notifications for concurrent outages of the Facility. When calculating the quantity of de-rating for an outage notification to be submitted to AEMO for a Scheduled Generator or Non-Scheduled Generator:

(a) the sent out capacity of the Facility is the quantity specified for the Facility under Appendix 1(b)(iii) or Appendix 1(e)(iiiA) as applicable;

(b) the MW reduction in capacity must be measured assuming the temperature associated with the sent out capacity of the Facility;

(c) if the reduction in capacity varies during a Trading Interval, then the quantity of de-rating for the Trading Interval is measured as the average MW reduction in capacity over the duration of the Trading Interval; and

(d) if the outage notification is in respect of an outage for an Intermittent Generator with a nameplate capacity (as specified for the Facility under Appendix 1(e)(ii)) exceeding its sent out capacity, and the Intermittent

~~1. zero and~~

~~2. the maximum capacity of the Facility minus its Reserve Capacity Obligation Quantity minus the sum of all Forced Outages notified for the Facility before the adjustment in (b) above is made by AEMO; and~~

~~(d) AEMO will calculate the Consequential Outage (on a sent out basis at 41 degrees Celsius) for a Facility in a Trading Interval as the greater of:~~

~~i. zero and~~

~~ii. the sum of all Consequential Outages minus the greater of:~~

~~1. zero and~~

~~2. the maximum capacity of the Facility minus its Reserve Capacity Obligation Quantity minus the sum of all Forced Outages and the sum of all Planned Outages notified for the Facility before the adjustments in (b) and (c) above are made by AEMO;~~

~~(e) [Blank]~~

~~(f) the maximum capacity used in this clause is the value defined in clause 3.21.5.~~

3.21.6. For a Scheduled Generator, for a Trading Interval:

(a) the Capacity-Adjusted Forced Outage Quantity is:

(b) the Capacity-Adjusted Planned Outage Quantity is:

(c) the Capacity-Adjusted Consequential Outage Quantity is:

where:

UFO is the Unadjusted Forced Outage Quantity for the Scheduled Generator for the Trading Interval;

TAF is the temperature adjustment factor determined by AEMO for the Scheduled Generator for the Trading Interval in accordance with clause 3.21.6A;

SOC is the sent out capacity of the Scheduled Generator specified under Appendix 1(b)(iii) for the Trading Interval;

DEF RCOQ is the Reserve Capacity Obligation Quantity that would apply to the Scheduled Generator in the Trading Interval assuming that the Scheduled

UPO is the Unadjusted Planned Outage Quantity for the Scheduled Generator for the Trading Interval; and

UCO is the Unadjusted Consequential Outage Quantity for the Scheduled Generator for the Trading Interval.

3.21.6A. **TAF**

in the calculations under clause 3.21.6 for a Scheduled Generator for a Trading Interval:

(a) if requested to do so by the relevant Market Participant under clause 3.21.6B, as:

$$\_\_\_\_\_$$

where:

MSOC_41 is the maximum sent out capacity of the Scheduled Generator at an ambient temperature of 41 degrees Celsius, as provided by the Market Participant to AEMO and used by AEMO for the purposes of Reserve Capacity Testing for the applicable Capacity Year; and

SOC is the sent out capacity of the Scheduled Generator specified under Appendix 1(b)(iii) for the Trading Interval;

and

(b) in all other circumstances as:

$$\_\_\_\_\_$$

where:

AG_41 is the maximum capacity of the Scheduled Generator at 41 degrees Celsius as found in the Standing Data file for temperature dependence provided under Appendix 1(b)(iv) on a generated basis for the Scheduled Generator; and

AG_15 is the maximum capacity of the Scheduled Generator at 15 degrees Celsius as found in the Standing Data file for temperature dependence provided under Appendix 1(b)(iv) on a generated basis for the Scheduled Generator.

3.21.6B. A Market Participant may, by notice in writing to AEMO, request that AEMO determine the temperature adjustment factor required in the calculations under clause 3.21.6 for its Scheduled Generator for Trading Intervals in which the Scheduled Generator holds Capacity Credits using the calculation specified in clause 3.21.6A(a).

~~3.21.7 Notwithstanding the requirements of clause 3.21.4 that a relevant Market Participant or Network Operator must inform AEMO of a Forced Outage or Consequential Outage as soon as practicable, a Market Participant or Network Operator must provide full and final details of the relevant Planned Outage, Forced Outage or Consequential Outage to AEMO no later than fifteen calendar days following the Trading Day.~~

3.21.7. Notwithstanding any prior obligations under

(b) the date and time the outage ended or is expected to end (as applicable);

(c) the cause of the outage;

(d) the Outage Facility de-rated as a result of the outage; and

(e) the expected quantity of any de-rating by Trading Interval, which must be submitted in accordance with clause 3.21.5 where the Facility is a Scheduled Generator or Non-Scheduled Generator.

3.21.12.- Where a Market Participant or Network Operator submits a request for a Consequential Outage under clause 3.21.10, or revises such a request under clause 3.21.13(a), and that request (or revised request) complies with clause 3.21.11, then the request (or revised request) will be deemed to constitute a declaration by an Authorised Officer of the Market Participant or Network Operator that the Consequential Outage has occurred.

3.21.13. Subject to clause 3.21.16(a), if a Market Participant or Network Operator submits a request for a Consequential Outage and subsequently becomes aware that the information provided in the request is inaccurate, then the Market Participant or Network Operator must, as appropriate:

(a) revise the request to update the information; or

(b) withdraw the request,

as soon as practicable.

3.21.14. Subject to clause 3.21.16(b), AEMO:

(a) must approve or reject a request for a Consequential Outage submitted by a Market Participant or Network Operator, including an updated request, and inform the Market Participant or Network Operator of its decision as soon as practicable after the request is submitted;

(b) must accept the information provided in a request for a Consequential Outage as accurate unless the information is inconsistent with other information held by AEMO; and

(c) may reject a previously approved request for a Consequential Outage if AEMO considers that the original determination was based on incorrect information, or has been superseded by new or updated information.

3.21.15. If AEMO rejects a request for a Consequential Outage under clause 3.21.14 then it:

it:

(b) during Trading Intervals where there is a ~~Consequential Outage or a Planned Outage~~ Capacity-Adjusted Consequential Outage Quantity or Capacity-Adjusted Planned Outage Quantity in respect of a Facility in the schedule maintained by AEMO in accordance with clause 7.3.4, AEMO must reduce the Reserve Capacity Obligation Quantity for that Facility and that Trading Interval, after taking into account adjustments in accordance with clause 4.12.6(a), ~~to reflect the amount of capacity unavailable due to that outage~~ by that Capacity-Adjusted Consequential Outage Quantity or Capacity-Adjusted Planned Outage Quantity; and

(c) if the generating system, being a generating system

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:

(f,t)

where:

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

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

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

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

i. where Facility f is 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

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. where Facility f is a Demand Side Programme, Y equals the DSM Reserve Capacity Price divided by 400;

iiA. where Facility f is an Intermittent Load, Y equals the Reserve Capacity Price divided by 12 then divided by the number of Trading Intervals in the relevant Trading Montm 0 1 383.47 244.49 Tmant Trading nt Tradin

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

i. six; and

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

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

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; and

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, Spare(f,t) is determined as follows:

i. where Facility f is a Scheduled Generator, the greater of zero and:

1. the MW quantity of Capacity Credits for Facility f in Trading Interval t; less

2. the ~~MW quantity of Outage~~ the sum of all Capacity-Adjusted Forced Outage Quantities, Capacity-Adjusted Planned Outage Quantities and Capacity-Adjusted Consequential Outage Quantities for Facility f ~~in~~ for Trading Interval t ~~as recorded~~ in the schedule maintained under clause 7.13.1A(b); less

3. the Sent Out Metered Schedule for Facility f in Trading Interval t multiplied by two so as to be a MW quantity;

ii. where Facility f is a Non-Scheduled Generator, zero; and

iii. where Facility f is a Demand Side Programme which has a Reserve Capacity Obligation Quantity in the Trading Interval t, Spare(f,t) is equal to:

where:

1. [Blank]

2. RCOQ(f,t) is the Reserve Capacity Obligation for the Demand Side Programme f in the Trading Interval t;

3. DSP Load(f,t) is the Demand Side Programme Load for the Demand Side Programme f in the Trading Interval t as

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

(a)

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 capacity-adjusted MW quantity of Forced Outage a

2.

Quantity in t; and

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

i. one for any Facility which is a Scheduled Generator and the following ~~applies~~ 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~~ 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~~ Trading Intervals prior to and including Trading Interval t, is less than the Maximum Partici/ Tm0 G[(n)ity thaTximty

Pa

i. the sum of:

ii. where a Facility in the Balancing Portfolio is subject to an Outage, the maximum amount of sent out energy, in MWh, which could have been dispatched given the sum of the Available ~~Capacity~~ Capacities of Facilities in the Balancing Portfolio for that Trading Interval.

6.15.3 AEMO must:

(a) calculate Maximum Theoretical Energy Schedules under clause 6.15.1 and Minimum Theoretical Energy Schedules under clause 6.15.2:

i. using Sent Out Metered Schedules determined using SCADA data and output estimates maintained in accordance with clause 7.13.1(cA), notwithstanding any requirement in clause 9.3.4 to use Meter Data Submissions received by AEMO; and

ii. as soon as practicable using applicable SCADA data maintained under clause 7.13.1(cA); and

(b) update Maximum Theoretical Energy Schedules and Minimum Theoretical Energy Schedules calculated under clause 6.15.3(a) as soon as practicable using the schedule of ~~Outages~~ Capacity-Adjusted Forced Outage Quantities, Capacity-Adjusted Planned Outage Quantities and Capacity-Adjusted Consequential Outage Quantities maintained under clause 7.13.1A(b).

6.17.5A. Subject to clause 6.17.5C, AEMO must attribute any Downwards Out of Merit Generation from the Balancing Portfolio in a Trading Interval as follows:

(a) Portfolio Constrained Off Quantity1 (PCoffQ1) equals the lesser of:

i. the maximum energy less the minimum energy, if any, in MWh, which could have been dispatched down from the Balancing -Quantity Pair N, with Price N, taking into account the sum of the Available ~~Capacity of~~ Capacities of the Facilities in the Balancing Portfolio, the MW level at the start of the Trading Interval and the Portfolio Ramp Rate Limit, where N is determined from either of the following Balancing Price-Quantity Pairs or, if different, the one with the lower price:

1. the Balancing Price-Quantity Pair associated with the intersection of sum of the Available ~~Capacity~~ Capacities and the quantities in all Balancing Price-Quantity Pairs summed in order of lowest to highest price; and

2. the Balancing Price-Quantity Pair with a price lower than but closest to the Balancing Price; and

ii. the Portfolio Downwards Out of Merit Generation;

6.17.9. AEMO must, other than for Facilities in the Balancing Portfolio, determine a Settlement Tolerance for each Scheduled Generator and Non-Scheduled Generator, where this Settlement Tolerance is equal to:

(a) for a Scheduled Generator for which an applicable Tolerance Range or Facility Tolerance Range has been determined by AEMO, the applicable value determined by AEMO under clause 2.13.6D, divided by two to be expressed as MWh; or

(b) for Facilities for which no applicable Tolerance Range or Facility Tolerance Range has been determined by AEMO, the lesser of:

i. 3 MWh; and

ii. the greater of:

1. 0.5 MWh; and

2. 3% of the~~—————————~~ Balancing Facility Maximum Capacity for the Balancing Facility divided by two to be expressed as MWh.

6.17.10. The Portfolio Settlement Tolerance equals the lesser of:

(a) 3 MWh; and

(b) 3% of the ~~Sent Out~~ Balancing Facility Maximum Capacity of the Balancing Portfolio divided by two to be expressed as MWh.

7.3.4. AEMO must prepare a schedule of ~~Planned Outages, Forced Outages and Consequential Outages for each Registered Facility~~ Capacity-Adjusted Planned Outage Quantities, Capacity-Adjusted Forced Outage Quantities and Capacity-Adjusted Consequential Outage Quantities for each Scheduled Generator of which AEMO is aware at that time ~~where Outages are calculated in accordance with clause 3.21.6~~, for each Trading Interval of a Trading Day, between 8:00 AM and 8:30 AM on the Scheduling Day prior to the Trading Day.

7.3.5. ~~[Blank]~~When preparing a schedule under clause 7.3.4, AEMO must assume that the maximum daily ambient site temperature at the site of each Scheduled Generator will not exceed 41 degrees Celsius during the relevant Trading Day.

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

ii. the average output over a Trading Interval of the Facility was equal to the output 0.000008871 0 595.32 d1 319.3utrt

record any relevant new or amended information outlined in clause 7.13.1E.

7.13.1E The information required to be recorded by AEMO under clause 7.13.1D must include:

(a) whether the request is for a Scheduled Outage or Opportunistic Maintenance;

(b) the information provided under clauses 3.18.6(a) ~~and 3.18.6(c)~~ to 3.18.6(g);

(c) the time and date when:

i. the Outage Plan or request for Opportunistic Maintenance was received by AEMO; and

ii. any amendment to the outage status occurred~~; and~~.

~~(d) the MW quantity of any de-rating to a Scheduled Generator or Non-Scheduled Generator, as measured on a sent out basis at 15 degrees Celsius.~~

7.13.1F. AEMO must as soon as practicable after:

(a) AEMO receives a notification of a Forced Outage via it

expected to generate in accordance with an approved Commissioning Test in that Trading Interval.

Balancing Price-Quantity Pair: ~~Means~~

(a) for a Scheduled Generator, the specified non-Loss Factor adjusted MW quantity at which a Market Participant is prepared to operate a Balancing Facility as at the end of a Trading Interval and the non-Loss Factor Adjusted Price, in $/MWh, at which the Market Participant is prepared to provide that quantity by the end of that Trading Interval;

(b) for a Non-Scheduled Generator the specified non-Loss Factor adjusted MW quantity at which a Market Participant is prepared to reduce its output as at the end of a Trading Interval and the non-Loss Factor Adjusted Price, in $/MWh, at which the Market Participant is prepared to provide that quantity by the end of that Trading Interval; and

(c) for the Balancing Portfolio, the specified MW quantity at which Synergy is prepared to have the Balancing Portfolio dispatched at as at the end of a Trading Interval and the Loss Factor Adjusted Price, in $/MWh, at which Synergy is prepared to provide from the

Refund Exempt Planned Outage: ~~Means a~~ A Capacity-Adjusted Planned Outage Quantity 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~~ In respect of a Scheduled Generator and a period of time, the sum over all Trading Intervals in that period ~~of~~ 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~~ A Capacity-Adjusted Planned Outage Quantity of a Scheduled Generator for which a Facility Reserve Capacity Deficit Refund is payable, as determined by AEMO under clause 4.26.1C.

Scheduled Outage: ~~Means an~~ An outage that has an Outage Plan that is included in

A Scheduled Outage does not cease to be a Scheduled Outage if it is approved by AEMO and becomes a Planned Outage.

...

~~**Sent Out Capacity:** Means:~~

~~(a) for a Balancing Facility, other than the Balancing Portfolio, that is:~~

~~i. a Scheduled Generator, the capacity provided as the Standing Data in Appendix 1(b)(iii); and~~

~~ii. a Non-Scheduled Generator, the capacity provided as the Standing Data in Appendix 1(e)(iiiA); and~~

~~(b) for the Balancing Portfolio, the sum of all of the Standing Data in Appendix 1(b)(iii) and Appendix 1(e)(iiiA) for each Facility in the Balancing Portfolio.~~

Unadjusted Consequential Outage Quantity: For a Scheduled Generator or Non-