Flexible_Capacity_Payments(p,d) + Flexible_Supplementary_Capacity_Payment(p,d)
– Flexible_Capacity_Cost_Refund(p,d) + Flexible_Over_Allocation_Payment(p,d)

where:

(a)   Flexible_Capacity_Payments(p,d) is calculated in accordance with clause 9.8.7;

(b)   Flexible_Supplementary_Capacity_Payment(p,d) is the net payment to be made by AEMO under a Supplementary Capacity Contract to Market

Participant p for Trading Day d, as specified by AEMO in accordance with clause 4.29.3(e)(i), for a contract relating solely to Flexible Capacity as specified by AEMO in accordance with clause 4.29.3(e)(iii);

(c)   Flexible_Capacity_Cost_Refund(p,d) is the Flexible Capacity Cost Refund payable to AEMO by Market Participant p in respect of that Market Participant's Flexible Capacity Credits for Trading Day d, as specified in clause 4.29.3(d)(vii); and

(d)   Flexible_Over_Allocation_Payment(p,d) is calculated in accordance with clause 9.8.8.

15.3   Insert the following new clause 9.8.7:

9.8.7.   For the purposes of clause 9.8.6, Flexible_Capacity_Payments(p,d) is calculated as:

$$Flexible\_Capacity\_Payments(p, d)$$
$$= \sum_{e \in FCCEntities(p,d)} \left((FCC(e,d) - FCCA(e,d)) \times EDFRCP(e,d) \right)$$

where:

(a)   e∈FCCEntities(p,d) denotes all:

i.   Separately Certified Components of Scheduled Facilities;

ii.   Separately Certified Components of Semi-Scheduled Facilities; and

iii.   Demand Side Programmes,

registered to Market Participant p on Trading Day d, and e is an entity in that set;

(b)   FCC(e,d) is the number of Flexible Capacity Credits assigned to entity e for Trading Day d;

(c)   FCCA(c,d) is the sum of the Flexible Capacity Credits associated with entity e for Trading Day d that have been allocated in a Capacity Credit Allocation; and

(d)   EDFRCP(e,d) is the Entity Daily Flexible Reserve Capacity Price associated with entity e in Trading Day d.

15.4   Insert the following new clause 9.8.8:

9.8.8.   For the purposes of clause 9.8.6, Flexible_Over_Allocation_Payment(p,d) is calculated as:

Flexible_Over_Allocation_Payment(p,d) =

max (0, Participant_FCCA(p,d) – FIRCR(p,d)) ×

Flexible_Excess_Allocation _Price(p,d);

where:

(a)   Participant_FCCA(p,d) is the sum of Flexible Capacity Credits allocated to Market Participant p in Trading Day d in Capacity Credit Allocations;

(b)   FIRCR(p,d) is the Flexible Individual Reserve Capacity Requirement for Market Participant p for the Trading Month in which Trading Day d falls, expressed in units of MW; and

(c)   Flexible_Excess_Allocation_Price(p,d) is zero if Participant_FCCA(p,d) = 0, and otherwise:

$$Flexible\_Excess\_Allocation\_Price(p,d)$$

$$= \frac{\sum_{c \in C(p,d)}\left(\sum_{e \in FCCEntities(d)}\left(FCCA(c,e,p,d) \times EDFRCP(e,d)\right)\right)}{\sum_{c \in C(p,d)}\left(\sum_{e \in FCCEntities(d)}\left(FCCA(c,e,p,d)\right)\right)}$$

where:

i.   C(p,d) is the set of Capacity Credit Allocations made to Market Participant p in Trading Day d and c is a Capacity Credit Allocation within the set;

ii.   e∈FCCEntities(d) denotes all registered:

1.   Separately Certified Components of Scheduled Facilities;

2.   Separately Certified Components of Semi-Scheduled Facilities;

3.   Non-Scheduled Facilities; and

4.   Demand Side Programmes,

       on Trading Day d;

iii.   FCCA(c,e,p,d) is the number of Flexible Capacity Credits associated with entity e that have been allocated to Market Participant p in Capacity Credit Allocation c in Trading Day d; and

iv.   EDFRCP(e,d) is the Entity Daily Flexible Reserve Capacity Price associated with entity e in Trading Day d.

15.5   Insert the following new clause 9.8.9:

9.8.9.   For the purposes of clause 9.8.2, Flexible_Capacity_Purchaser_Payment(p,d) for Market Participant p for Trading Day d is:

Flexible_Capacity_Purchaser_Payment(p,d) =

Flexible_Targeted_Reserve_Capacity_Cost(p,d) +

Flexible_Shared_Reserve_Capacity_Cost(p,d)

where:

(a) Flexible_Targeted_Reserve_Capacity_Cost(p,d) =
Flexible_Targeted_Reserve_Capacity_Cost(d) ×
Flexible_Shortfall_Share(p,d)

(b) Flexible_Shared_Reserve_Capacity_Cost(p,d) =
Flexible_Shared_Reserve_Capacity_Cost(d) ×
Flexible_Capacity_Share(p,d)

(c) Flexible_Targeted_Reserve_Capacity_Cost(d) is the cost of Flexible
Capacity to be shared amongst those Market Participants who have not
had sufficient Flexible Capacity Credits allocated to them for Trading Day
d where this cost is specified under clause 4.29.3(bA);

(d) $Flexible\_Shortfall\_Share(p,d) = \frac{(\max{(0, FIRCR(p,d) - Participant\_FCCA(p,d))})}{\sum_{p \in P}(\max{(0, FIRCR(p,d) - Participant\_FCCA(p,d))})}$

(e) Flexible_Shared_Reserve_Capacity_Cost(d) is the cost of Flexible
Capacity to be shared amongst all Market Participants for Trading Day d
where this cost is specified under clause 4.29.3(cA);

(f) Flexible_Capacity_Share(p,d) = FIRCR(p,d) / ∑p∈PFIRCR(p,d);

(g) P is the set of all Market Participants where p is a member of that set;

(h) FIRCR(p,d) is the Flexible Individual Reserve Capacity Requirement for
Market Participant p for the Trading Month in which Trading Day d falls,
expressed in units of MW; and

(i) Participant_FCCA(p,d) is the sum of the Flexible Capacity Credits
allocated to Market Participant p in Trading Day d, in a Capacity Credit
Allocation.

16.   Chapter 11 (Glossary) amended

16.1   Insert each of the following new defined terms in Chapter 11 (Glossary) in the appropriate
alphabetical order:

3 High-Ramp Trading Days: For a Trading Month, means the three Trading Days with the
highest Four-Hour Demand Increase as published by AEMO under clause 4.1.23BA.

Flexible Capacity Adjusted Forced Outage Quantity: Means, the quantity, in MW, of the
derating of a Facility or Separately Certified Component in a Dispatch Interval or Trading
Interval from the Flexible Reserve Capacity Obligation Quantity for the Facility or Separately
Certified Component as determined by AEMO in accordance with:

(a) for a Separately Certified Component in a Dispatch Interval, the formula in clause 3.21.12;

(b) for a Separately Certified Component in a Trading Interval, the formula in clause 3.21.13;

(c) for a Facility in a Trading Interval, the formula in clause 3.21.14; and

(d) for a Facility in a Dispatch Interval, the formula in clause 3.21.15.

Flexible Capacity Adjusted Planned Outage Quantity: Means, the quantity, in MW, of the derating of a Facility or Separately Certified Component in a Dispatch Interval or Trading Interval from the Flexible Reserve Capacity Obligation Quantity for the Facility or Separately Certified Component as determined by AEMO in accordance with:

(a) for a Separately Certified Component in a Dispatch Interval, the formula in clause 3.21.16;

(b) for a Separately Certified Component in a Trading Interval, the formula in clause 3.21.17;

(c) for a Facility in a Trading Interval, the formula in clause 3.21.18; and

(d) for a Facility in a Dispatch Interval, the formula in clause 3.21.19.

Flexible Capacity Cost Refund: Has the meaning given in clause 4.26.15.

Flexible Capacity Outage Quantity: The quantity, in MW, of the derating of a Separately Certified Component in a Dispatch Interval as a result of a Planned Outage or Forced Outage for Flexible Capacity, determined in accordance with clause 3.21.11.

Flexible Demand Side Programme Capacity Cost Refund: Has the meaning given in clause 4.26.18.

Flexible DSP Test Shortfall: For a Demand Side Programme in a Trading Interval, the quantity in MW by which it failed a Reserve Capacity Test for Flexible Capacity, calculated under clause 4.25.3E, clause 4.25.3G(b) or clause 4.25.6(b)(ii);

Flexible ESR Charge Shortfall: The MW quantity of Flexible Capacity of a Scheduled Facility or Semi-Scheduled Facility that is subject to a capacity refund in a Trading Interval due to the inadequate Charge Level of an Electric Storage Resource, calculated in accordance with clause 4.26.9.

Flexible Excess Allocation Price: Means the price for a Market Participant as calculated in accordance with clause 9.8.8(c).

Flexible Facility Reserve Capacity Deficit Refund: Has the meaning given in clause 4.26.4.

Flexible Generation Capacity Cost Refund: Has the meaning given in clause 4.26.17.

Flexible Generation Reserve Capacity Deficit Refund: Has the meaning given in clause 4.26.13.

Flexible Individual Reserve Capacity Requirement: The MW quantity determined by AEMO in respect of a Market Participant for a Trading Month, in accordance with clause 4.28.7A and, if applicable, as revised in accordance with clause 4.28.11B.

Flexible IRCR Intervals: For a Capacity Year, the Trading Intervals determined by AEMO under clause 4.28.5C.

Flexible Not In-Service Capacity Refund Quantity: The MW quantity of Not In-Service Capacity of a Scheduled Facility or Semi-Scheduled Facility that is subject to a Flexible Capacity refund in a Trading Interval, calculated in accordance with clause 4.26.8.

Flexible Real-Time Market Offer Shortfall: Has the meaning given in clause 4.26.11.

Flexible Real-Time Market Reserve Capacity Deficit: Has the meaning given in clause 4.26.5.

Flexible Refund Exempt Planned Outage Count: In respect of a Separately Certified Component of a Scheduled Facility or Semi-Scheduled Facility and a period of time during which Flexible Capacity Credits were associated with the Separately Certified Component, the sum over all Trading Intervals in that period of:

    (a)   the total Flexible Refund Exempt Planned Outage Quantity determined by AEMO for the Separately Certified Component in the Trading Interval under clauses 4.26.6 or 4.26.7; divided by

    (b)   the number of Flexible Capacity Credits associated with the Separately Certified Component in the Trading Interval.

Flexible Refund Exempt Planned Outage Quantity: A Flexible Capacity Adjusted Planned Outage Quantity for a Separately Certified Component of a Scheduled Facility or Semi-Scheduled Facility in a Trading Interval for which a Flexible Facility Reserve Capacity Deficit Refund is not payable, as determined by AEMO under clauses 4.26.6 or 4.26.7.

Flexible Refund Payable Planned Outage Quantity: A Flexible Capacity Adjusted Planned Outage Quantity for a Separately Certified Component of a Scheduled Facility or Semi-Scheduled Facility in a Trading Interval for which a Flexible Facility Reserve Capacity Deficit Refund is payable, as determined by AEMO under clauses 4.26.6 or 4.26.7.

Flexible Reserve Capacity Deficit: Has the meaning given in clause 4.26.4(a)(ii).

Flexible Shared Reserve Capacity Cost: For a Trading Day, the cost determined in accordance with clause 4.28.1A(b).

Flexible Targeted Reserve Capacity Cost: For a Trading Day, the cost defined under clause 4.28.1A(a).

Flexible Trading Interval Capacity Cost Refund: The refund a Market Participant holding Flexible Capacity Credits incurs in a Trading Interval, as calculated in accordance with clause 4.26.16.

Flexible Trading Interval Refund Rate: The Flexible Capacity refund rate applicable in a Trading Interval, and in respect of a Facility, as calculated in accordance with clause 4.26.1(h).

Indicative Flexible Individual Reserve Capacity Requirement: Means the estimate of a Market Participant's Flexible Individual Reserve Capacity Requirement for a Trading Month determined and provided to that Market Participant by AEMO in accordance with clause 4.28.6A.

Maximum Flexible Facility Refund: The total amount of the Flexible Capacity Credit payments paid or to be paid under these WEM Rules to a Market Participant in relation to a Facility and in relation to a Capacity Year assuming that:

(a)   AEMO acquires all of the Flexible Capacity Credits held by the Market Participant in relation to its Facility; and

(b)   the cost of each Flexible Capacity Credit so acquired is determined in accordance with clause 4.28.2(d).

Maximum Flexible Participant Generation Refund: The total amount of the Flexible Capacity Credit payments paid or to be paid under these WEM Rules to a Market Participant in relation to its Facilities (other than Facilities with a Facility Class or indicative Facility Class of Demand Side Programme) and in relation to a Capacity Year assuming that:

(a)   AEMO acquires all of the Flexible Capacity Credits held by the Market Participant in relation to those Facilities; and

(b)   the cost of each Flexible Capacity Credit so acquired is determined in accordance with clause 4.28.2(d).

16.2   The definition for 'Individual Reserve Capacity Requirement' in Chapter 11 (Glossary) is deleted and replaced with the following:

Individual Reserve Capacity Requirement: A Peak Individual Reserve Capacity Requirement or a Flexible Individual Reserve Capacity Requirement or both (as the context requires).

17   New Appendix 4 inserted

17.1   Insert a new Appendix 4 by deleting [Blank] and inserting the following:

Appendix 4: Flexible Individual Reserve Capacity Requirements

This Appendix presents the method that must be used by AEMO to determine, for a Trading Month n:

- Indicative Flexible Individual Reserve Capacity Requirements as required under clause 4.28.6A;

- Flexible Individual Reserve Capacity Requirements as required under clause 4.28.7A; and

- revised Flexible Individual Reserve Capacity Requirements as required under clause 4.28.11B.

AEMO must perform steps 1 to 3 to determine the Indicative Flexible Individual Reserve Capacity Requirements, Flexible Individual Reserve Capacity Requirements or revised Flexible Individual Reserve Capacity Requirements for Trading Month n.

For the purpose of this Appendix:

1. All references, apart from those in step 1(c)(ii), to meters are to interval meters.

2. The Notional Wholesale Meter is to be treated as a registered interval meter. This meter is denoted by meter m=m*.

3. The New Notional Wholesale Meter, determined in accordance with step 1(c), is to be treated as a registered interval meter. This meter is denoted by m=m$^+$.

4. A meter measuring a Facility containing an Intermittent Load is to be included in these calculations as a single meter representing a Non-Dispatchable Load, with metered consumption calculated according to clause 2.30B.11 and clause 9 of this Appendix 4.

5. The meter registration data to be used in the calculations is to be the most current complete set of meter registration data as at the time of commencing the calculations.

6. When calculating the Indicative Flexible Individual Reserve Capacity Requirements AEMO must assume that all meters registered to a Market Participant on the day of calculation will remain registered to that Market Participant for all future Trading Intervals.

7. A meter measuring a Scheduled Facility, Semi-Scheduled Facility or Non-Scheduled Facility not containing an Intermittent Load is to be included in these calculations with metered consumption calculated in accordance with clause 9 of this Appendix 4.

8. Each meter measuring an Aggregated Facility is to be included as a separate meter with metered consumption calculated in accordance with clause 9 of this Appendix 4.

9. Metered consumption for meter m, in Trading Interval t, is zero when AEMO issues a direction under clause 7.7.5 in respect of an Electric Storage Resource associated with m for a Dispatch

Interval within t, otherwise it is -1 x min(0, SOMS(m, t)), where SOMS(m, t) is the Sent Out Metered Schedule of m in t.

10. If meter m measures an Associated Load of a Demand Side Programme, then its metered consumption in Trading Interval t is:

      (a) negative one multiplied by the quantity estimated by AEMO under clause 7.13.5A for that Associated Load for Trading Interval t; plus

      (b) negative one multiplied by min(0, SOMS(m, t)), where SOMS(m, t) is the Sent Out Metered Schedule of m in t.

11. References to the "relevant Capacity Year" are to the Capacity Year which contains Trading Month n.

Step 1: Determine the contribution of each meter m to the Flexible Reserve Capacity Requirement as:

      (a) for a meter, including the Notional Wholesale Meter, for which Sent Out Metered Schedules exist for all of the Flexible IRCR Intervals for the relevant Capacity Year:

$$FRCRC(m)$$
$$= 2$$
$$\times \frac{\sum_{d \in FIRCRD} \max_{t \in FIRCRI(d)}(Demand(m, LatestInterval(d)) - Demand(m, t))}{3}$$

where:

    i. Demand(m,t) is the metered consumption in MWh of meter m in Trading Interval t;

    ii. d∈FIRCRD refers to all Trading Days in the relevant Capacity Year which contain Flexible IRCR Intervals;

    iii. t∈FIRCRI(d) refers to all Flexible IRCR Trading Intervals on Trading Day d; and

    iv. LatestInterval(d) is the latest Flexible IRCR Trading Interval on Trading Day d;

      (b) for a meter, excluding the New Notional Wholesale Meter, for which Sent Out Metered Schedules exist for all Trading Intervals in Trading Month n-3:

$$FRCRC(m)$$
$$= 2 \times \max_{M \in PTM} \left(\frac{\sum_{d \in 3HRTD(M)} (\max_{t \in HRTI(d)}(Demand(m, Highest4HDI(d)) - Demand(m, t)))}{3} \right)$$

where:

> i. Demand(m, t) is the metered consumption in MWh of meter m in Trading Interval t; and
>
> ii. $d \in$ 3HRTD(M) refers to all Trading Days in the 3 High-Ramp Trading Days in Trading Month M;
>
> iii. $t \in$ HRTI(d) refers to the Trading Interval with the highest Four-Hour Demand Increase on Trading Day d and the seven prior Trading Intervals;
>
> iv. Highest4HDI(d) is the Trading Interval with the highest Four-Hour Demand Increase on Trading Day d; and
>
> v. $M \in$ PTM refers to all Trading Months from the start of the relevant Capacity Year to Trading Month n-3 inclusive; and

(c) for the New Notional Wholesale Meter:

$$FRCRC(m^+) = \frac{FRCRC(m^*)}{NIMCount(FMPCY)} \times \big(NIMCount(n-3) - NIMCount(FMPCY)\big)$$

where:

> i. FRCRC(m*) is the contribution to the Flexible Reserve Capacity Requirement by the Notional Wholesale Meter calculated under step 1(a);
>
> ii. NIMCount(FMPCY) is the number of non-interval or accumulation meters that existed at the end of the final Trading Month of the Capacity Year before the relevant Capacity Year; and
>
> iii. NIMCount(n-3) is the number of non-interval or accumulation meters that existed at the end of Trading Month n-3.

Step 2: For each Market Participant p, calculate the contribution to the Flexible Reserve Capacity Requirement as:

$$FRCRC(p) = \sum_{m \in Meters(p)} FRCRC(m)$$

where:

(a) FRCRC(m) is the contribution to the Flexible Reserve Capacity Requirement of meter m calculated under step 1; and

(b) $m \in$ Meters(p) refers to all meters registered to Market Participant p.

Step 3: For each Market Participant p, calculate the Indicative Flexible Individual Reserve Capacity Requirement or Flexible Individual Reserve Capacity Requirement, as applicable as:

$$\text{FIRCR(p)} = \frac{\text{FRCRC(p)}}{\sum_p \text{FRCRC(p)}} \times \min(\text{FRCR, FCC})$$

where:

(a)   FRCRC(p) is the contribution to the Flexible Reserve Capacity Requirement by Market Participant p calculated under step 2;

(b)   FRCR is the Flexible Reserve Capacity Requirement for the relevant Capacity Year; and

(c)   FCC is the number of Flexible Capacity Credits held by Market Participants on the relevant Trading Day.