Notes

SCHEDULE B

PART 3

Amendment 39 – Market Rule 2.34

(1) Clause 2.34.3 is amended to read as follows:

2.34.3. A Rule Participant that seeks to change its Standing Data, other than Standing Data changed in accordance with the processes set out in clauses 6.2A, 6.3C, 6.5C or 6.11A must notify AEMO of:

(a) the revisions it proposes be made to its Standing Data;

(b) the reason for the change; and

(c) the date from which the revision will take effect.

Deleted: or 6.5C

(2) Clause 2.34.7 is amended to read as follows:

2.34.7. AEMO may reject a change:

(a) in Standing Data related to prices and payments:

i. if the price or payment data submitted is inconsistent with any applicable limit on those values under these Market Rules; or

ii. except in relation to Consumption Decrease Price or an Extra Consumption Decrease Price, if AEMO is not satisfied with evidence provided that the submitted data represents the reasonable costs of the Market Participant in the circumstances related to that price or payment; and

(b) in any other Standing Data if it considers that an inadequate explanation, including test results, was provided to justify the change in Standing Data.

(3) Clause 2.34.8 is amended to read as follows:

2.34.8. Other than Standing Data changed in accordance with the processes set out in clauses 6.2A, 6.3C, 6.5C or 6.11A, AEMO must notify the Rule Participant of its acceptance or rejection of the change in Standing Data as soon as practicable, and no later than three Business Days after the later of:

(a) the date of notification described in clause 2.34.3; and

(b) if AEMO makes a request under clause 2.34.6, the date on which the information requested is received by AEMO.

Deleted: or 6.5C

(4) Clause 2.34.14 is amended to read as follows:

2.34.14. AEMO must commence using revised Standing Data from:

(a) 8:00 AM on the Scheduling Day following AEMO's acceptance of the revised Standing Data in the case of:

i. Standing STEM Submissions;

iA. Standing Bilateral Submissions;

iB. Standing Resource Plan Submissions;

ii. Consumption Increase Prices, Consumption Decrease Prices and Extra Consumption Decrease Prices; and

iii. Standing Data changes stemming from acceptance of an application under clause 6.6.9,

Deleted: Consumption Increase Prices and Consumption Decrease Prices; and

with the exception that the previous Standing Data remains current for the purpose of settling the Trading Day that commences at the same time as that Scheduling Day; and

(b) as soon as practicable in the case of any other revised Standing Data.

Amendment 40 – Market Rule 3.2

(1) Clause 3.2.5 is amended to read as follows:

3.2.5. The Technical Envelope represents the limits within which the SWIS can be operated in each SWIS Operating State. In establishing and modifying the Technical Envelope under clause 3.2.6, System Management must:

(a) respect all Equipment Limits but only to the extent those limits are not inconsistent with the dispatch of Facilities that, but for the Equipment Limits, would be dispatched under clause 7.6.1C;

(b) respect all Security Limits;

(c) respect all SWIS Operating Standards;

(d) respect all Ancillary Service standards specified in clause 3.10; and

(e) take into account those parts of the SWIS which are not designed to be operated to the planning criteria in the relevant Technical Code.

Amendment 41 – Market Rule 3.19

(1) Clause 3.19.3A is amended to read as follows:

3.19.3A. In assessing whether to grant a request for Opportunistic Maintenance, System Management:

(a) must not grant permission for Opportunistic Maintenance to begin prior to the first Trading Interval for which Opportunistic Maintenance is requested;

(b) must not approve Opportunistic Maintenance for a Facility or item of equipment on two consecutive Trading Days;

(c) may decline to approve Opportunistic Maintenance for a Facility or item of equipment where it considers that the request has been made principally to avoid exposure to Capacity Cost Refunds as described in clause 4.26 rather than to perform maintenance; and

(d) may decline to approve Opportunistic Maintenance for a facility where it considers that inadequate time is available before the proposed commencement time of the outage to adequately assess the impact of that outage.

Amendment 42 – Market Rule 4.5

(1) Clause 4.5.13 is amended to read as follows:

4.5.13. The Statement of Opportunities Report must include:

…

(h) the Expected DSM Dispatch Quantity for each Capacity Year in the Long Term PASA Study Horizon;

…

(j) an estimate of the DSM Reserve Capacity Price for each Capacity Year in the Long Term PASA Study Horizon; and

(2) Clause 4.5.14A is amended to read as follows:

4.5.14A. AEMO must, for each Capacity Year, calculate the Expected DSM Dispatch Quantity and the DSM Activation Price, in accordance with clauses 4.5.14B, 4.5.14C, 4.5.14D, 4.5.14E and 4.5.14F.

(3) Clause 4.5.14B is amended to read as follows:

Deleted: Balancing

Deleted: Reserve Capacity refunds

Deleted: other than the 2016 Capacity Year

Deleted: other than the 2016 Capacity Year

Deleted: other than the 2016 Capacity Year

Notes

4.5.14B. AEMO must document the procedure it follows in calculating:

(a) the Expected DSM Dispatch Quantity; and

(b) the DSM Activation Price,

and Rule Participants, including AEMO, must follow that documented Market Procedure.

Amendment 43 – Market Rule 4.12

(1) Clause 4.12.4 is amended to read as follows:

4.12.4. Subject to clause 4.12.5, where AEMO establishes the initial Reserve Capacity Obligation Quantity to apply for a Facility for a Trading Interval:

…

(c) for Interruptible Loads, Demand Side Programmes and Dispatchable Loads, except where otherwise precluded by this clause 4.12.4, the Reserve Capacity Obligation Quantity:

i. will equal zero once the capacity has been dispatched under clause 7.6.1C(d) or 7.6.1C(e) for the number of hours per year that are specified under clause 4.10.1(f)(ii);

ii. will equal zero for the remainder of a Trading Day in which the capacity has been dispatched under clause 7.6.1C(d) or 7.6.1C(e) for the number of hours per day that are specified under clause 4.10.1(f)(iii);

iii. [Blank]

iv. must account for staffing and other restrictions on the ability of the Facility to curtail energy upon request; and

v. will equal zero for Trading Intervals which fall outside of the periods specified in clause 4.10.1(f)(vi).

(2) Clause 4.12.8 is deleted. It read as follows:

Amendment 44 – Market Rule 4.25

(1) Clause 4.25.1 is amended to read as follows:

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

(a) in the case of a generation system, during the term the Reserve Capacity Obligations apply, operate at a level equivalent to its Required Level, adjusted to the level of Capacity Credits currently held, at least once during each of the following periods and such level of operation during those periods must be achieved on each type of fuel notified under clause 4.10.1(e)(v):

i. 1 October to 31 March; and

ii. 1 April to 30 September; and

(2) Clause 4.25.4B is amended to read as follows:

4.25.4B In order for an application under clause 4.25.4A to be assessed by AEMO, it must:

(a) be in writing;

(b) relate to a Facility for which AEMO has notified the Market Participant, in accordance with clause 4.13.14, of its determination that the need to maintain the Reserve Capacity Security for that Facility has ceased;

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

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

(3) Clause 4.25.4E will be amended. The amending rule will read as follows:

If at the time the amending rule commences, Schedule B, Part 4 of the Amending Rules 2016 has already commenced or is concurrently commencing, clause 4.25.4E will read as follows:

Deleted: , other than the 2016 Capacity Year,

Deleted: will equal zero once the capacity has been dispatched under clause 7.6.1C(d) for the maximum number of times per year specified under clause 4.10.1(f)(iv);

Deleted: 4.12.8. . Where a Demand Side Programme is dispatched under clause 7.6.1C(d) to a level equal to its Reserve Capacity Obligation Quantity on two consecutive days the Reserve Capacity Obligation Quantity for the third consecutive day will be zero.¶

Deleted: operation must be achieved on each type of fuel available to that Facility

Deleted: Reserve

Deleted: 4.25.4E. . Where the Capacity Credits associated with a Demand Side Programme are reduced in accordance with clause 4.25.4C the Market Participant must pay a refund of an amount equal to all Reserve Capacity payments associated with the reduced Capacity Credits for the relevant Reserve Capacity Year to AEMO calculated in accordance with the provisions of clause 4.26.¶

Notes

4.25.4E. Where the Capacity Credits associated with a Demand Side Programme are reduced in accordance with clause 4.25.4C or 4.11.13 the Market Participant must pay a refund of an amount equal to all Reserve Capacity payments associated with the reduced Capacity Credits minus the prorated amount of all Capacity Cost Refunds already paid by the Market Participant for the relevant Capacity Year to AEMO calculated in accordance with the provisions of clause 4.26.

Otherwise, clause 4.25.4E will read as follows:

4.25.4E. Where the Capacity Credits associated with a Demand Side Programme are reduced in accordance with clause 4.25.4C the Market Participant must pay a refund of an amount equal to all Reserve Capacity payments associated with the reduced Capacity Credits minus the prorated amount of all Capacity Cost Refunds already paid by the Market Participant for the relevant Capacity Year to AEMO calculated in accordance with the provisions of clause 4.26.

(4) Clause 4.25.13 is amended to read as follows:

4.25.13. [Blank]

Deleted: AEMO must monitor at all times the on-site fuel storage of each Scheduled Generator required to comply with clause 4.10.2. AEMO may: ¶
(a) . require the relevant Market Participant to submit a weekly report of the current fuel level;¶
(b) . have a representative of AEMO conduct an on-site inspection to verify the fuel storage level; and¶
(c) . instruct System Management to use its SCADA systems to monitor the fuel storage level and to report any failure of any Market Participant to comply with clause 4.10.2 to the IMO.

Deleted: Reserve

Amendment 45 – Market Rule 4.25A

(1) Clause 4.25A.1 is amended to reach as follows:

4.25A.1. In each Capacity Year each Market Customer must undertake a Verification Test during the period specified in clause 4.10.1(f)(vi) for each Demand Side Programme registered to the Market Customer. Each test must be conducted in accordance with a Market Procedure and be carried out:

(a) within 20 Business Days of registration, as notified by AEMO under clause 2.31.6, of the Demand Side Programme, if applicable; or

(b) between 1 October and 30 November.

Amendment 46 – Market Rule 4.26

(1) Clause 4.26.1 is amended to read as follows:

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

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

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

where:

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

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

iii. Y is the per interval Reserve Capacity Price associated with the Trading Interval t for a Facility f and is determined in accordance with clause 4.26.1(b).

(b) For a Facility f in the Trading Interval t , Y is determined as follows:

i. for a Non-Scheduled Generator, Y equals zero if AEMO has determined that in Trading Interval t the Non-Scheduled Generator is in Commercial Operation under clause 4.13.10B and one of the following applies:

1. the Non-Scheduled Generator has operated at a level equivalent to its Required Level in at least two Trading Intervals, adjusted to 100 percent of the level of Capacity Credits currently held; or

Deleted: 4.26.1. . If a Market Participant holding Capacity Credits associated with a generation system 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.¶
REFUND TABLE¶
¶
Dates
... [1]

Notes

2. the Market Participant has provided AEMO with a report under clause 4.13.10C specifying that the Facility can operate at a level equivalent to its Required Level, adjusted to 100 percent of the level of Capacity Credits currently held;

ii. for a Demand Side Programme, Y equals the DSM Reserve Capacity Price divided by 400.

iii. subject to clause 4.26.1(b)(i) and (ii), for a Facility f in the Trading Interval t, Y equals:

1. the Monthly Reserve Capacity Price; divided by

2. the number of Trading Intervals in the relevant Trading Month the Trading Interval t falls in.

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

i. six; and

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

(d) The dynamic refund factor $\mathrm{RF\ dynamic(t)}$ in the Trading Interval t is determined as follows:

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

where:

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

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

(e) For a Facility f in the Trading Interval t, $\mathrm{Spare\ (f,t)}$ is determined as follows:

i. for each Scheduled Generator, the greater of zero and:

1. the MW quantity of Capacity Credits; less

2. the MW quantity of Outage provided under clause 7.13.1A(b); less

3. the Sent Out Metered Schedule multiplied by two so as to be a MW quantity;

ii. for each Non-Scheduled Generator is Zero; and

iii. for each Demand Side Programme which has a Reserve Capacity Obligation Quantity in the Trading Interval t, $\mathrm{Spare\ (f,t)}$ is determined as follows:

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

where:

1. $DSP\ A(t)$ is the total available quantity of consumption which can be reduced via the dispatch of the Demand Side Programme in MW in the Trading Interval t;

2. $\mathrm{RCOQ(t)}$ is the Demand Side Programme's Reserve Capacity Obligation in the Trading Interval t;

3. $\mathrm{DSP\ Load(t)}$ is the Demand Side Programme's Demand Side Programme Load in the Trading Interval t as determined under clause 6.16.2 multiplied by two so as to be a MW quantity; and

Notes

4. $\text{DSP MinLoad}(t)$ is the sum of the Minimum Consumption of each Associated Load of the Demand Side Programme in MW in the Trading Interval t;

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

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

where:

i. $\text{Dispatchable}(f,t)$ for a Facility f in the Trading Interval t is its portion of capacity which is not subject to a Forced Outage over the 4,320 previous Trading Intervals pt prior to and including the Trading Interval t and is determined as follows:

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

where:

1. PT is the set of 4,320 Trading Intervals immediately prior to and including the Trading Interval t and pt is a Trading Interval within that set;

2. $FO(f,pt)$ is the quantity of Forced Outage for a Facility f in the Trading Interval pt, provided in accordance with clause 7.13.1A(b); and

3. $CC(f,pt)$ is the number of Capacity Credits a Market Participant holds for Facility f in the Trading Interval pt; and

(g) $\text{RF floor}(f,t)$ is equal to one in the Trading Interval t for a Facility f to which any of the following applies:

i. the Facility is a Demand Side Programme;

ii. [Blank]

iii. the Facility is an Intermittent Generator to which clauses 4.26.1A(a)(ii)(2) or 4.26.1A(a)(ii)(3) applies; or

iv. the Facility is a Scheduled or Non-Scheduled Generator to which clauses 4.26.1A(a)(ii)(4) or 4.26.1A(a)(ii)(5) applies.

(2) Clause 4.26.1A is amended to read as follows:

4.26.1A. AEMO must calculate the Reserve Capacity Deficit refund for each Facility ("**Facility Reserve Capacity Deficit Refund**") for each Trading Interval t as the lesser of:

(a) the product of:

i. the Trading Interval Refund Rate applicable to the Facility in Trading Interval t; and

ii. the Reserve Capacity Deficit in Trading Interval t,

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

1. if the Facility is required to have submitted a Forced Outage under clause 3.21.4, or is a Scheduled Generator that has taken a Refund Payable Planned Outage, the total Forced Outage and Refund Payable Planned Outage in that Trading Interval measured in MW;

2. if the Facility is an Intermittent Generator which is not considered by AEMO to have been in Commercial Operation for the purposes of clause 4.26.1(b), the number of Capacity Credits associated with the relevant Intermittent Generator;

3. if the Facility is an Intermittent Generator which is considered by AEMO to have been in Commercial Operation for the purposes

Deleted: 4.26.1A. . AEMO must calculate the Reserve Capacity Deficit refund for each Facility ("**Facility Reserve Capacity Deficit Refund**") for each Trading Month m as the lesser of:¶
(a) . the sum over all Trading Intervals t in Trading Month m of the product of: ¶
i . the Off-Peak Trading Interval Rate or Peak Trading Interval Rate determined in accordance with the Refund Table applicable to Trading Interval t; and ¶
ii . the Reserve Capacity Deficit in Trading Interval t,¶
where the Reserve Capacity Deficit for a Facility is equal to whichever of the following applies:¶
iii. . if the Facility is required to have submitted a Forced Outage under clause 3.21.4, the Forced Outage in that Trading Interval measured in MW; or¶
iv. . if the Facility is an Intermittent Generator which is not considered by AEMO to have been in Commercial Operation for the purposes of clause 4.26.1, the number of Capacity Credits associated with the relevant Intermittent Generator; or¶
ivA. . if the Facility is an Intermittent Generator which is considered by AEMO to have been in Commercial Operation, but for which Y does not equal zero in the Refund Table in clause 4.26.1, the minimum of:¶
1. . RL- (2 x Max_2); or¶
2. . RL – A¶
where;¶
RL . is the Required Level, adjusted to 100 percent of the level of Capacity Credits currently held;¶
Max_2 . is the second highest value of the output for the Facility (MWh) achieved during a Trading Interval during the relevant Trading Month, as measured in Meter Data Submissions received by AEMO in accordance with clause 8.4, that has been achieved since the date AEMO determined the Facility to be in Commercial Operation, where this value must be set equal to or greater than the Max_2 applied by AEMO for the previous Trading Month; and¶
A . is the level of output (in MW) detailed in the most recent report provided by the Market Participant for the Facility under clause 4.13.10C,¶
where this value will be applied for the purposes of this clause for the relevant Trading Month; or¶
v. . if, from the Trading Day commencing on 30 November of Year 3 for Reserve Capacity Cycles up to and including 2009 or 1 October of Year 3 for Reserve Capacity Cycles from 2010 onwards, the Facility is undergoing an approved Commissioning Test and, for the purposes of permission sought under clause 3.21A.2, is a new generating system referred to in clause 3.21A.2(b), the number of Capacity Credits associated with the relevant Facility; or¶
vi. . if, from the Trading Day commencing on 30 November of Year 3 for Reserve Capacity Cycles up to and including 2009 or 1 October of Year 3 for Reserve Capacity Cycles from 2010 onwards, the Facility is not yet undergoing an approved Commissioning Test and, for the purposes of permission sought under clause 3.21A.2, is a new generating system referred to in clause 3.21A.2(b), the number of Capacity Credits associated with the relevant Facility; or¶
vii. . if the Facility is a Demand Side Programme:¶
max(0, RCOQ - max(0, (RD – MinLoad)))¶
where:¶
RCOQ is the Reserve Capacity Obligation Quantity determined for the Facility under clause 4.12.4;¶
RD is the Relevant Demand for the Facility determined in accordance with clause 4.26.2CA; and¶
MinLoad is the sum of the minimum load MW quantities provided under clause 2.29.5B(c) for the Facility's Associated Loads; and¶
(b) . the total value of the Capacity Credit payments associated with the relevant Facility paid or to be p ... [2]

Notes

of clause 4.26.1(b), but for which Y does not equal zero in clause 4.26.1(b), the minimum of:

i. RL- (2 x Max2); or

ii. RL – A

where:

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

Max2 is the second highest value of the output for the Facility (MWh) achieved during a Trading Interval during the Trading Month the Trading Interval t falls in, as measured in Meter Data Submissions received by AEMO in accordance with section 8.4, that has been achieved since the date AEMO determined the Facility to be in Commercial Operation, where this value must be set equal to or greater than the Max2 applied by AEMO for the previous Trading Month; and

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

4. if, from the Trading Day commencing on 30 November of Year 3 for Reserve Capacity Cycles up to and including 2009 or 1 October of Year 3 for Reserve Capacity Cycles from 2010 onwards, the Facility is undergoing an approved Commissioning Test and, for the purposes of permission sought under clause 3.21A.2, is a new generating system referred to in clause 3.21A.2(b), the number of Capacity Credits associated with the relevant Facility;

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

6. if the Facility is a Demand Side Programme:

$$\max\left(0, \mathrm{RCOQ} - \max\left(0, (\mathrm{RD} - \mathrm{MinLoad})\right)\right)$$

where:

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

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

MinLoad is the sum of the MW quantities of Minimum Consumption for the Facility's Associated Loads; and

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

(3) Clause 4.26.1B is amended to read as follows:

4.26.1B. AEMO must calculate the Generation Reserve Capacity Deficit Refund for each Market Participant for each Trading Interval as the sum of the Facility Reserve Capacity Deficit Refunds for the Trading Interval for each Facility registered to the relevant Market Participant, excluding any registered Demand Side Programmes.

Deleted: Month

Deleted: Month

Notes

(4) Clauses 4.26.1C and 4.26.1D are inserted and read as follows:

4.26.1C. Where System Management notifies AEMO under clause 7.13.1A(b) of the Planned Outage of a Scheduled Generator in a Trading Interval, AEMO must determine that Planned Outage to be:

(a) if the Refund Exempt Planned Outage Count for the Facility, calculated over the 1000 Trading Days preceding the Trading Day in which the Trading Interval falls, is less than 8400 – a Refund Exempt Planned Outage; or

(b) otherwise – a Refund Payable Planned Outage.

4.26.1D. IMO must undertake a review, to be completed by 31 December 2020 of whether the limit for the Refund Exempt Planned Outage Count referred to in clause 4.26.1C should be modified to better address the Wholesale Market Objectives. The review must include, at a minimum, an assessment of:

(a) variations in Planned Outage rates and Forced Outage rates of Scheduled Generators since the introduction of the limit on Refund Exempt Planned Outages;

(b) for each Scheduled Generator and each year since the introduction of the limit on Refund Exempt Planned Outages:

i. the number of Equivalent Planned Outage Hours for which Facility Reserve Capacity Deficit Refunds were payable; and

ii. the total amount of Facility Reserve Capacity Deficit Refunds associated with Refund Payable Planned Outages; and

(c) the level of participation by Scheduled Generators in the Reserve Capacity Mechanism in each year since the introduction of the limit on Refund Exempt Planned Outages; and

(d) changes in the mix of Scheduled Generators that have participated in the Reserve Capacity Mechanism in each year since the introduction of the limit on Refund Exempt Planned Outages.

(5) Clause 4.26.2 is amended to read as follows:

~~4.26.2.~~ AEMO must determine the net STEM shortfall ("Net STEM Shortfall") in Reserve Capacity supplied by each Market Participant p holding Capacity Credits associated with a generation system in each Trading Interval t as:

SF(p,t) = Max(RCDF(p,t), RCOQ(p,t) - A(p,t)) - RCDF(p,t)

Where:

A(p,t) = Min(RCOQ(p,t), CAPA(p,t));

RCOQ(p,t) for Market Participant p and Trading Interval t is equal to:

(a) the total Reserve Capacity Obligation Quantity of Market Participant p's unregistered facilities that have Reserve Capacity Obligations, excluding Loads that can be interrupted on request; plus

(b) the sum of the product of:

i. the factor described in clause 4.26.2B as it applies to Market Participant p's Registered Facilities; and

ii. the Reserve Capacity Obligation Quantity for each Facility,

for all Market Participant p's Registered Facilities, excluding Demand Side Programmes,

CAPA(p,t) is for Market Participant p and Trading Interval t:

(c) equal to RCOQ(p,t) for a Trading Interval where the STEM Auction has been suspended by AEMO in accordance with section 6.10;

(d) subject to clause 4.26.2(c), for the case where Market Participant p is not Synergy, the sum of:

Deleted: 4.26.2. . AEMO must determine the net STEM shortfall ("Net STEM Shortfall") in Reserve Capacity supplied by each Market Participant p holding Capacity Credits associated with a generation system in each Trading Interval t of Trading Day d and Trading Month m as:¶
SF(p,m,d,t) = Max(RTFO(p,d,t), RCOQ(p,d,t) - A(p,d,t)) - RTFO(p,d,t)¶
Where:¶
A(p,d,t) = Min(RCOQ(p,d,t), CAPA(p,d,t));¶
RCOQ(p,d,t) for Market Participant p and Trading Interval t of Trading Day d is equal to:¶
(a) . the total Reserve Capacity Obligation Quantity of Market Participant p's unregistered facilities that have Reserve Capacity Obligations, excluding Loads that can be interrupted on request; plus¶
(b) . the sum of the product of:¶
i. . the factor described in clause 4.26.2B as it applies to Market Participant p's Registered Facilities; and ¶
ii. . the Reserve Capacity Obligation Quantity for each Facility,¶
for all Market Participant p's Registered Facilities, excluding Demand Side Programmes,¶
CAPA(p,d,t) is for Market Participant p and Trading Interval t of Trading Day d: ¶
(c) . equal to RCOQ(p,d,t) for a Trading Interval where the STEM Auction has been suspended by AEMO in accordance with clause 6.10;¶
(d) . subject to clause 4.26.2(c), for the case where Market Participant p is not Synergy, the sum of:¶
i. . the Reserve Capacity Obligation Quantities in Trading Interval t of that Market Participant's Interruptible Loads; plus¶
ii. . the MW quantity calculated by doubling the net MWh quantity of energy sent out by Facilities registered by that Market Participant during that Trading Interval calculated as the Net Contract Position less the shortfall as indicated by the applicable Resource Plan; plus¶
iiA. . if a STEM submission does not exist for that Trading Interval, the MW quantity calculated by doubling the total MWh quantity of energy to be consumed by that Market Participant including demand associated with any Interruptible Load, but excluding demand associated with any Dispatchable Load during that Trading Interval as indicated by the applicable Resource Plan; plus¶
iii. . the MW quantity calculated by doubling the total MWh quantity covered by the STEM Offers which were not scheduled and the STEM Bids which were scheduled in the relevant STEM Auction, determined by AEMO for that Market Participant under clause 6.9 for Trading Interval t, corrected for Loss Factor adjustments so as to be a sent out quantity in accordance with clause 4.26.2A; plus¶
iv. . double the total MWh quantity to be provided as Ancillary Services as specified by AEMO in accordance with clause 6.3A.2(e)(i) for that Market Participant corrected for Loss Factor adjustments so as to be a sent out quantity in accordance with clause 4.26.2A; plus¶
v. . the greater of zero and (BSFO(p,d,t) – RTFO(p,d,t)); and¶
(e) . subject to clause 4.26.2(c), for the case where Market Participant p is Synergy, the sum of:¶
i. . the sum of the Reserve Capacity Obligation Quantities in Trading Interval t of that Market Participant's Interruptible Loads; plus¶
ii. . the MW quantity calculated by doubling the total MWh quantity of energy that Synergy is selling to other Market Participants as indicated by the Net Contract Position for Trading Interval t, corrected for Loss Factor adjustments so as to be a sent out quantity in accordance with clause 4.26.2A; plus¶
iii. . the MW quantity calculated by doubling the total MWh quantity of the STEM Offers which were not ... [3]

Notes

i. the Reserve Capacity Obligation Quantities in Trading Interval t of that Market Participant's Interruptible Loads; plus

ii. the MW quantity calculated by doubling the net MWh quantity of energy sent out by Facilities registered by that Market Participant during that Trading Interval calculated as the Net Contract Position less the shortfall as indicated by the applicable Resource Plan; plus

iiA. if a STEM submission does not exist for that Trading Interval, the MW quantity calculated by doubling the total MWh quantity of energy to be consumed by that Market Participant including demand associated with any Interruptible Load, but excluding demand associated with any Dispatchable Load during that Trading Interval as indicated by the applicable Resource Plan; plus

iii. the MW quantity calculated by doubling the total MWh quantity covered by the STEM Offers which were not scheduled and the STEM Bids which were scheduled in the relevant STEM Auction, determined by AEMO for that Market Participant under section 6.9 for Trading Interval t, corrected for Loss Factor adjustments so as to be a sent out quantity in accordance with clause 4.26.2A; plus

iv. double the total MWh quantity to be provided as Ancillary Services as specified by AEMO in accordance with clause 6.3A.2(e)(i) for that Market Participant corrected for Loss Factor adjustments so as to be a sent out quantity in accordance with clause 4.26.2A; plus

v. the greater of zero and (BSFO(p,t) – RTFO(p,t)); and

(e) subject to clause 4.26.2(c), for the case where Market Participant p is Synergy, the sum of:

i. the sum of the Reserve Capacity Obligation Quantities in Trading Interval t of that Market Participant's Interruptible Loads; plus

ii. the MW quantity calculated by doubling the total MWh quantity of energy that Synergy is selling to other Market Participants as indicated by the Net Contract Position for Trading Interval t, corrected for Loss Factor adjustments so as to be a sent out quantity in accordance with clause 4.26.2A; plus

iii. the MW quantity calculated by doubling the total MWh quantity of the STEM Offers which were not scheduled and the STEM Bids which were scheduled in the relevant STEM Auction, determined by AEMO for that Market Participant under section 6.9 for Trading Interval t, corrected for Loss Factor adjustments so as to be a sent out quantity in accordance with clause 4.26.2A; plus

iv. double the total MWh quantity to be provided as Ancillary Services as specified by AEMO in accordance with clause 6.3A.2(e)(i) for Synergy corrected for Loss Factor adjustments so as to be a sent out quantity in accordance with clause 4.26.2A; plus

v. the greater of zero and (BSFO(p,t) – RTFO(p,t)).

RCDF(p,t) = RTFO(p,t) + RTNREPO(p,t);

$$RTNREPO(p,t) = \sum_{f \in F} \left(Max\left(0, NREPO(f,t) - BSPO(f,t)\right)\right)$$

NREPO(f,t) is the total MW quantity of Refund Payable Planned Outage associated with Facility f for Trading Interval t;

BSPO(f,t) is the total MW quantity of Planned Outage associated with Facility f before the STEM Auction for Trading Interval t, as provided to the AEMO by System Management in accordance with clause 7.3.4;

Notes

F is the set of Scheduled Generators registered to Market Participant p, and f is a Facility within that set;

BSFO(p,t) is the total MW quantity of Forced Outage associated with Market Participant p before the STEM Auction for Trading Interval t, where this is the sum over all the Market Participant's Registered Facilities of the lesser of the Reserve Capacity Obligation Quantity of the Facility for Trading Interval t and the MW Forced Outage of the Facility for Trading Interval t as recorded in accordance with section 7.3; and

RTFO(p,t) is the total MW quantity of Forced Outage associated with Market Participant p in real-time for Trading Interval t, where this is the sum over all the Market Participant's Registered Facilities of the lesser of the Reserve Capacity Obligation Quantity of the Facility for Trading Interval t and the MW Forced Outage of the Facility for Trading Interval t as recorded in accordance with clause 7.13.1A(b).

(6) Clause 4.26.2B is amended to read as follows:

4.26.2B. AEMO is to set the factor described in the definition of RCOQ(p,t) in clause 4.26.2 to equal one in all situations except for Scheduled Generators, Non-Scheduled Generators and Dispatchable Loads with Loss Factors less than one in which event the factor must equal the facilities Loss Factor.

(7) Clause 4.26.2C is amended to read as follows:

4.26.2C. [Blank]

(8) Clause 4.26.2CA is amended to read as follows:

4.26.2CA. The Relevant Demand of a Demand Side Programme for a Trading Day d in a Capacity Year is the lesser of:

(a) a value determined for the Demand Side Programme using the methodology set out in Appendix 10; or

(b) the sum of Individual Reserve Capacity Requirement Contributions of the Associated Loads of the Demand Side Programme.

(9) Clause 4.26.2D is amended to read as follows:

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

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

max(0, min(RCOQ, DIMW) – max (0, RD – DSPLMW))

where

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

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

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

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

Deleted: RCOQ(p,d,t) and RCOQ(f,d,t)

Deleted: For each Capacity Year, AEMO must:

Deleted: (a) . identify the eight consecutive Trading Intervals with the highest aggregate system demand in each month during the Hot Season of the previous Capacity Year; and¶
(b) . for each Non–Dispatchable Load or Interruptible Load associated with a Demand Side Programme (Associated Load) during the Capacity Year and each of the 32 Trading Intervals identified under clause 4.26.2C(a), determine a MW quantity equal to:¶
i. . the metered consumption of the Associated Load for the Trading Interval, multiplied by two to convert to units of MW; or¶
ii. . where the metered consumption of the Associated Load for the Trading Interval is not available or is considered by AEMO to be inappropriate, a MW quantity determined by AEMO based on:¶
1. . available Meter Data Submissions; or¶
2. . Load information provided by the Market Customer; or¶
3. . other relevant information; or¶
iii. . where a Market Customer provides evidence satisfactory to AEMO that the Associated Load was operating at below capacity due to its consumption being reduced at the request of System Management or because of maintenance, AEMO's estimate of what the consumption of the Associated Load would have been if it had not been reduced, multiplied by two to convert to units of MW.¶

Deleted: 4.26.2CA. . The Relevant Demand of a Demand Side Programme for a Trading Day d in a Capacity Year is the median of the historical consumption quantities determined by AEMO for each of the 32 Trading Intervals identified under clause 4.26.2C(a) for the Capacity Year. The historical consumption quantity for each Trading Interval is the sum, over all the Associated Loads associated with the Demand Side Programme during Trading Day d, of the MW quantity determined by AEMO for each Associated Load and the Trading Interval under clause 4.26.2C(b).¶

Deleted: of Trading Day d and Trading Month m

Deleted: Trading Day d

Notes

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

(10) Clause 4.26.2E is amended to read as follows:

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

(11) Clause 4.26.2F is amended to read as follows:

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

(a) either:

i. where Market Participant p holds Capacity Credits associated with a generation system, the Generation Capacity Cost Refund for Market Participant p for Trading Interval t, determined in accordance with clause 4.26.3; or

ii. zero, otherwise; and

(b) the sum of all Demand Side Programmes Capacity Cost Refunds for Demand Side Programmes for which Market Participant p holds Capacity Credits.

(12) Clause 4.26.3 is amended to read as follows:

4.26.3. The Generation Capacity Cost Refund for Trading Interval t in Capacity Year y for a Market Participant p holding Capacity Credits associated with a generation system is the lesser of:

(a) the Maximum Participant Generation Refund determined for Market Participant p and Capacity Year y less all Generation Capacity Cost Refunds applicable to Market Participant p in previous Trading Interval t falling in Capacity Year y; and

(b) the Generation Reserve Capacity Deficit Refund for Market Participant p and Trading Interval t, plus the Net STEM Refund in Trading Interval t for Market Participant p.

where the Net STEM Refund is calculated as follows:

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

Where:

i. $\text{N STEM Refund}(p,t)$ is the Net STEM Refund for Market Participant p in Trading Interval t;

ii. $\text{TIRR weighted}(p,t)$ is the weighted average of the Trading Interval Refund Rate in Trading Interval t for each Facility Participant p holds Capacity Credits for and is calculated as follows:

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

where:

1. F is the set of Scheduled Generators registered to Market Participant p and f is a Facility within that set;

2. $\text{TIRR}(f,t)$ is the Trading Interval Refund Rate for Facility f in Trading Interval t; and

3. CC(f,t) is the number of Capacity Credits associated with Facility f in Trading Interval t; and

iii. $\text{N STEM Short}(p,t)$ is the Net STEM Shortfall for Market Participant p in Trading Interval t.

(13) Clause 4.26.3A is amended to read as follows:

Deleted: Month m

Deleted: Month m

Deleted: the sum over all Demand Side Programmes for which Market Participant p holds Capacity Credits of the Demand Side Programme Capacity Cost Refund for Trading Month m, determined in accordance with clause 4.26.3A.

Deleted: 4.26.3. . The Generation Capacity Cost Refund for Trading Month m for a Market Participant p holding Capacity Credits associated with a generation system is the lesser of: ¶
(a) . the Maximum Participant Generation Refund determined for Market Participant p and Trading Month m in accordance with the Refund Table, less all Generation Capacity Cost Refunds applicable to Market Participant p in previous Trading Months falling in the same Capacity Year as Trading Month m; and ¶
(b) . the Generation Reserve Capacity Deficit Refund for Market Participant p and Trading Month m, plus the sum over all Trading Intervals t in Trading Month m of the Net STEM Refund, ¶
where the Net STEM Refund is the product of: ¶
i. . the Off-Peak Trading Interval Rate or Peak Trading Interval Rate determined in accordance with the Refund Table applicable to Trading Interval t; and ¶
ii. . the Net STEM Shortfall for Market Participant p in Trading Interval t.¶

Notes

4.26.3A. The Demand Side Programme Capacity Cost Refund for Trading Interval t for a Demand Side Programme is equal to the lesser of:

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

(b) the sum of:

i.

$$\mathrm{TIRR}(f,t) \times S$$

where:

S is the Capacity Shortfall in MW determined in accordance with clause 4.26.2D in Trading Interval t, and

$\mathrm{TIRR}(f,t)$ is the Trading Interval Refund Rate for Facility f in Trading Interval t; and

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

Deleted: 4.26.3A. . The Demand Side Programme Capacity Cost Refund for Trading Month m for a Demand Side Programme is equal to the lesser of: ¶
(a) . twelve times the Monthly Reserve Capacity Price for Trading Month m multiplied by the number of Capacity Credits associated with the Facility, less all Demand Side Programme Capacity Cost Refunds applicable to the Facility in previous Trading Months falling in the same Capacity Year as Trading Month m; and ¶
(b) . the sum of:¶
i. . the sum over all Trading Intervals t in Trading Month m of: ¶
12 * Monthly Reserve Capacity Price * S / (2 * H)¶
Where:¶
S is the Capacity Shortfall in MW determined in accordance with clause 4.26.2D in any Trading Interval; and¶
H is the maximum number of hours that the Facility was certified to be available in accordance with clause 4.10.1(f)(ii); and¶
ii. . the Facility Reserve Capacity Deficit Refund for Trading Month m for the Facility, determined in accordance with clause 4.26.1A.¶

(14) Clause 4.26.4 is amended to read as follows:

4.26.4. For each Market Participant holding Capacity Credits associated with a Scheduled Generator or a Demand Side Programme, AEMO must determine the amount of the rebate ("**Participant Capacity Rebate**") to be applied for Trading Interval t as the sum of all Facility Capacity Rebates determined in accordance with clause 4.26.6.

Deleted: 4.26.4. . AEMO must apply any revenue generated from the application of clause 4.26.2E to Market Customers in accordance with clause 4.28.4.¶

(15) Clause 4.26.5 is amended to read as follows:

4.26.5. To support the calculation of the values of RCOQ(p,t) and RCOQ(f,t) required by clause 4.26.2:

(a) AEMO must record the following temperature data for generation systems (other than Intermittent Generators) in respect of which Market Participants hold Capacity Credits and which, in accordance with clause 4.10.1(e)(iv), indicated a valid method for measuring ambient temperature:

i. the publicly available maximum daily temperature associated with a Facility for which temperature is defined in accordance with clause 4.10.1(e)(iv)(1); and

ii. temperatures provided by System Management for Facilities for which temperature is defined in accordance with clause 4.10.1(e)(iv)(2).

(b) System Management must provide the temperatures described in clause 4.26.5(a)(ii) for a Trading Month to AEMO not later than two Business Days prior to the relevant Non-STEM Settlement Statement Date.

Deleted: RCOQ(p,d,t) and RCOQ(f,d,t)

(16) Clause 4.26.6 is inserted and reads as follows:

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

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

where:

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

(b) $\mathrm{TAR}(t)$ is the sum of all Trading Interval Capacity Cost Refunds for all Market Participants in Trading Interval t;

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

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(d) $CC(f,t)$ for a Facility f in a Trading Interval t is the Facility's capacity in t, which is not subject to an Outage, determined as follows:

i. for a Scheduled Generator, the MW value of Capacity Credits less the MW quantity of Outage as provided under clause 7.13.1A(b); and

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

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

2. the Demand Side Programme's Reserve Capacity Obligation Quantity in t; and

(e) $E(f,t)$ is the eligibility of Facility f in Trading Interval t, equal to:

i. one for any Facility which is a Scheduled Generator and the following applies:

1. the Facility has a Sent Out Metered Schedule greater than zero in any one of the 1,440 Trading Intervals prior to and including Trading Interval t;

2. the sum of the Facility Reserve Capacity Deficit Refunds for Facility f, in Capacity Year y that the Trading Interval t falls in, for trading intervals prior to and including Trading Interval t, is less than the Maximum Facility Refund for Facility f in Capacity Year y; and

3. the sum of the Generation Reserve Capacity Deficit Refund in Capacity Year y that the Trading Interval t falls in, for trading intervals prior to and including Trading Interval t, is less than the Maximum Participant Generation Refund for for the Market Participant p which the Facility is registered to, in Capacity Year y; and

ii. one for any Facility which is a Demand Side Programme and the following applies:

1. the Facility received a Dispatch Instruction to reduce consumption in any one of the 1,440 Trading Intervals prior to and including Trading Interval t;

2. the Reserve Capacity Obligation Quantity for the Demand Side Programme does not equal zero under clause 4.12.4(c); and

3. the sum of the Demand Side Programme Capacity Cost Refunds for Facility f, in Capacity Year y that the Trading Interval t falls in, for trading intervals prior to and including Trading Interval t, is less than the Maximum Facility Refund for Facility f in Capacity Year y; and

iii. zero otherwise.

Amendment 47 – Market Rule 4.27

(1) Clause 4.27.1 is amended to read as follows:

4.27.1. [Blank]

(2) Clause 4.27.2 is amended to read as follows:

4.27.2. By the twenty-fifth day of each month, AEMO must assess the number of Equivalent Planned Outage Hours taken in the preceding 12 Trading Months by each Scheduled Generator and Non-Scheduled Generator assigned Capacity Credits for the current Capacity Year.

(3) Clause 4.27.3 is amended to read as follows:

Deleted: AEMO must monitor the total availability of capacity in the SWIS on a daily basis. The total available capacity should equal:

Deleted: (a) . the total Capacity Credits held by Market Participants on that day; less¶
(b) . the maximum amount of capacity unavailable at any time due to Planned Outages.¶

Deleted: By the twenty fifth day of each month, AEMO must assess the number of days in the preceding 12 calendar months where the total available capacity in the SWIS dropped below 80% (during the Hot Season), and 70% (in either the Intermediate Season or Cold Season), of the total Capacity Credits held by Market Participants for more than six hours on the day.

Notes

4.27.3. If the number of Equivalent Planned Outage Hours for a Facility, as determined under clause 4.27.2, exceeds 1,750 hours for the preceding 12 Trading Months, AEMO may require the Market Participant holding Capacity Credits for that Facility to provide to AEMO:

(a) a Reserve Capacity Performance Report as described in clause 4.27.4; and

(b) a Reserve Capacity Performance Improvement Report as described in clause 4.27.4A, to be provided at intervals specified by AEMO, but not more frequently than once per quarter.

Deleted: 4.27.3. . If the number of days determined in accordance with clause 4.27.2 exceeds 40, then AEMO must require reports to be filed by those Market Participants holding Capacity Credits for each Facility which:¶
(a) . has been unavailable due to Planned Outages for more than 1000 hours during the preceding 12 calendar months; and¶
(b) . has not been included in such a report during the preceding 12 calendar months.¶

(4) Clause 4.27.3A is inserted and reads as follows:

4.27.3A. In making its decision whether to require a report under clause 4.27.3, AEMO must assess whether the number of Equivalent Planned Outage Hours taken by the Facility in the previous 12 Trading Months was attributable to specific, infrequent events or is indicative of an underlying performance deficiency, and may consider any matters it deems relevant in making this assessment. AEMO may consult System Management in deciding whether or not to require a report.

(5) Clause 4.27.4 is amended to read as follows:

4.27.4. A Reserve Capacity Performance Report must include:

(a) explanations of all Planned Outages taken by the Facility in the 12 Trading Months referred to in clause 4.27.2;

(b) a statement of the expected maximum number of days of Planned Outages to be taken by the Facility in each of the next 36 Trading Months commencing from the Trading Month in which the report is requested, including adequate explanation to make clear the reason for each Planned Outage;

(bA) the relationship of the Planned Outages to the long term asset management strategy and established maintenance plan for the Facility;

(c) measures being undertaken or proposed by the Market Participant to increase the availability of the Facility, and their actual and anticipated effect on the frequency of Planned Outages; and

(d) any other information concerning the availability of the Facility that AEMO may request.

Deleted: 4.27.4. . The reports described in clause 4.27.3 must include:¶
(a) . explanations of all Planned Outages taken by the Facility in the preceding 12 calendar months;¶
(b) . a statement of the expected maximum number of days of Planned Outages to be taken by the Facility in each of the next 24 months commencing from the month in which the report is requested, including adequate explanation to make clear the reason for each Planned Outage; and¶
(c) . measures proposed by the Market Participant to increase the availability of the Facility.¶

(6) Clause 4.27.4A is inserted and reads as follows:

4.27.4A. A Reserve Capacity Performance Improvement Report must include:

(a) descriptions of the measures proposed, being undertaken or already undertaken by the Market Participant to increase the availability of the Facility;

(b) details of any changes to the expected maximum number of days of Planned Outages to be taken by the Facility for a Trading Month previously provided by the Market Participant under clause 4.27.4(b) or this clause 4.27.4A(b), including adequate explanations for each change; and

(c) explanation of any variation between expected and actual improvement of the availability of the Facility as a result of the measures taken.

(7) Clause 4.27.5 is amended to read as follows:

4.27.5. A Market Participant must:

(a) provide a Reserve Capacity Performance Report to AEMO in a format specified in the Market Procedure referred to in clause 4.27.12 within 20 Business Days of being requested to do so; and

(b) provide a Reserve Capacity Performance Improvement Report to AEMO in a format specified in the Market Procedure referred to in clause 4.27.12 by the date specified by AEMO under clause 4.27.3(b).

Deleted: 4.27.5. . A Market Participant must provide a report described in clause 4.27.3 to AEMO in a format specified in the Reserve Capacity Procedure within 20 Business Days of being requested to do so.¶

(8) Clause 4.27.6 is amended to read as follows:

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4.27.6. AEMO may, at the Market Participant's expense, consult with any person AEMO considers suitably qualified to provide an opinion on a report provided under clause 4.27.5. AEMO may ask the person to provide an opinion on the report generally, or to limit the scope of the opinion to specified matters covered in the report.

(9) Clause 4.27.7 is amended to read as follows:

4.27.7. [Blank]

(10) Clause 4.27.8 is amended to read as follows:

4.27.8. [Blank]

(11) Clause 4.27.9 is amended to read as follows:

4.27.9. [Blank]

Amendment 48 – Market Rule 4.28

(1) Clause 4.28.1 is amended to read as follows:

4.28.1. AEMO must separate the total costs of Capacity Credits acquired by it for a Trading Month, including Capacity Credits covered by Special Price Arrangements, into the following two sets:

(a) the cost of acquiring enough Capacity Credits to ensure, to the extent possible given the number of Capacity Credits AEMO has acquired, that the lesser of:

i. the Reserve Capacity Requirement applicable to that Trading Month; and

ii. total Capacity Credits assigned to Facilities minus the total DSM Capacity Credits,

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

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

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

(2) Clause 4.28.2 is amended to read as follows:

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 Trading Month if that Capacity Credit has not been allocated by that Market Participant to another Market Participant for settlement purposes under sections 9.4 and 9.5;

(aA) without limiting clause 4.28.2(a), AEMO is taken to have acquired all DSM Capacity Credits;

(b) [Blank]

(c) the cost of a Capacity Credit acquired by AEMO which is covered by a Short Term Special Price Arrangement is the Special Reserve Capacity Price determined in accordance with clause 4.21.1(b);

(cA) the monthly cost of a DSM Capacity Credit is the DSM Reserve Capacity Price divided by 12; and

(d) the cost of each other Capacity Credit acquired by AEMO is the Monthly Reserve Capacity Price determined in accordance with clause 4.29.1.

Deleted: AEMO must consult with System Management on the implications of the report.

Deleted: If AEMO considers the number of days reported in accordance with clause 4.27.4(b) to be unjustified based on good industry practice it may, at its sole discretion, limit the number of days on which Planned Outages are to be taken by the Facility in each of the next 24 months for the purposes of clause 4.27.8 and 4.27.9 and must notify the Market Participant who filed the report described in clause 4.27.3 of the limit.

Deleted: If AEMO limits the number of days in accordance with clause 4.27.7 then the modified value is to supersede the corresponding value specified in the report described in clause 4.27.4.

Deleted: If the number of days determined in accordance with clause 4.27.2 exceeds 80 then AEMO must:

Deleted: (a) . notify all Market Participants that this has occurred; and¶
(b) . during the 12 months commencing from the first Trading Day of the following month, cease to adjust Reserve Capacity Obligation Quantities under clause 4.12.6(b) in response to Planned Outages for Facilities:¶
i. . referred to in clause 4.27.3; and¶
ii. . for which the number of days of Planned Outage during that 12 month period has exceeded the total number of days of Planned Outage predicted for that 12 month period in accordance with clause 4.27.4(b), as modified by clause 4.27.8. ¶

Deleted: 4.28.1. . AEMO must separate the total costs of Capacity Credits acquired by it for a Trading Month, including Capacity Credits covered by Special Price Arrangements, into the following two sets:¶
(a) . the cost of acquiring enough Capacity Credits to ensure, to the extent possible given the number of Capacity Credits AEMO has acquired, that the Reserve Capacity Requirement applicable to that Trading Month is just covered after allowing for Capacity Credits traded bilaterally in that Trading Month (so that if AEMO has not acquired adequate Capacity Credits to cover the required quantity then no cost is to be associated with the shortfall); and ¶
(b) . the cost of other Capacity Credits acquired but not allocated to the set referred to in clause 4.28.1(a) (where this cost will be zero if there is no surplus of Capacity Credits relative to the Reserve Capacity Requirement),¶
determined on the basis that the Capacity Credits acquired by AEMO are allocated to the set referred to in clause 4.28.1(a) in order of decreasing cost per Capacity Credit until the capacity requirements referred to in clause 4.28.1(a) are met, with the remaining Capacity Credits acquired by AEMO being allocated to the set referred to in clause 4.28.1(b). ¶

Deleted: 4.28.2. . For these purposes:¶
(a) . AEMO is taken to have acquired a Capacity Credit held by a Market Participant in respect of a Trading Month if that Capacity Credit has not been allocated by that Market Participant to another Market Participant for settlement purposes under clauses 9.4 and 9.5;¶
(b) . the cost of a Capacity Credit acquired by AEMO which is covered by a Long Term Special Price Arrangement is the Special Reserve Capacity Price determined in accordance with clause 4.22.3;¶
(c) . the cost of a Capacity Credit acquired by AEMO which is covered by a Short Term Special Price Arrangement is the Special Reserve Capacity Price determined in accordance with clause 4.21.1(b); a... [4]

Notes

(3) Clause 4.28.4 is amended to read as follows:

4.28.4. For each Trading Month, AEMO must calculate a Shared Reserve Capacity Cost being the sum of:

(a) the cost defined under clause 4.28.1(b);

(b) the net payments to be made by AEMO under Supplementary Capacity Contracts less any amount drawn under a Reserve Capacity Security by AEMO and distributed in accordance with clause 4.13.11A(a); and

(bA) the Tranche 2 DSM Dispatch Payments made in that month; less

(c) the Intermittent Load Refunds for that Trading Month; less

(d) any amount drawn under a Reserve Capacity Security by AEMO and distributed in accordance with clause 4.13.11A(b),

and AEMO must allocate this total cost to Market Customers in proportion to each Market Customer's Individual Reserve Capacity Requirement.

Deleted: 4.28.4. . For each Trading Month, AEMO must calculate a Shared Reserve Capacity Cost being the sum of:¶
(a) . the cost defined under clause 4.28.1(b); and¶
(aA) . the net payments to be made by AEMO under Supplementary Capacity Contracts less any amount drawn under a Reserve Capacity Security by AEMO and distributed in accordance with clause 4.13.11A(a); less¶
(b) . the Capacity Cost Refunds for that Trading Month; less¶
(bA) . the Intermittent Load Refunds for that Trading Month; less¶
(c) . any amount drawn under a Reserve Capacity Security by AEMO and distributed in accordance with clause 4.13.11A(b)¶
and AEMO must allocate this total cost to Market Customers in proportion to each Market Customer's Individual Reserve Capacity Requirement. ¶

(4) Clause 4.28.11A is amended to read as follows:

4.28.11A. For the purpose of the calculation of Individual Reserve Capacity Requirements described in Appendix 4A and Appendix 5, other than for step 10 of Appendix 5, where those calculations make use of the Reserve Capacity Requirement and the peak demand associated with that Reserve Capacity Requirement specified in clause 4.6.2 AEMO may apply different values provided it preserves the ratio of the latter to the former so as to ensure that the total Individual Reserve Capacity Requirement across all Market Customers does not exceed the total number of Capacity Credits during that Trading Month.

Amendment 49 – Market Rule 4.28A

(1) Clause 4.28A.1 is amended to read as follows:

4.28A.1 AEMO must determine for each Intermittent Load registered to Market Participant p the amount of the refund ("**Intermittent Load Refund**") to be applied for each Trading Month m in respect of that Intermittent Load as the sum over all Trading Intervals t of Trading Day d in the Trading Month m of the product of:

(a) the applicable value of Y for the Intermittent Load as determined in clause 4.26.1(b)(iii); and

(b) [Blank]

(c) the Capacity Shortfall for Trading Interval t of Trading Day d and Trading Month m which is the greater of zero and:

i. double the MWh of the Intermittent Load metered during that Trading Interval, where for the purpose of this calculation the metered amount should be defined at the meter rather than being Loss Factor adjusted so as to be measured at the Reference Node, less;

ii. if the generating system described in clause 2.30B.2(a) is undergoing a Planned Outage or a Consequential Outage, the quantity nominated for that Intermittent Load by its Market Customer in accordance with clause 4.28.8(c); less

iii. 3% of the quantity nominated for that Intermittent Load by its Market Customer in accordance with clause 4.28.8(c); less

iv. for Trading Intervals where the temperature data described in clause 4.28A.2 shows a temperature in excess of 41ºC and the generating system described in clause 2.30B.2(a) is not undergoing a Planned Outage, Forced Outage or a Consequential Outage, the capacity reduction, if any, specified in accordance with clause 2.30B.3(b)(i).

Deleted: the applicable value of Y in the Refund Table described in clause 4.26.1 is that which applies for Scheduled Generators; and

Amendment 50 – Market Rule 4.29

(1) Clause 4.29.1 is amended to read as follows:

Notes

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

(a) if a Reserve Capacity Auction is run for the Reserve Capacity Cycle, the Reserve Capacity Price for the Reserve Capacity Cycle divided by 12; or

(b) if no Reserve Capacity Auction is run:

i. for a Reserve Capacity Cycle prior to 1 October 2008, 85 percent of the Benchmark Reserve Capacity Price for the Reserve Capacity Cycle divided by 12;

ii. for a Reserve Capacity Cycle up to and including the 2014 Reserve Capacity Cycle, 85 percent of the Benchmark Reserve Capacity Price for the Reserve Capacity Cycle multiplied by the excess capacity adjustment and divided by 12 where the excess capacity adjustment is equal to the minimum of:

1. one; and

2. the Reserve Capacity Requirement for the Reserve Capacity Cycle divided by the total number of Capacity Credits assigned by AEMO in accordance with clause 4.20.5A for the Reserve Capacity Cycle; and

iii. for a Reserve Capacity Cycle from the 2015 Reserve Capacity Cycle up to and including the 2021 Reserve Capacity Cycle, the value calculated using the formula set out below for the relevant Capacity Year and divided by 12:

RESERVE CAPACITY ADMINISTERED PRICE TABLE

Reserve Capacity Cycle	Capacity Year commencing	Formula
2015	1 October 2017	$\text{MIN}\left\{\left(\frac{\text{BRCP}\times 1.113}{1-((\text{surplus}+0.03)\times -3.75)}\right), \text{BRCP}\times 1.1\right\}$
2016	1 October 2018	$\text{MIN}\left\{\left(\frac{\text{BRCP}\times 1.119}{1-((\text{surplus}+0.03)\times -3.95)}\right), \text{BRCP}\times 1.1\right\}$
2017	1 October 2019	$\text{MIN}\left\{\left(\frac{\text{BRCP}\times 1.126}{1-((\text{surplus}+0.03)\times -4.2)}\right), \text{BRCP}\times 1.1\right\}$
2018	1 October 2020	$\text{MIN}\left\{\left(\frac{\text{BRCP}\times 1.141}{1-((\text{surplus}+0.03)\times -4.7)}\right), \text{BRCP}\times 1.1\right\}$
2019	1 October 2021	$\text{MIN}\left\{\left(\frac{\text{BRCP}\times 1.159}{1-((\text{surplus}+0.03)\times -5.3)}\right), \text{BRCP}\times 1.1\right\}$
2020	1 October 2022	$\text{MIN}\left\{\left(\frac{\text{BRCP}\times 1.183}{1-((\text{surplus}+0.03)\times -6.1)}\right), \text{BRCP}\times 1.1\right\}$
2021	1 October 2023 onward	$\text{MIN}\left\{\left(\frac{\text{BRCP}\times 1.210}{1-((\text{surplus}+0.03)\times -7)}\right), \text{BRCP}\times 1.1\right\}$

where:

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

2. surplus is the pro rata excess capacity calculated as follows:

Deleted: 4.29.1. . The Monthly Reserve Capacity Price to apply during the period specified in clause 4.1.29 is to equal: ¶
(a) . if a Reserve Capacity Auction was run for the Reserve Capacity Cycle, the Reserve Capacity Price for the Reserve Capacity Cycle divided by 12; or¶
(b) . if no Reserve Capacity Auction was run for the Reserve Capacity Cycle:¶
i. . prior to 1 October 2008, 85% of the MaximumBenchmark Reserve Capacity Price for the Reserve Capacity Cycle divided by 12;¶
ii. . from 1 October 2008, 85% of the MaximumBenchmark Reserve Capacity Price for the Reserve Capacity Cycle multiplied by the Excess Capacity Adjustment and divided by 12;¶
(c) . the Excess Capacity Adjustment is equal to the minimum of:¶
i. . one, and¶
ii. . the Reserve Capacity Requirement for the Reserve Capacity Cycle divided by the total number of Capacity Credits assigned by AEMO in accordance with clause 4.20.5A for the Reserve Capacity Cycle.¶

Notes

$$\text{surplus} = \frac{\text{CC} - \text{RCR}}{\text{RCR}}$$

where:

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

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

iv. for a Reserve Capacity Cycle from the 2022 Reserve Capacity Cycle onwards:

A. the value determined under the auction process developed under clause 4.1.33; or

B. if for any reason such a determination has not occurred, a value determined by inserting values for the relevant Reserve Capacity Cycle into the equation for the 2021 Reserve Capacity Cycle set out in clause 4.29.1(b)(iii).

(2) Clause 4.29.3 is amended to read as follows:

4.29.3. AEMO must determine the following information in time for settlement of Trading Month m:

(a) the Monthly Reserve Capacity Price applying during that Trading Month;

(b) the Targeted Reserve Capacity Cost for that Trading Month as defined in clause 4.28.3;

(c) the Shared Reserve Capacity Cost for that Trading Month as defined in clause 4.28.4;

(d) subject to clause 4.29.4, for each Market Participant p and for Trading Month m:

i. the quantity of Capacity Credits (including Capacity Credits from Facilities subject to Network Control Service Contracts) acquired by AEMO which are not:

1. DSM Capacity Credits; or

2. covered by a Special Price Arrangement;

ii. the quantity of Capacity Credits acquired by AEMO covered by a Special Price Arrangement;

iii. the total quantity of Capacity Credits covered by Special Price Arrangements;

iv. the quantity of Capacity Credits (other than DSM Capacity Credits) traded bilaterally (as defined in clause 4.14.2) that are not covered by Special Price Arrangements, including Capacity Credits from Facilities subject to Network Control Service Contracts to which clause 4.20.1(d)(iii) does apply;

ivA. the quantity of DSM Capacity Credits;

v. the Individual Reserve Capacity Requirement for each Market Customer for that Trading Month;

vi. the total Capacity Cost Refund to be paid by the Market Participant to AEMO for all Trading Intervals in Trading Month m;

vii. the total Participant Capacity Rebate to be paid to the Market Participant by AEMO for all Trading Intervals in Trading Month m; and

viii. the Tranche 2 DSM Dispatch Payments to be made to the Market Participant;

(dA) for each Market Participant, the Intermittent Load Refund to be paid by the Market Participant to AEMO for each of its Intermittent Loads; and

Deleted: prepare and provide the following information to the Settlement Systems

Deleted: (d) . subject to clause 4.29.4, for each Market Participant p and for Trading Month m:¶
i. . the quantity of Capacity Credits acquired by AEMO to which no Special Price Arrangement applies, including Capacity Credits from Facilities subject to Network Control Service Contracts to which clause 4.20.1(d)(iii) does not apply;¶
ii. . the quantity of Capacity Credits acquired by AEMO covered by a Special Price Arrangement;¶
iii. . the total quantity of Capacity Credits covered by Special Price Arrangements; ¶
iv. . the quantity of Capacity Credits traded bilaterally that are not covered by Special Price Arrangements, including Capacity Credits from Facilities subject to Network Control Service Contracts to which clause 4.20.1(d)(iii) does apply; ¶
v. . the Individual Reserve Capacity Requirement for each Market Customer for that Trading Month; and¶
vi. . the total Capacity Cost Refund to be paid by the Market Participant to AEMO; ¶

Notes

(e) for each Supplementary Capacity Contract:

i. the net payment to be made by AEMO under that contract for the Trading Month;

ii. to whom the payment is to be made; and

iii. how the payment is to be made if the party identified in (ii) is not a Market Participant.

Amendment 51 – Market Rule 6.11A

(1) Section 6.11A is inserted and reads as follows:

6.11A. Nominating Consumption Decrease Price and Extra Consumption Decrease Price

6.11A.1. A Market Customer with a Demand Side Programme or Dispatchable Load:

(a) must submit to AEMO:

i. for a Dispatchable Load — a Consumption Decrease Price; and

ii. for a Demand Side Programme — a Consumption Decrease Price and an Extra Consumption Decrease Price; and

(b) may from time to time submit to AEMO:

i. for a Dispatchable Load — a changed Consumption Decrease Price; and

ii. for a Demand Side Programme — either or both of a changed Consumption Decrease Price and a changed Extra Consumption Decrease Price.

6.11A.2. When AEMO receives a submission under clause 6.11A.1 from a Market Participant, it must as soon as practicable:

(a) if the received data complies with, as applicable, clauses 6.11A.3 or 6.11A.4:

i. accept the received data and communicate the acceptance to the Market Participant; and

ii. revise the Standing Data accordingly; or

(b) if the received data does not comply with, as applicable, clauses 6.11A.3 or 6.11A.4 – reject the received data and communicate the rejection to the Market Participant.

6.11A.3. A Consumption Decrease Price submitted under clause 6.11A.1 must:

(a) be not less than the Minimum STEM Price or more than the Alternative Maximum STEM Price;

(b) vary between Peak Trading Intervals and Off-Peak Trading Intervals.

6.11A.4. An Extra Consumption Decrease Price submitted under clause 6.11A.1 must:

(a) be not less than the Minimum STEM Price or more than the DSM Activation Price;

(b) vary between Peak Trading Intervals and Off-Peak Trading Intervals.

Amendment 52 – Market Rule 6.12

(1) Clause 6.12.1 is amended to read as follows:

6.12.1.

(a) By 5:00 PM on the Scheduling Day, AEMO must determine the Non-Balancing Dispatch Merit Orders identified in clauses 6.12.1(b) and 6.12.1(c) for the Trading Day. A Non-Balancing Dispatch Merit Order:

Deleted: 6.12.1. . ¶
(a) . By 1:30 PM on the Scheduling Day (or within 40 minutes of a closing time extended in accordance with clause 6.5.1(b)) AEMO must determine the Non-Balancing Dispatch Merit Orders identified in clauses 6.12.1(b) to 6.12.1(e). A Non-Balancing Dispatch Merit Order lists the order in which the Dispatchable Loads and Demand Side Programmes of Market Participants will be issued Dispatch Instructions by System Management under clause 7.6.1C(d) to increase or decrease consumption, as applicable.¶
(b) . A Non-Balancing Dispatch Merit Order for a decrease in consumption relative to the quantities included in the applicable Resource Plan (or the current operating level of a Facility not included in a Resource Plan) during Peak Trading Intervals. AEMO must take into account the following principles when determining this Non-Balancing Dispatch Merit Order:¶
i. . this Non-Balancing Dispatch Merit Order must list all Demand Side Programmes and Dispatchable Loads registered by Market Participants; and¶
ii. . this Non-Balancing Dispatch Merit Order must be determined by ranking the Registered Facilities referred to in clause 6.12.1(b)(i) in increasing order of the Consumption Decrease Price for Peak Trading Intervals.¶
(c) . A Non-Balancing Dispatch Merit Order for an increase in consumption relative to the quantities included in the applicable Resource Plan during Peak Trading Intervals. AEMO must take into account the following principles when determining this Non-Balancing Dispatch Merit Order:¶
i. . this Non-Balancing Dispatch Merit Order must list all Dispatchable Loads registered by Market Participants;¶
ii. . this Non-Balancing Dispatch Merit Order must be determined by ranking the Registered Facilities referred to in clause 6.12.1(c)(i) in increasing order of the Consumption Increase Price for Peak Trading Intervals;¶
(d) . A Non-Balancing Dispatch Merit Order for a decrease in consumption relative to quantities included in the applicable Resource Plan (or the current operating level of a Facility not included in a Resource Plan) during Off-Peak Trading Intervals. AEMO must take into account the following principles when determining this Non-Balancing Dispatch Merit Order:¶
i. . this Non-Balancing Dispatch Merit Order must list all Demand Side Programmes and Dispatchable Loads registered by Market Participants; and¶
ii. . this Non-Balancing Dispatch Merit Order must be determined by ranking the Registered Facilities referred to in clause 6.12.1(d)(i) in increasing order of the Consumption Decrease Price for Off-Peak Trading Intervals;¶
(e) . A Non-Balancing Dispatch Merit Order for an increase in consumption relative to the quantities included in the applicable Resource Plan during Off-Peak Trading Intervals. AEMO must take into account the following principles when determining this Non-Balancing Dispatch Merit Order:¶
i. . this Non-Balancing Dispatch Merit Order must list all Dispatchable Loads registered by Market Participants; and¶
ii. . this Non-Balancing Dispatch Merit Order must be determined by ranking the Registered Facilities referred to in clause 6.12.1(e)(i) in increasing order of the Consumption Increase Price for Off-Peak Trading Intervals.¶
(f) . Where the prices described in Standing Data for two or more Registered Facilities are equal, then, for the purposes of determining the ranking in any Non-Balancing Dispatch Merit Order, AEMO must rank a Registered Facility with a greater load registered in Standing Data in items (h)(iii) or (i)(iii) of Appendix 1 before a Registered Facility with a lesser load. In ... [5]

Notes

i. lists the order in which Non-Balancing Facilities will be issued Dispatch Instructions by System Management under clause 7.6.1C(d) to increase or decrease consumption, as applicable;

ii list the order in which Non-Balancing Facilities will be issued Dispatch Instructions by System Management under clause 7.6.1C(e) to decrease consumption, as applicable; and

iii. provides for each Facility in the list in clause 6.12.1(a)(i) and (ii):

1. the Reserve Capacity Obligation Quantity determined in accordance with clause 4.12.4(c); and

2. for a Demand Side Programme:

A. the Unused Expected DSM Dispatch Quantity;

B. the Relevant Demand; and

C. the aggregate of Minimum Consumptions across all the Facility's Associated Loads.

(b) A Non-Balancing Dispatch Merit Order for a decrease in consumption relative to the quantities included in the applicable Resource Plan or the current operating level of a Facility not included in a Resource Plan for a Trading Interval must:

i. list all Demand Side Programmes and Dispatchable Loads registered by Market Participants; and

ii. be determined by ranking the Registered Facilities referred to in clause 6.12.1(b)(i) as follows:

1. Registered Facilities with a Reserve Capacity Obligation Quantity greater than zero in that Trading Interval ranked in increasing order of:

A. for Non-Balancing Facilities other than Demand Side Programmes – the Facility's Consumption Decrease Price applicable to that Trading Interval; and

B. for Demand Side Programmes – the Facility's Extra Consumption Decrease Price applicable to that Trading Interval;

followed by

2. Registered Facilities with a Reserve Capacity Obligation Quantity of zero in that Trading Interval, ranked in increasing order of the Facility's Consumption Decrease Price applicable to that Trading Interval.

(c) A Non-Balancing Dispatch Merit Order for an increase in consumption relative to the quantities included in the applicable Resource Plan for a Trading Interval must:

i. list all Dispatchable Loads registered by Market Participants; and

ii. be determined by ranking the Registered Facilities referred to in clause 6.12.1(c)(i) in increasing order of the Facility's Consumption Increase Price applicable to that Trading Interval.

(d) [Blank]

(e) [Blank]

(f) Where the prices described in Standing Data for two or more Registered Facilities are equal, then, for the purposes of determining the ranking in any Non-Balancing Dispatch Merit Order, AEMO must rank those Registered Facilities in decreasing order of the time since the Facility's consumption was last reduced in response to a Dispatch Instruction. In the event of a tie, AEMO will randomly assign priority to break the tie.

Amendment 53 – Market Rule 6.17

(1) Clause 6.17.6 is amended to read as follows:

Notes

6.17.6. The Non-Balancing Facility Dispatch Instruction Payment, DIP(p,d,t), for Market Participant p and Trading Interval t of Trading Day d equals the sum of:

…

(c) the sum over all Demand Side Programmes registered to Market Participant p of the amount that is the product of:

i. the Tranche 2 DSM Dispatch Payments; and

ii. the Tranche 3 DSM Payments.

Deleted: i. . the quantity (in MWh) by which the Demand Side Programme reduced its consumption in response to a Dispatch Instruction, excluding any instructions given under a Network Control Service Contract, where this quantity is equal to the least of: '
1. . half of the Facility's Capacity Credits;¶
2. . the Dispatch Instruction amount provided by System Management in accordance with clause 7.13.1(eG); or¶
3. . the greater of zero and the difference between half of the Relevant Demand set in clause 4.26.2CA and the Demand Side Programme Load measured in the Trading Interval; and¶
ii. . the applicable Consumption Decrease Price for the Facility in Trading Interval t.

(2) Clauses 6.17.6B-6.17.6F are inserted and read as follows:

6.17.6B. AEMO must develop a Market Procedure that details the methodology to calculate the Tranche 2 DSM Dispatch Payment and the Tranche 3 DSM Dispatch Payment for each Demand Side Programme.

6.17.6C. The methodology described in 6.17.6B must ensure that, subject to clauses 6.17.6D and 6.16.6E, the Non-Balancing Facility Dispatch Instruction Payment is determined as follows:

(a) (**Tranche 1**) while the Demand Side Programme's Cumulative Annual DSM Dispatch for a Capacity Year is less than or equal to the Demand Side Programme's Calculated DSP Quantity – the Non-Balancing Facility Dispatch Instruction Payment for each MWh of Deemed DSM Dispatch is zero;

(b) (**Tranche 2**) once the Demand Side Programme's Cumulative Annual DSM Dispatch for a Capacity Year exceeds the Demand Side Programme's Calculated DSP Quantity – the Non-Balancing Facility Dispatch Instruction Payment for each MWh of Deemed DSM Dispatch is the Extra Consumption Decrease Price until:

i. an amount equal to:

A. the sum, across all 12 months in the Capacity Year, of all the amounts payable (or anticipated to become payable) in respect of the Demand Side Programme as "DSM Capacity Payments (p,m)" under clause 9.7.1A;

plus

B. the aggregate of all Non-Balancing Facility Dispatch Instruction Payments received by the Demand Side Programme up to that time in the Capacity Year,

equals or exceeds

ii. an amount equal to the Reserve Capacity Price multiplied by an amount equal to the number of the Demand Side Programme's DSM Capacity Credits; and

(c) (**Tranche 3**) thereafter until the end of the Capacity Year – the Non-Balancing Facility Dispatch Instruction Payment for each MWh of Deemed DSM Dispatch is the Consumption Decrease Price.

6.17.6D. If in a Trading Interval a Demand Side Programme decreases its consumption:

(a) partly in response to a Dispatch Instruction under clauses 7.6.1C(d) or (e); and

(b) partly in accordance with:

i. a Network Control Service Contract;

ii. an Ancillary Service Contract;

iii. these Market Rules in connection with a Test; or

iv. a Supplementary Capacity Contract,

then:

(c) a Non-Balancing Facility Dispatch Instruction Payment is payable only to the extent that the Demand Side Programme would have decreased its consumption

in response to the Dispatch Instruction had there been no reduction of the type described in clause 6.17.6D(b); and

(d) no Non-Balancing Facility Dispatch Instruction Payment is payable in respect of any decrease in consumption in excess of the amount referred to in clause 6.17.6D(c) ("**Further DSM Consumption Decrease**").

6.17.6E. If the number of DSM Capacity Credits assigned to a Demand Side Programme changes during a Capacity Year, then either or both of:

(a) the thresholds in clause 6.17.6C(a) and (b) which determine whether the Non-Balancing Facility Dispatch Instruction Payment is to be calculated under clause 6.17.6C(a), (b) or (c); and

(b) the values of Cumulative Annual DSM Dispatch or Calculated DSP Quantity (or both) for the Demand Side Programme for the Capacity Year,

are to be adjusted on a proportional basis in accordance with the Market Procedure established under clause 6.17.6F.

6.17.6F. AEMO must document the procedure it follows in making the adjustment referred to in clause 6.17.6E, and Rule Participants, including AEMO, must follow the documented Market Procedure.

Amendment 54 – Market Rule 6.21

(1) Clause 6.21.2 is amended to read as follows:

6.21.2. AEMO must provide the following information to the settlement system for each Trading Interval in a Trading Day:

(a) the Balancing Price; and

(b) for each Market Participant:

i. the Metered Balancing Quantity;

ii. the Facility Loss Factor adjusted Constrained On Quantities and Loss Factor Adjusted Prices calculated in accordance with clauses 6.17.3 and 6.17.3A;

iii. the Facility Loss Factor adjusted Constrained Off Quantities and Loss Factor Adjusted Prices calculated in accordance with clauses 6.17.4 and 6.17.4A;

iv. the Balancing Portfolio Loss Factor adjusted Constrained On Quantities and prices calculated in accordance with clause 6.17.5;

v. the Balancing Portfolio Loss Factor adjusted Constrained Off Quantities and prices calculated in accordance with clause 6.17.5A; and

vi. the Non-Balancing Facility Dispatch Instruction Payment; and

vii. the Tranche 2 DSM Dispatch Payment.

Deleted: and

Deleted: .

Amendment 55 – Market Rule 7.6

(1) Clause 7.6.1C is amended to read as follows:

7.6.1C. In seeking to meet the Dispatch Criteria System Management must, subject to clause 7.6.1D, issue Dispatch Instructions in the following descending order of priority:

(a) Dispatch Instructions to Balancing Facilities in the order and, subject to clause 7.7.6B, for the quantities that appear in the BMO, taking into account Ramp Rate Limits for that Facility;

(b) a Dispatch Instruction to a Balancing Facility Out of Merit but only to the next Facility or Facilities, and associated quantity in the BMO that System Management reasonably considers best meets the Dispatch Criteria, taking into account the associated Ramp Rate Limit for that Facility;

Notes

(c) a Dispatch Instruction to any Balancing Facility Out of Merit, taking into account the Ramp Rate Limit and non-ramp rate Standing Data limitations relevant to that Facility and any other relevant information available to System Management; and

(d) subject to clauses 7.6.1E and 7.6.1F, a Dispatch Instruction in accordance with the Non-Balancing Dispatch Merit Order to a Non-Balancing Facility which holds Capacity Credits, taking into account:

i. for a Demand Side Programme – the DSP Ramp Rate Limit; and

ii. for any other Non-Balancing Facility – non-ramp rate Standing Data limitations relevant to that Facility; and

(e) subject to clause 7.6.1E, a Dispatch Instruction in accordance with the Non-Balancing Dispatch Merit Order to a Non-Balancing Facility (whether or not it holds Capacity Credits) taking into account the DSP Ramp Rate Limit and non-ramp rate Standing Data limitations relevant to that Facility and any other relevant information available to System Management.

Deleted: a Dispatch Instruction to a Non-Balancing Facility in accordance with the Non-Balancing Dispatch Merit Order, taking into account Standing Data limitations relevant to that Facility.

(2) Clause 7.6.1D is amended to read as follows:

7.6.1D. System Management may only issue Dispatch Instructions under:

(a) clause 7.6.1C(b) in priority to clause 7.6.1C(a);

(b) clause 7.6.1C(c) in priority to clause 7.6.1C(b); and

(c) clause 7.6.1C(d) in priority to clause 7.6.1C(c); and

(cA) clause 7.6.1C(e) in priority to clause 7.6.1C(d);

where System Management considers, on reasonable grounds, that it needs to do so in order to:

(d) avoid a High Risk Operating State or an Emergency Operating State; or

(e) if the SWIS is in a High Risk Operating State or an Emergency Operating State, return the SWIS to a Normal Operating State.

Deleted: and

Deleted: ,

(3) Clauses 7.6.1E-7.6.1H are inserted and read as follows:

7.6.1E. If System Management issues a Dispatch Instruction to a Demand Side Programme under clause 7.6.1C(d) or (e), it must make best endeavours to do so in a way which, when considered across all Dispatch Instructions to all Demand Side Programmes, maximises the extent to which the resulting Non-Balancing Facility Dispatch Instruction Payments are zero under clause 6.17.6C, in preference to causing any Tranche 2 DSM Dispatch Payments or Tranche 3 DSM Dispatch Payments to become payable.

7.6.1F. System Management must not issue a Dispatch Instruction to a Demand Side Programme under clause 7.6.1C(d) unless it has issued a Dispatch Advisory under clause 7.11.5(k) more than two hours before the time the Dispatch Instruction will come into effect.

7.6.1G. A Dispatch Advisory can satisfy the requirement in clause 7.6.1F whether or not the Demand Side Programme in question was named in the Dispatch Advisory.

7.6.1H. If:

(a) System Management has issued a Dispatch Instruction to a Facility under clause 7.6.1C(d) or 7.6.1C(e); and

(b) System Management considers that dispatch of the Facility is, or will be, no longer required to meet the Dispatch Criteria, having regard to clauses 7.6.1A to 7.6.1E,

then System Management must issue a Dispatch Instruction to the Facility specifying the time from which the Facility is no longer required to restrict its consumption.

(4) Clause 7.6.10 is amended to read as follows:

7.6.10. If a Power System Operating Procedure is published under clause 7.6.10A, then a Market Participant who has been assigned DSM Capacity Credits must, in the time and manner

Deleted: 7.6.10. . Where a Market Participant has Capacity Credits granted in respect of a Demand Side Programme:¶
(a) . AEMO must provide System Management with the details of the Reserve Capacity Obligations to enable System Management to dispatch the Demand Side Programme; and¶
(b) . any Dispatch Instructions issued by System Management to the Demand Side Programme under clause 7.6.1C(d) must be in accordance with those Reserve Capacity Obligations.¶

Notes

specified in the Power System Operating Procedure, provide System Management with, for each Trading Interval:

(a) the then current consumption, in MW, of each Associated Load of the Demand Side Programme; and

(b) the then current consumption, in MW, of the Demand Side Programme, which must equal the sum of the consumption of all Associated Loads of that Demand Side Programme provided in clause 7.6.10(a).

(5) Clause 7.6.10A is inserted and reads as follows:

7.6.10A. System Management must develop a Power System Operation Procedure documenting the manner and time in which the obligation in clause 7.6.10 is to be complied with, including how consumption is to be measured or estimated.

Amendment 56 – Market Rule 7.7

(1) Clause 7.7.2 is amended to read as follows:

7.7.2. Each Dispatch Instruction under clause 7.6.1C(c) or clause 7.6.1C(e) must:

(a) be consistent with the latest data described in clause 7.1.1 available to System Management at the time the Dispatch Instruction is determined;

(b) be applicable to a specific Registered Facility; and

(c) be issued at a time that takes into account the Standing Data minimum response time for the Registered Facility.

Deleted: issued to a Non-Balancing Facility or to a Balancing Facility Out of Merit

(2) Clause 7.7.3 is amended to read as follows:

7.7.3. Each Dispatch Instruction must contain the following information:

(a) details of the Registered Facility to which the Dispatch Instruction relates;

(b) the time the Dispatch Instruction was issued;

(c) the required level of sent out generation or consumption which may be any one of the following:

i. a target MW output;

ii. for a Non-Scheduled Generator, that it no longer needs to restrict its output;

Deleted: or

iii. for a Demand Side Programme, a required decrease in consumption, in MW, measured as a decrease from the Facility's Relevant Demand; or

Deleted: iii. . a required decrease in consumption, in MW, for a Demand Side Programme;

iv. for a Demand Side Programme, that it no longer needs to restrict its consumption.

(d) the ramp rate to maintain until the required level of sent out generation or consumption is reached, which (subject to clause 7.7.3B) must not exceed any applicable Ramp Rate Limit (and for a Demand Side Programme, must not exceed the Applicable DSP Ramp Rate Limit); and

Deleted: (d) . the ramp rate to maintain until the required level of sent out generation or consumption is reached, which must not exceed any applicable Ramp Rate Limit; and ¶

(e) the time at which the ramp rate specified in clause 7.7.3(d) is required to commence.

(3) Clauses 7.7.3B and 7.7.3C are inserted and read as follows:

7.7.3B. For a Demand Side Programme, a Dispatch Instruction may:

(a) request (but not require) the Facility to maintain a ramp rate faster than the Applicable DSP Ramp Rate Limit; and

(b) describe the requested faster ramp rate in non-specific terms (for example, "the highest rate achievable").

Notes

7.7.3C. If a Dispatch Instruction requests a ramp rate faster than the Applicable DSP Ramp Rate Limit, then the Facility:

(a) must maintain a ramp rate at least equal to the Applicable DSP Ramp Rate Limit; but

(b) is not required to maintain a ramp rate faster than the Applicable DSP Ramp Rate Limit, and is excused from compliance with the Dispatch Instruction to that extent.

(4) Clause 7.7.4A is amended to read as follows:

7.7.4A. When selecting Non-Balancing Facilities from the Non-Balancing Dispatch Merit Order, and subject to 7.6.1C and 7.6.1E, System Management must select them in accordance with the Power System Operation Procedure. The selection process specified in the Power System Operation Procedure must:

(a) only discriminate between Non-Balancing Facilities based on response time and availability;

(b) permit System Management to not curtail a Demand Side Programme when, due to limitations on the availability of the Demand Side Programme, such curtailment would prevent that Demand Side Programme from being available to System Management at a later time when it would have greater benefit with respect to maintaining Power System Security and Power System Reliability; and

(c) not be inconsistent with section 7.6.

(5) Clause 7.7.5 is amended to read as follows:

7.7.5. A Dispatch Instruction for a Balancing Facility Out of Merit and a Non-Balancing Facility for a Trading Interval must not be issued earlier than 6:00 PM on the Scheduling Day for the Trading Day on which the Trading Interval falls or later than the end of the Trading Interval.

(6) Clause 7.7.6C is inserted and reads as follows:

7.7.6C. If a Market Participant receives a Dispatch Instruction under clause 7.6.1(d) or (e), and is or becomes aware that the information specified in clause (h)(xv) of Appendix 1 is no longer a reasonable forecast of the Demand Side Programme's likely consumption profile for a Trading Interval in the Trading Day to which the Dispatch Instruction relates if the Market Participant receives a Dispatch Instruction under clause 7.6.1H, then it must notify System Management as soon as reasonably practicable of a revised good faith forecast of the Demand Side Programme's likely consumption profile for the Trading Interval should it receive a Dispatch Instruction under clause 7.6.1H.

(7) Clause 7.7.10 is amended to read as follows:

7.7.10. When System Management has issued an Operating Instruction to a Demand Side Programme to decrease its consumption, System Management may issue a further instruction terminating the requirement for the Demand Side Programme to decrease its consumption providing that the further instruction is issued at least two hours before it is to come into effect.

Amendment 57 – Market Rule 7.10

(1) Clause 7.10.2 is amended to read as follows:

7.10.2. A Market Participant is not required to comply with clause 7.10.1 if:

(a) such compliance would endanger the safety of any person, damage equipment or breach any applicable law;

(b) the Facility was physically unable to maintain the ramp rate specified in the Dispatch Instruction but:

i. the actual output of the Facility did not, at any time the Dispatch Instruction applied, vary from the output specified in the Dispatch Instruction by more than the applicable Tolerance Range or Facility Tolerance Range; and

Deleted: (a) . only discriminate between Non-Balancing Facilities based on size of the capacity, response time and availability; and ¶

Deleted: .

Deleted: 2:00 PM

Deleted: 7.7.10. . When System Management has issued a Dispatch Instruction or an Operating Instruction to a Demand Side Programme to decrease its consumption, System Management may issue a further instruction terminating the requirement for the Demand Side Programme to decrease its consumption providing that:¶
(a) . the further instruction is issued at least four hours before it is to come into effect; and¶
(b) . the minimum period for which the Demand Side Programme is instructed to decrease its consumption is not less than two hours.¶

Deleted: or

Notes

ii. the average output over a Trading Interval of the Facility was equal to the output specified in the Dispatch Instruction; or

(c) both of the following apply:

i. the Market Participant has notified System Management, in accordance with clause 3.21.4, that its Registered Facility has been affected by a Forced Outage or Consequential Outage; and

ii. the quantity of the Forced Outage or Consequential Outage notified is consistent with the extent to which the Market Participant did not comply with the most recently issued Dispatch Instruction, Operating Instruction or Dispatch Order applicable to its Registered Facility for the Trading Interval.

(d) a Demand Side Programme was issued a Dispatch Instruction by System Management under clause 7.6.1C and its Reserve Capacity Obligation Quantity, as determined under clause 4.12.4(c) is or becomes zero; or

(e) clause 7.7.3C excuses compliance.

(2) Clause 7.10.4 is amended to read as follows:

7.10.4. System Management must monitor the behaviour of Market Participants with Registered Facilities to assess whether they are complying with clause 7.10.1 in accordance with its Monitoring and Reporting Protocol.

(3) Clause 7.10.4A is inserted and reads as follows:

7.10.4A. For a Demand Side Programme, System Management's monitoring under clause 7.10.4 may be undertaken after the event.

(4) Clause 7.10.5 is amended to read as follows:

7.10.5. Where System Management considers that a Market Participant has not complied with clause 7.10.1 in relation to any of its Registered Facilities in a manner that is not within:

(a) the Tolerance Range determined in accordance with clause 2.13.6D; or

(b) a Facility Tolerance Range determined in accordance with clause 2.13.6E or, if applicable, varied in accordance with clause 2.13.6H,

System Management must (unless the Registered Facility is a Demand Side Programme, in which case System Management may) as soon as reasonably practicable:

(c) warn the Market Participant about the deviation and request an explanation for the deviation; and

(d) if necessary to meet the Dispatch Criteria, issue a new Dispatch Instruction, Operating Instruction or Dispatch Order in accordance with clause 7.6.

Amendment 58 – Market Rule 7.11

(1) Clause 7.11.1 is amended to read as follows:

7.11.1. [Blank]

(2) Clause 7.11.3 is amended to read as follows:

7.11.3. Dispatch Advisories must be released as soon as practicable after System Management becomes aware of a situation requiring the release of a Dispatch Advisory and must update the Dispatch Advisory as soon as possible after new, relevant information becomes available to it.

(3) Clause 7.11.5 is amended to read as follows:

7.11.5. System Management must release a Dispatch Advisory in the event of, or in anticipation of situations where:

…

Deleted: or

Deleted: .

Deleted: , except where it relates to a Demand Side Programme

Deleted: A Dispatch Advisory is a communication by System Management to Market Participants, Network Operators, the IMO and AEMO that there has been, or is likely to be, an event that will require dispatch of Facilities Out of Merit or will restrict communication between System Management and any of the Market Participants, Network Operators, the IMO, or AEMO.

(i) the system is in, or is expected to be in, a High Risk Operating State or an Emergency Operating State;

(j) System Management expects to issue a Dispatch Instruction to a Non-Balancing Facility within the next 24 hours; or

(k) System Management expects to issue a Dispatch Instruction to a Demand Side Programme under clause 7.6.1C(d) within the next 24 hours.

Deleted: .

(4) Clause 7.11.6 is amended to read as follows:

7.11.6. Subject to clause 7.11.6A, a Dispatch Advisory must contain the following information:

(a) [Blank]

(b) the date and time that the Dispatch Advisory is released;

(c) the time period for which the Dispatch Advisory is expected to apply;

(cA) the Operating State to be applicable, or expected to be applicable, at different times during the time period to which the Dispatch Advisory relates;

(d) details of the situation that the Dispatch Advisory relates to, including the location, extent and seriousness of the situation;

(dA) where System Management is to release a Dispatch Advisory under clause 7.11.5(g), details of the estimated Out of Merit quantities, reasons for the deviation from the BMO and all relevant information about the deviation;

(dB) where System Management is to release a Dispatch Advisory under clause 7.11.5(h), details of the estimated quantities of LFAS that are to be used, reasons for the deviation from the LFAS Merit Order and all relevant information about the deviation;

(dC) where System Management is to release a Dispatch Advisory under clause 7.11.5(j) or 7.11.5(k), for each Trading Interval, details of the total quantity of load reduction expected due to dispatch of Demand Side Programmes;

(e) any actions System Management plans to take in response to the situation;

(f) any actions Market Participants and Network Operators are required to take in response to the situation; and

(g) any actions Market Participants may voluntarily take in response to the situation.

(5) Clause 7.11.6A is amended to read as follows:

7.11.6A. If any information that would otherwise be released under clauses 7.11.6(d), 7.11.6(dA), 7.11.6(dC), 7.11.6(e), 7.11.6(f) or 7.11.6(g) is confidential or has a confidentiality status that would prevent the IMO or AEMO from releasing the information, System Management must:

(a) release that information to the IMO or AEMO but, subject to clause 7.11.6A(b), ensure that the Dispatch Advisory contains information of only a general or aggregate nature so that the information publically released is not confidential; and

(b) include in the Dispatch Advisory the details of any circumstance that has given rise to System Management issuing the Dispatch Advisory, including:

i. the name of the Facility where that Facility has caused or materially contributed to the circumstances giving rise to the Dispatch Advisory;

iA. the name of the Facility, or Facilities, that are likely to be dispatched in response to the Dispatch Advisory;

ii. any likely change in the quantities of energy that, but for the circumstance, would have been dispatched under the Market Rules; and

iii. the quantities of energy likely to be dispatched Out of Merit.

Amendment 59 – Market Rule 7.13

(1) Clause 7.13.1 is amended to read as follows:

Notes

7.13.1. System Management must provide AEMO with the following data for a Trading Day by noon on the first Business Day following the day on which the Trading Day ends:

…

(eG) for each Demand Side Programme for each Trading Interval, the requested decrease in consumption calculated under clause 7.13.5(a);

(eH) the consumption data provided to System Management by each Market Participant with a Demand Side Programme under clause 7.6.10;

…

(i) for each Demand Side Programme in each Trading Interval any Further DSM Consumption Decrease.

(2) Clause 7.13.5 is inserted and reads as follows:

7.13.5. System Management must:

(a) for the purposes of clause 7.13.1(eG) calculate, for each Demand Side Programme for each Trading Interval, the amount, in MWh, by which the Facility was requested by the applicable Dispatch Instruction to decrease its consumption for the Trading Interval, which amount:

i. must be measured as a requested decrease from the Facility's Relevant Demand (and so must not include any amount above the Relevant Demand);

ii. must not assume a ramp rate faster than was requested in the Dispatch Instruction;

iii. must not include any Further DSM Consumption Decrease; and

iv. must not take account of the Facility's actual performance in response to the Dispatch Instruction; and

(b) develop a Power System Operating Procedure that details how it will calculate the amount in clause 7.13.5(a).

Amendment 60 – Market Rule 9.4

(1) Clause 9.4.1 is amended to read as follows:

9.4.1. Subject to clause 9.4.1A, a Market Participant holding Capacity Credits may make a single Capacity Credit Allocation Submission applicable for a full Trading Month to AEMO between the dates and times specified in clauses 9.16.2(b)(i) and 9.16.2(b)(ii).

(2) Clause 9.4.1A is inserted and reads as follows:

9.4.1A. A Capacity Credit Allocation Submission must not include DSM Capacity Credits.

(3) Clause 9.4.4 is amended to read as follows:

9.4.4. By making a Capacity Credit Allocation Submission, a Market Participant acknowledges that:

(a) it is acting with the permission of all affected Market Participants; and

(b) AEMO has the right to reverse any Capacity Credit Allocations if either or both of:

i. any affected Market Participant, other than the submitting Market Participant, objects to the allocation prior to the deadline for disputes in relation to Non-STEM Settlement Statements; or

ii. the Capacity Credit Allocation Submission includes DSM Capacity Credits.

(4) Clause 9.4.8 is amended to read as follows:

9.4.8. AEMO must accept a Capacity Credit Allocation Submission unless the submission is not consistent with the requirements of clauses 9.4.1A or 9.5.

Deleted: (eG) . the required decrease, in MWh, in the consumption of each Demand Side Programme, by Trading Interval, as a result of System Management Dispatch Instructions, where this is to be used in settlement as the quantity described in clause 6.17.6(c)(i)(2);¶

Deleted: A

Deleted: (b) . AEMO has the right to reverse any Capacity Credit Allocations if any affected Market Participant, other than the submitting Market Participant, objects to the allocation prior to the deadline for disputes in relation to Non-STEM Settlement Statements.¶

Deleted: clause

Notes

Amendment 61 – Market Rule 9.5

(1) Clause 9.5.1 is amended to read as follows:

9.5.1. A Capacity Credit Allocation Submission must set out:

(a) the identity of the submitting Market Participant, which must be the holder of Capacity Credits;

(b) the identity of each Market Participant to which the Capacity Credits are to be allocated for settlement purposes, which may include the submitting Market Participant;

(c) the number of Capacity Credits to be allocated for settlement purposes to each other Market Participant from each of the following sets:

i. the set consisting of Capacity Credits held by the submitting Market Participant that are covered by Special Price Arrangements but which are allowed to be traded under clause 4.14.9, where the total number of Capacity Credits in this set is the number of Capacity Credits specified under clause 4.29.3(d)(iii), less the number of Capacity Credits specified under clause 4.29.3(d)(ii), for the Market Participant for the Trading Month; and

ii. the set consisting of Capacity Credits held by the submitting Market Participant which are allowed to be traded under clause 4.14.9 that are neither DSM Capacity Credits nor covered by Special Price Arrangements, as specified under clause 4.29.3(d)(iv) for the Market Participant for the Trading Month.

Amendment 62 – Market Rule 9.7

(1) Clause 9.7.1 is amended to read as follows:

9.7.1. The Reserve Capacity settlement amount for Market Participant p for Trading Month m is:

RCSA(p,m) = Capacity Provider Payment(p,m) – Capacity Purchaser Payment(p,m)

(2) Clauses 9.7.1A and 9.7.1B are inserted and read as follows:

9.7.1A. For the purposes of clause 9.7.1, Capacity Provider Payment (p,m) is:

CCP(p,m) = Participant Capacity Rebate(p,m)

+ Non_Allocated_Gen_Capacity_Payments (p,m)

+ Non_Allocated_SPA_Payments (p,m)

– Intermittent Load Refund(p,m)

+ Supplementary Capacity Payment(p,m)

+ DSM_Capacity_Payments (p,m)

+ Tranche 2 DSM Dispatch Payments_(p,m)

– Capacity Cost Refund(p,m)

Where

Non_Allocated_Gen_Capacity_Payments =

Monthly Reserve Capacity Price(m) x (CC_NSPA(p,m) – CC_ANSPA(p,m))

Where:

Monthly Reserve Capacity Price(m) is the Monthly Reserve Capacity Price which applies for Trading Day d defined in accordance with clause 4.29.1;

CC_NSPA(p,m) is the number of Capacity Credits held by Market Participant p in Trading Month m that are not covered by Special Price Arrangements and are not DSM Capacity Credits;

Deleted: bilaterally

Deleted: bilaterally

Deleted: not

Deleted: 9.7.1. The Reserve Capacity settlement amount for Market Participant p for Trading Month m is: ¶
RCSA(p,m) =
Monthly Reserve Capacity Price(m) × (CC_NSPA(p,m) – Sum(q∈ P,CC_ANSPA(p,q,m))) + Sum(a ∈ A, Monthly Special Price(p,m,a) × (CC_SPA(p,m,a) – Sum(q∈ P,CC_ASPA(p,q,m,a)))) - Capacity Cost Refund(p,m) - Intermittent Load Refund(p,m) + Supplementary Capacity Payment(p,m) - Targeted Reserve Capacity Cost(m) × Shortfall Share(p,m) - Shared Reserve Capacity Cost(m) × Capacity Share(p,m) + LF_Capacity_Cost(m) × Capacity Share(p,m)¶
Where:¶
Shortfall Share(p,m) =
0, if Sum(n∈ P, (IRCR(n,m) – Sum(q∈ P, CC_ANSPA(q,n,m) + Sum(a∈ A, CC_ASPA(q,n,m,a))))) = 0
otherwise,
(IRCR(p,m) – Sum(q∈ P, CC_ANSPA(q,p,m) + Sum(a∈ A, CC_ASPA(q,p,m,a)))) / Sum(n∈ P, (IRCR(n,m) – Sum(q, CC_ANSPA(q,n,m) + Sum(a∈ A, CC_ASPA(q,n,m,a)))))¶
Capacity Share(p,m) = IRCR(p,m) / Sum(n∈ P, IRCR(n,m))¶
Monthly Reserve Capacity Price(m) is the Monthly Reserve Capacity Price which applies for Trading Day d defined in accordance with clause 4.29.1;¶
CC_NSPA(p,m) is the number of Capacity Credits held by Market Participant p in Trading Month m that are not covered by Special Price Arrangements;¶
CC_ANSPA(p,q,m) is the number of Capacity Credits held by Market Participant p in Trading Month m that are not covered by Special Price Arrangements and which are allocated to another Market Participant q for Trading Month m under clauses 9.4 and 9.5;¶
A is the set of all Special Price Arrangements associated with a Facility where "a" is used to refer to a member of that set;¶
P is the set of all Market Participants, where "p", "n", and "q" are all used to refer to a member of that set;¶
Monthly Special Price(p,m,a) is the Monthly Special Reserve Capacity Price for Special Price Arrangement for Market Participant p defined in accordance with clause 4.29.2 which applies for Trading Day d;¶
CC_SPA(p,m,a) is the number of Capacity Credits held by Market Participant p in Trading Month m that are covered by Special Price Arrangement a;¶
CC_ASPA(p,q,m,a) is the number of Capacity Credits held by Market Participant p in Trading Month m that are covered by Special Price Arrangement a and which are allocated to Market Participant q for Trading Month m under clauses 9.4 and 9.5;¶
IRCR(p,m) is the Individual Reserve Capacity Requirement for Market Participant p and Trading Month m expressed in units of MW;¶
Capacity Cost Refund(p,m) is the Capacity Cost Refund payable to AEMO by Market Participant p in respe... [6]

Notes

CC_ANSPA(p,m) is the number of Capacity Credits held by Market Participant p in Trading Month m that are not covered by Special Price Arrangements and which are allocated to other Market Participants;

Non_Allocated_SPA_Payments =

Sum(a ∈ A, Monthly Special Price(p,m,a) × (CC_SPA(p,m,a) – (CC_ASPA(p,m,a)))

Where:

Monthly Special Price(p,m,a) is the Monthly Special Reserve Capacity Price for Special Price Arrangement a for Market Participant p defined in accordance with clause 4.29.2 which applies for Trading Day d

CC_SPA(p,m,a) is the number of Capacity Credits held by Market Participant p in Trading Month m that are covered by Special Price Arrangement a;

CC_ASPA(p,m,a) is the number of Capacity Credits held by Market Participant p in Trading Month m that are covered by Special Price Arrangement a and which are allocated to other Market Participants for Trading Month m under sections 9.4 and 9.5;

DSM_Capacity_Payments (p,m) =

DSM Capacity Credits (p,m) x Monthly DSM Reserve Capacity Price (m)

Monthly DSM Reserve Capacity Price (m) is the DSM Reserve Capacity Price divided by 12;

Tranche 2 DSM Dispatch Payments (p,m) are the Tranche 2 DSM Dispatch Payments for Market Participant p for month m;

Capacity Cost Refund(p,m) is the Capacity Cost Refund payable to AEMO by Market Participant p in respect of that Market Participant's Capacity Credits for Trading Month m, as specified in clause 4.29.3(d)(vi);

Intermittent Load Refund(p,m) is the sum over all of Market Participant p's Intermittent Loads of the Intermittent Load Refund payable to AEMO by Market Participant p in respect of each of its Intermittent Loads for Trading Month m, as specified in clause 4.28A.1;

Supplementary Capacity Payment(p,m) is the net payment to be made by AEMO under a Supplementary Capacity Contract to Market Participant p for Trading Month m, as specified by AEMO in accordance with clause 4.29.3(e)(i);

Participant Capacity Rebate(p,m) is the Participant Capacity Rebate payable to the Market Participant p for all Trading Intervals in Trading Month m, as determined in accordance with clause 4.29.3(d)(vii);

A is the set of all Special Price Arrangements associated with a Facility where "a" is used to refer to a member of that set;

P is the set of all Market Participants where p is a member of that set

9.7.1B. For the purposes of clause 9.7.1, Capacity Purchaser Payment is:

CPP(p,m) =

Targeted Reserve Capacity costs(p,m)

+ Shared Reserve capacity costs (p,m)

- LF_Capacity_Cost(p,m)

Where

Targeted Reserve Capacity costs(p,m) =

Targeted Reserve Capacity Cost(m) x Shortfall Share(p,m)

Where:

Targeted Reserve Capacity Cost(m) is the cost of Reserve Capacity to be shared amongst those Market Participants who have not had sufficient Capacity Credits allocated to them for Trading Month m where this cost is specified for Trading Month m under clause 4.29.3(b)

Shortfall Share(p,m) =

(IRCR(p,m) – Allocated Capacity Credits(p,m)) /

Sum(p∈ P, (IRCR(p,m) – Allocated Capacity Credits(p,m))

Where:

IRCR(p,m) is the Individual Reserve Capacity Requirement for Market Participant p and Trading Month m expressed in units of MW;

Allocated Capacity Credits (p,m) equals the capacity credits allocated to Market Participant p in month m in accordance with sections 9.4 and 9.5

Shared Reserve Capacity Cost(p,m) =

Shared Reserve Capacity Cost(m) x Capacity Share(p,m)

Where:

Shared Reserve Capacity Cost(m) is the cost of Reserve Capacity to be shared amongst all Market Participants for Trading Month m where this cost is specified for Trading Month m under clause 4.29.3(c)

Capacity Share(p,m) =

IRCR(p,m) / Sum(p∈ P, IRCR(p,m))

LF_Capacity_Cost(p,m)

LF_Capacity_Cost(m) × Capacity Share (p,m))

Where:

LF_Capacity_Cost(m) is the total Load Following Service capacity payment cost for Trading Month m as specified in clause 9.9.2(q);

P is the set of all Market Participants where p is a member of that set

Amendment 63 – Market Rule 9.8

(1) Clause 9.8.1 is amended to read as follows (including the footnote):

9.8.1. The balancing settlement amount for Market Participant p for Trading Interval t of Trading Day d is:

BSA(p,d,t) = Balancing Price (d,t) x MBQ(p,d,t) + CONC(p,d,t) + COFFC(p,d,t) + DIP(p,d,t).

Where:

…

DIP(p,d,t) is the Non-Balancing Facility Dispatch Instruction Payment (minus any Tranche 2 DSM Dispatch Payments)[1] for Market Participant p for Trading Interval t of Trading Day d calculated in accordance with clause 6.17.6.

Amendment 64 – Market Rule 9.19

(1) Clause 9.19.1 is amended to read as follows:

[1] Tranche 2 DSM Dispatch Payments are deducted from the DIP, because they have already been paid under clause 9.7.1A.

Notes

9.19.1. When undertaking an Adjustment Process AEMO must:

(a) recalculate the amounts included in the Relevant Settlement Statements in accordance with this Chapter but taking into account any:

i. revised metering data which has been provided by Metering Data Agents;

iA. adjustment to Non-Balancing Dispatch Instruction Payments under clause 9.19.1A;

ii. actions arising from a Notice of Disagreement;

iii. the resolution of any Dispute;

iv. determinations made in accordance with clauses 6.16A.1(b)(i), 6.16A.2(b)(i), 6.16B.1(b)(i) or 6.16B.2(b)(i);

v. revised Market Fee rate, System Operation Fee rate or Regulator Fee rate; and

vi. any adjustment required for GST purposes under clause 9.1.2; and

(b) provide adjusted STEM Settlement Statements and adjusted Non-STEM Settlement Statements to Rule Participants in accordance with the timeline specified under clause 9.16.4 in respect of the relevant Adjustment Process.

(2) Clause 9.19.1A is inserted and reads as follows:

9.19.1A. If AEMO receives new information which, if it were used in calculating a Non-Balancing Dispatch Instruction Payment, would produce a different value to the value previously calculated under clause 6.17.6 or recalculated under this clause 9.19.1A, then AEMO must recalculate the Non-Balancing Dispatch Instruction Payment and determine the necessary adjustment for use in clause 9.19.1(a)iA.

Amendment 65 – Market Rule 10.5

(1) Clause 10.5.1 is amended to read as follows:

10.5.1. AEMO must set the class of confidentiality status for the following information under clause 10.2.1, as Public and AEMO must make each item of information available from the Market Web Site after that item of information becomes available to AEMO:

…

(jA)

i. for each Trading Interval in each completed Trading Day in the previous 12 calendar months, before the end of the seventh day from the start of the Trading Day, any changes to a Facility's Consumption Decrease Price, Consumption Increase Price or Extra Consumption Decrease Price; and

ii. the values of any Consumption Decrease Price, Consumption Increase Price or Extra Consumption Decrease Price of a Facility that has been dispatched pursuant to a Dispatch Instruction, as soon as practicable;

…

(zE) the Non-Balancing Dispatch Merit Orders;

(zF) audit reports;

(zG) documentation of the functionality of:

i. any software used to run the Reserve Capacity Auction;

ii. the STEM Auction software; and

iii. the Settlement System software; and

(zH) information relating to Commissioning Tests which is supplied under clause 3.21A.16 by System Management; and

Deleted: or

Deleted: or

Deleted: (zE) . the current Non-Balancing Dispatch Merit Order;¶

Deleted: .

Notes

(zI) the Refund Exempt Planned Outage Count for each Scheduled Generator for each of the 1,000 Trading Days up to and including the most recent Trading Day which System Management has recorded in accordance with clause 7.13.1A(b); and

(zJ) as soon as practicable, the consumption data information under clause 7.13.1(eH).

Amendment 66 – Glossary

(1) The following definitions are inserted and read as follows (including the footnote):

Applicable DSP Ramp Rate Limit: For a Demand Side Programme for a Trading Interval, the DSP Ramp Rate Limit specified in the Standing Data for the Facility for the Trading Interval.

Calculated DSP Quantity: For a Demand Side Programme for a given Capacity Year, an amount (in MWh, adjusted under clause 6.17.6E if applicable) equal to:

(a) the number of DSM Capacity Credits assigned to the Demand Side Programme; multiplied by

(b) an amount (expressed on a MWh per DSM Capacity Credit basis) equal to the Expected DSM Dispatch Quantity plus 0.5.[2]

Calendar Hour: A period of one hour, commencing on the hour.

Cumulative Annual DSM Dispatch: For a Demand Side Programme at a time in a Capacity Year, the cumulative total (in MWh, adjusted under clause 6.17.6E if applicable) of all the Demand Side Programme's Deemed DSM Dispatch amounts across all Trading Intervals in the Capacity Year prior to the time.

Equivalent Planned Outage Hours: Means, in respect of a Facility, the sum of the "Planned Outage Hours" and the "Equivalent Planned Derated Hours" for the Facility as calculated in accordance with the Power System Operation Procedure.

Extra Consumption Decrease Price: A price specified in item (h)(vi)(3) and (4) of Standing Data, accepted by AEMO under section 6.11A, to apply in forming the Non-Balancing Dispatch Merit Order for a Trading Interval for a Demand Side Programme and in the calculation of the Non-Balancing Facility Dispatch Instruction Payment for that Demand Side Programme for that Trading Interval.

Facility Capacity Rebate: For a Scheduled Generator or a Demand Side Programme, the rebate determined for a Trading Month m, as calculated in accordance with clause 4.26.6.

Further DSM Consumption Decrease: Is defined in clause 6.17.6D(d).

Individual Reserve Capacity Requirement Contribution: Means the contribution of an Associated Load to a Market Customer's Individual Reserve Capacity Requirement determined in accordance with Step 11 of Appendix 5.

Maximum Facility Refund: The total amount of the Capacity Credit payments paid or to be paid under these Market Rules to a Market Participant in relation to a Facility and in relation to a Capacity Year assuming that:

(a) AEMO acquires all of the Capacity Credits held by the Market Participant in relation to its Facility; and

(b) the cost of each Capacity Credit so acquired is determined in accordance with clauses 4.28.2(c), 4.28.2(cA) and 4.28.2(d) (as applicable).

Minimum Consumption: For an Associated Load means the amount specified under clause 2.29.5B(c) as the amount below which the Associated Load does not wish to be curtailed in the

[2] For example, if the Expected DSM Dispatch Quantity equals 2 MWh per DSM Capacity Credit, and a Demand Side Programme is assigned 10 Capacity Credits. the Calculated DSP Quantity would be 10 x (2+0.5), which equals 25 MWh.

course of dispatching the DSM Facility, as recorded and updated from time to time in Standing Data under Appendix 1, item (h)(xiv).

Participant Capacity Rebate: For a Market Participant holding Capacity Credits associated with a Scheduled Generator or a Demand Side Programme, the rebate determined for a Trading Month, as calculated in accordance with clause 4.26.4.

Refund Exempt Planned Outage: Means a Planned Outage of a Scheduled Generator for which a Facility Reserve Capacity Deficit Refund is not payable, as determined by AEMO under clause 4.26.1C.

Refund Exempt Planned Outage Count: Means, in respect of a Scheduled Generator and a period of time, the sum over all Trading Intervals in that period of:

(a) zero, if the Trading Interval occurs before 8:00 AM on 1 June 2016 or if no Capacity Credits were associated with the Facility in the Trading Interval; or

(b) the MW quantity of Refund Exempt Planned Outage for the Facility in the Trading Interval, divided by the number of Capacity Credits associated with the Facility in the Trading Interval.

Refund Payable Planned Outage: Means a Planned Outage of a Scheduled Generator for which a Facility Reserve Capacity Deficit Refund is payable, as determined by AEMO under clause 4.26.1C.

Reserve Capacity Performance Improvement Report: A report including the information specified in clause 4.27.4A of the Market Rules, provided by a Market Participant to AEMO under clause 4.27.5(b) in response to a request made under clause 4.27.3(b).

Reserve Capacity Performance Report: A report including the information specified in clause 4.27.4 of the Market Rules, provided by a Market Participant to AEMO under clause 4.27.5(a) in response to a request made under clause 4.27.3(a).

Trading Interval Capacity Cost Refund: The refund a Market Participant holding Capacity Credits incurs in a Trading Interval, as calculated in accordance with clause 4.26.2F.

Trading Interval Refund Rate: The refund rate applicable in a Trading Interval, and in respect of a Facility, as calculated in accordance with clause 4.26.1(a).

Tranche 2 DSM Dispatch Payment: For a Trading Interval, a payment calculated under clause 6.17.6C(b).

Tranche 3 DSM Dispatch Payment: For a Trading Interval, a payment calculated in accordance with clause 6.17.6C(c).

Unused Expected DSM Dispatch Quantity: For a Demand Side Programme, the quantity (in MWh) equal to the greater of:

(a) an amount equal to the Demand Side Programme's Calculated DSP Quantity minus the Demand Side Programme's Cumulative Annual DSM Dispatch; and

(b) zero.

(2) The following definitions are amended as follows:

Balancing Forecast: Means a forecast, determined by AEMO in accordance with the Balancing Forecast Market Procedure, for a Trading Interval, of the following:

(a) the Relevant Dispatch Quantity for the Trading Interval;

(b) the aggregate output of all Non-Scheduled Generators which are Balancing Facilities for the Trading Interval;

(c) the Balancing Price for the Trading Interval; and

(d) the spare capacity for the Trading Interval.

Deleted: Balancing Forecast: Means a forecast, determined by AEMO in accordance with the Balancing Forecast Market Procedure, for a Trading Interval, of the following:¶
(a) . the Relevant Dispatch Quantity for the Trading Interval; ¶
(b) . the aggregate output of all Non-Scheduled Generators which are Balancing Facilities for the Trading Interval; and¶
(c) . the Balancing Price for the Trading Interval. . ¶

Notes

Consumption Decrease Price: A price specified in items (h)(vi)(1) or (2), (i)(xA)(3) or (i)(xA)(4) of Standing Data, accepted by AEMO under section 6.11A, to apply in forming the Non-Balancing Dispatch Merit Order for a Trading Interval for a Dispatchable Load or Demand Side Programme and in the calculation of the Non-Balancing Facility Dispatch Instruction Payment for that Dispatchable Load or Demand Side Programme for that Trading Interval.

Deemed DSM Dispatch: The quantity (in MWh) for a Demand Side Programme for a Trading Interval equal to the least of:

(a) half of the Facility's DSM Capacity Credits;

(b) the requested decrease in consumption specified under clause 7.13.1(eG); and

(c) the greater of zero and the difference between:

i. half of the Relevant Demand set in clause 4.26.2CA; and

ii. the Demand Side Programme Load measured in the Trading Interval, adjusted to add back any Further DSM Consumption Decrease.

Dispatch Advisory: Means a communication by System Management to Market Participants and Network Operators that there has been, or is likely to be, an event that will require dispatch of Non-Balancing Facilities or Facilities Out of Merit, or will restrict communication between System Management and any of the Market Participants or Network Operators.

Maximum Participant Generation Refund: The total amount of the Capacity Credit payments paid or to be paid under these Market Rules to a Market Participant in relation to its generating Facilities and in relation to a Capacity Year assuming that:

(a) AEMO acquires all of the Capacity Credits held by the Market Participant in relation to its generating Facilities; and

(b) the cost of each Capacity Credit so acquired is determined in accordance with clauses 4.28.2(b), 4.28.2(c) and 4.28.2(d) (as applicable).

Relevant Demand: The consumption, expressed in MW, of a Demand Side Programme as determined in clause 4.26.2CA.

Reserve Capacity Price: In respect of a Reserve Capacity Cycle, the price for Reserve Capacity determined in accordance with clause 4.29.1 and multiplied by 12, where this price is expressed in units of dollars per megawatt per year and has a value between zero and 110 percent of the Benchmark Reserve Capacity Price.

Amendment 67 – Appendix 1

(1) Clause (h) is amended to read as follows:

This Appendix describes the Standing Data to be maintained by AEMO for use by AEMO in market processes and by System Management in dispatch processes.

Standing Data required to be provided as a pre-condition of Facility Registration and which Rule Participants are to update as necessary, is described in clauses (a) to (i).

Standing Data not required to be provided as a pre-condition of Facility Registration but which AEMO is required to maintain, and which Rule Participants are to update as necessary, includes the data described in clauses (j) to (m).

…

(h) for a Demand Side Programme:

vi. for a Demand Side Programme that is registered to a Market Participant, data comprising:

1. a Consumption Decrease Price for Peak Trading Intervals;

2. a Consumption Decrease Price for Off-Peak Trading Intervals;

Deleted: Consumption Decrease Price: A price specified in items (h)(vi), (i)(xA)(3) or (i)(xA)(4) of Standing Data, which must be not less than the Minimum STEM Price and not more than the Alternative Maximum STEM Price to apply in forming the Non-Balancing Dispatch Merit Order for a Trading Interval for a Dispatchable Load or Demand Side Programme and in the calculation of the Non-Balancing Facility Dispatch Instruction Payment for that Dispatchable Load or Demand Side Programme for that Trading Interval, which varies for Peak Trading Intervals and Off-Peak Trading Intervals. ¶

Deleted: Deemed DSM Dispatch: The quantity (in MWh) for a Demand Side Programme for a Trading Interval equal to the least of:¶
(a) . half of the Facility's DSM Capacity Credits;¶
(b) . the requested decrease in consumption specified under clause 7.13.1(eG); and¶
(c) . the greater of zero and the difference between: ¶
i. . half of the Relevant Demand set in clause 4.26.2CA; and ¶
ii. . the Demand Side Programme Load measured in the Trading Interval.¶

Deleted: Dispatch Advisory: Has the meaning given in clause 7.11.1.¶

Deleted: Maximum Participant Generation Refund: Has the meaning given in clause 4.26.1.¶

Deleted: Relevant Demand: The consumption of a Demand Side Programme as determined in clause 4.26.2CA. Relevant Demand is used to determine Reserve Capacity shortfalls.¶

Deleted: vi. . for a Demand Side Programme that is registered to a Market Participant, data comprising:¶
1. . a Consumption Decrease Price for Peak Trading Intervals; and¶
2. . a Consumption Decrease Price for Off-Peak Trading Intervals,¶
where these prices must be expressed in units of $/MWh to a precision of $0.01/MWh;¶

Notes

3. an Extra Consumption Decrease Price for Peak Trading Intervals; and

4. an Extra Consumption Decrease Price for Off-Peak Trading Intervals,

where these prices must be expressed in units of $/MWh to a precision of $0.01/MWh;

…

xi. the DSP Ramp Rate Limit for each Trading Interval, and the rate at which the Facility is expected to increase its consumption when dispatch ends, as a function of output level, if applicable;

xii. emergency ramp up and ramp down rates, if applicable (which information does not limit a request under clause 7.7.3B);

xiii. [Blank]

xiv. the information for each Associated Load described in clauses 2.29.5B (b) to (f); and

xv. a good faith forecast of a consumption profile or profiles at which the Facility is likely to operate for the rest of the Trading Day, if it is issued a Dispatch Instruction by System Management in accordance with 7.6.1H (eg. a Market Participant may provide different profiles to reflect different operation depending on the time of day at which the Dispatch Instruction takes effect).

Deleted: xi. . the normal ramp up and ramp down rates as a function of output level, if applicable;¶

Deleted: xii. . emergency ramp up and ramp down rates, if applicable; and¶

Deleted: the maximum number of times that the Demand Side Programme can be curtailed during the term of its Capacity Credits.

Deleted: .

Amendment 68 – Appendix 5

(1) Step 10 is amended to read as follows:

STEP 10: The Individual Reserve Capacity Requirement of Market Customer i for Trading Month n of a Capacity Year equals (X(i) × Total_Ratio) where:

Total_Ratio = RR_Transitional/Y

Y = Sum(i,X(i))

RR_Transitional is equal to the lesser of:

(a) the Reserve Capacity Requirement; and

(b) the sum of all Capacity Credits minus DSM Capacity Credits

Deleted: STEP 10: The Individual Reserve Capacity Requirement of Market Customer i for Trading Month n of a Capacity Year equals (X(i) × Total_Ratio) where ¶
Total_Ratio = RR/Y¶
Y = Sum(i,X(i))¶
RR is the Reserve Capacity Requirement (as modified in accordance with clause 4.28.11A).¶

(2) Step 11 is inserted and reads as follows:

STEP 11: The Individual Reserve Capacity Requirement Contribution of an individual metered Associated Load for Trading Month n of a Capacity Year is determined as follows:

(a) for meter u at an existing connection point measuring Non-Temperature Dependent Load equals (NTDL(u) x NTDL_Ratio x Total_Ratio);

(b) for meter v at an existing connection point measuring Temperature Dependent Load equals (TDL(v) x TDL_Ratio x Total_Ratio);

(c) for meter u at a new connection point measuring Non-Temperature Dependent Load equals (NMNTCR(u) x Total_Ratio); and

(d) for meter v at a new connection point measuring Temperature Dependent Load equals (NMTDCR(v) x Total_Ratio).

Amendment 69 – Appendix 10

(1) Appendix 10 is inserted and reads as follows (including the footnote):

Appendix 10: Relevant Demand Determination

This Appendix sets out the 5th percentile methodology for determining the Relevant Demand for each Demand Side Programme, for use in clause 4.26.2CA(a).

The Relevant Demand value is to be re-calculated for each Demand Side Programme for each Trading Day.

Step 1

Identify the 200 Calendar Hours in the previous Capacity Year with the highest Total Sent Out Generation. The Calendar Hours do not have to be contiguous.

Step 2:

For each Demand Side Programme, for each Calendar Hour identified in Step 1, for each of the Demand Side Programme's Associated Loads, identify the quantity (expressed in MWh)[3] equal to:

(a) unless paragraphs (b) or (c) apply, the Associated Load's metered consumption for the two Trading Intervals in the Calendar Hour; or

(b) unless paragraph (c) applies, if the Associated Load's metered consumption is not available or is considered by AEMO to be inappropriate, a quantity determined by AEMO based on:

i. available Meter Data Submissions; or

ii. Load information provided by the Market Customer; or

iii. other relevant information; or

(c) if a Market Customer provides evidence satisfactory to AEMO that the Associated Load was operating at below capacity due to its consumption being reduced at the request of System Management or because of maintenance, AEMO's estimate of what the consumption of the Associated Load would have been if it had not been reduced.

Step 3:

For each Demand Side Programme, for each Calendar Hour identified in Step 1, sum the values determined under Step 2 across all the Demand Side Programme's Associated Loads.

Step 4:

For each Demand Side Programme, rank the 200 values determined under Step 3 from lowest to highest.

The Demand Side Programme's Relevant Demand is the tenth lowest value.

[4] When this compilation was prepared, the Amending Rules 2016 Schedule B, Part 4 had not come into operation. The details of those amendments are set out below, marked up in the manner described in endnote 2, and subject to the same caution.

[3] On this occasion, the MWh number does not get divided by 2, because measurement is across a full hour, ie. 2 Trading Intervals.