

MARKET PROCEDURE: RESERVE CAPACITY TESTING

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1. RESERVE CAPACITY TESTING PROCEDURE INTRODUCTION

~~Each year, AEMO is required to verify and test the operation of Facilities holding Capacity Credits to ensure that the Reserve Capacity Obligations of Market Participants are met. There are two methods by which AEMO may verify the operation of a Facility. In particular the:~~

~~(a) first method is by observing the generation system or Demand Side Programme operate at a level equivalent to its Required Level, adjusted to the level of Capacity Credits currently held, at least once as part of normal market operations as determined from Meter Data Submissions; and~~

~~(b) second method is by AEMO (in its capacity as System Management) conducting a test on:~~

~~(i) in the case of a generation system, the Facility's ability to operate at a level equivalent to its Required Level, adjusted to the level of Capacity Credits currently held, for not less than 60 minutes; or~~

~~(ii) in the case of a Demand Side Programme, Interruptible Load or Dispatchable Load, the Facility's ability to reduce demand to a level equivalent to its Required Level, adjusted to the level of Capacity Credits currently held, for not less than one Trading Interval. [Clause 4.25.2].~~

~~AEMO must verify the operation of each generation Facility at least twice a year, and each Demand Side Programme once a year, within specified time periods, but may also conduct Facility verifications on an as required basis [Clause 4.25.1]. AEMO notes that Intermittent Generators do not need to undertake Reserve Capacity Tests.~~

~~The assessment of the performance of each Facility is based on its Required Level determined under clause 4.11.3B. The Required Level is defined from the Capacity Credits originally assigned to a Facility.~~

~~For a Scheduled Generator, the Required Level is determined from the original Capacity Credits and the Temperature Dependence Curve for the Facility.~~

~~For a Demand Side Programme, the Required Level is the Relevant Demand minus the original Capacity Credits.~~

- ~~— The Capacity Credits may be reduced from the originally assigned level (for example, due to previous Reserve Capacity Tests or a voluntary Capacity Credit reduction). Consequently, for the purpose of Reserve Capacity Testing, the Required Level must be adjusted to the level of Capacity Credits currently held to reflect the Reserve Capacity obligations applicable to each Facility at the time of the test.~~
- ~~— Market Participants may undertake as many self-scheduled tests as they require to demonstrate the capability of their Facilities.~~
- ~~— If a Facility's capability has not been demonstrated through a self-scheduled test, up to two tests are conducted. If a Facility fails the first test, a second test will be called. If the Facility fails the second test AEMO must reduce the number of Capacity Credits assigned to a Facility to:~~
 - ~~(a) in the case of a generation system, reflect the maximum capabilities achieved in either test performed (after an adjustment to the 41°C temperature equivalent values and allowing for the capability provided by operation on different types of fuels); or~~
 - ~~(a) in the case of a Dispatchable Load, Demand Side Programme or Interruptible Load, the maximum level of reduction achieved in either of the two tests [Clause 4.25.4]~~
- ~~— In the event that AEMO reduces the number of Capacity Credits associated with a Facility, the Market Participant may, subject to certain provisions, ask to have the Facility re-tested and have the Capacity Credits reassigned in the case that the Facility performs to a level equivalent to its Required Level. Decisions by AEMO in regard to verification by observation, and to tests, are not reviewable decisions under clause 2.17.1 of the Market Rules.~~

1.1. Relationship with the Market Rules Purpose and scope

- 1.1.1. This Market Procedure: Reserve Capacity Testing (Procedure) is made in accordance with AEMO's functions under clause 2.1A.2(h) of the Wholesale Electricity Market Rules (WEM Rules). This Procedure is also made under clause 4.25.14 and 4.25A.1 of the WEM Rules.
- 1.1.2. The purpose of this Procedure is to describe the processes/steps that:
 - (a) AEMO must follow in-:
 - (i) performing the Reserve Capacity Testing and Verification Testing functions specified under the Market Rule conducting Reserve Capacity Tests and Verification Tests; and
 - (ii) determining the results of Reserve Capacity Tests and Verification Tests; and
 - (iii) publishing information about Reserve Capacity Tests; and

~~(b) Market Participants must follow in- complying with instructions for Reserve Capacity Tests and undertaking Verification Tests fulfilling the Reserve Capacity Testing and Verification Testing functions under the Market Rules.~~

~~1.1.3. In this Procedure, where obligations are conferred on a Rule Participant, that Rule Participant must comply with the relevant obligations in accordance with clauses 2.9.7, 2.9.7A, 2.9.7B, 2.9.7C, and 2.9.8 of the WEM Rules, as applicable.~~

~~1.1.4. Reference to particular WEM Rules within this Procedure in bold and square brackets [clause XX] are included for convenience only, and are not part of this Procedure.~~

1.2. Definitions and interpretation

~~1.1.~~

~~(a) **Definitions and This Market Procedure for Reserve Capacity Testing (Procedure) has been developed in accordance with, and should be read in conjunction with, section 4.25 and 4.25A of the Wholesale Electricity Market (WEM) Rules (Market Rules).**~~

~~(b) **References to particular Market Rules within the procedure in bold and square brackets [MR XX] are current as at 10 December 2016. These references are included for convenience only and are not part of this procedure.**~~

~~(c) **This procedure is made in accordance with clause 4.25.14 and 4.25A.1 of the Market Rules.**~~

~~Interpretation~~

~~1.1.1.2.1. Terms defined in the WEM Rules have the same meanings in this Procedure unless otherwise specified in this clause. The words, phrases, and abbreviations in the table below have the meanings set out opposite them in the table when used in this Procedure.~~

<u>Term</u>	<u>Definition</u>
<u>Invalid Test</u>	Considered a Reserve Capacity Test for settlement purposes, but otherwise disregarded. A test that is disregarded for Reserve Capacity Test purposes, but treated as a Reserve Capacity Test for settlement purposes. It is a Reserve Capacity Test the results of which are deemed invalid for Reserve Capacity testing purpose, but are considered valid for settlement purposes.
<u>Meter Data Submission</u>	A submission of meter data by a Metering Agent to AEMO in accordance with clause 8.4 of the WEM Rules.

Term	Definition
<u>Observation Test</u>	A Facility that is operating at a level equivalent to its Required Level, adjusted to the level of Capacity Credits currently held, for at least one Trading Interval as follows: <ul style="list-style-type: none"> a) for a generation system, as part of normal market operations as determined from Meter Data Submissions [clause 4.25.2(a)(i)]; or b) for a Demand Side Programme, in response to an activation of the Facility by the relevant Market Customer as measured in metered consumption [clause 4.25.2(b)(i)].
<u>Temperature Measurement Consultant</u>	A consultant or organisation appointed by AEMO to calibrate Temperature Measurement Systems.
<u>Temperature Measurement Systems</u>	The sensors, systems and data used to measure ambient temperature at a Facility where the information is provided to AEMO through the SCADA system.
<u>Temperature Dependence Curve</u>	A dataset showing how a generation system's (other than an Intermittent Generator) sent out output in MW varies with temperature, measured in increments of 0.1 degrees Celsius, and provided for temperatures between 0 and 45 degrees Celsius. The data must be accompanied by a report from the original equipment manufacturer or independent engineering firm.
<u>Wholesale Electricity Market System or WEMS</u>	An interface software system that AEMO uses to administer and operate the Wholesale Electricity Market.

1.2.1.2.2. The following principles of interpretation apply to this Procedure, unless otherwise expressly indicated:

- (a) references to time are references to Australian Western Standard Time; ~~In this procedure, unless the contrary intention is expressed:~~
- (a) _____
- (b) terms that are capitalised, but not defined in this Procedure, have the meaning given in the WEM Rules;
- (c) to the extent that this Procedure is inconsistent with the WEM Rules, the WEM Rules prevail to the ~~Extententententententent~~ extent of the inconsistency;
- (b) terms used in this Procedure have the same meaning as those given in the Market Rules (made pursuant to the ~~Electricity Industry (Wholesale Electricity Market) Regulations 2004~~);
- (c) to the extent that this Procedure is contrary or inconsistent with the Market Rules, the Market Rules shall prevail to the extent of the inconsistency;
- (d) a reference to the Market WEM Rules or Market Procedures includes any associated forms required or contemplated by the Market WEM Rules or Market Procedures;
- (e) words expressed in the singular include the plural or vice versa; and
- (e) _____
- (f) ~~In this Procedure the conventions specified in clauses 1.3 to 1.5 of the WEM Rules apply.~~

1.3. Purpose

The purpose of this Procedure is to describe the steps that:

- ~~(a) AEMO must follow in performing the Reserve Capacity Testing and Verification Testing functions specified under the Market Rules; and~~
- ~~(b)(a) Market Participants must follow in fulfilling the Reserve Capacity Testing and Verification Testing functions under the Market Rules.~~

1.4. Application

This Procedure applies to:

- ~~(a) AEMO in conducting Reserve Capacity Tests;~~
- ~~(b) Market Participants in complying with Reserve Capacity Tests; and~~
- ~~(c) [Blank]~~
- ~~(d) Market Participants when undertaking Verification Tests.~~

1.5.1.3. Associated Market Procedures Related documents

~~1.5.1.3.1.~~ The following Market Procedures and Power System Operation Procedures (PSOPs) are associated with this Procedure:

- ~~(a) Market Procedure: Declaration of Bilateral Trades and the Reserve Capacity Auction;~~
- ~~(b)(a) Market Procedure: Capacity Credit Allocation;~~
- ~~(b) Market Procedure: Certification of Reserve Capacity;~~
- ~~(c) Market Procedure: Reserve Capacity Security;~~
- ~~(d) Market Procedure: Reserve Capacity Performance Monitoring; and~~
- ~~(e) Market Procedure: Notices and Communications; and~~
- ~~(f) PSOP: Commissioning and Testing; and~~
- ~~(e)(g) PSOP: Facility Outages.~~

~~1.5.2.~~ The following Power System Operation Procedures are associated with this Procedure:

- ~~(a) Facility Outages.~~

1.6. Terminologies and Definitions

Table 1 — Glossary and Defined Terms

Term	Definition
Invalid Test	Invalid Test is a test the results of which will be disregarded but which for the purposes of settlement will be considered a Reserve Capacity Test
Request to Conduct Temperature Calibration	Request to Conduct Temperature Calibration is the request made by AEMO to conduct a calibration of the Temperature Measurement Systems associated with a Facility.
Reserve Capacity Test	Reserve Capacity Test means a test conducted in accordance with clause(s) 4.25 of the Market Rules.

Term	Definition
Temperature Measurement Consultant	Temperature Measurement Consultant means a consultant or organisation appointed by AEMO to conduct calibrations of the Temperature Measurement Systems.
Temperature Measurement Systems	Temperature Measurement Systems means the sensors, systems and data used to measure ambient temperature at a Facility where the information is provided to AEMO through the SCADA system.
Temperature Dependence Curve	Temperature Dependence Curve: refers to the information provided by a Market Participant under clause 4.10.1(e)(i) of the Market Rules. If a change in Capacity Credits occurs over a Reserve Capacity Year, the Temperature Dependence Curve will be: <ul style="list-style-type: none"> (a) scaled to reflect the change in Capacity Credits at 41°C; or (b) changed to reflect a new Temperature Dependence Curve supplied by the Market Participant which has been determined by an independent engineering firm.
Summer Reserve Capacity Testing Cycle	Summer Reserve Capacity Testing Cycle: refers to 1 October to 31 March.
Winter Reserve Capacity Testing Cycle	Winter Reserve Capacity Testing Cycle: refers to 1 April to 30 September.
Verification Test	Verification Test: the test that is required under clause 4.25A of the Market Rules to be undertaken each Reserve Capacity Year for each registered Demand Side Programme: <ul style="list-style-type: none"> (a) within 20 Business Days of registration of the Demand Side Programme, if applicable; or (b) between 1 October and 30 November.

2. TIMING AND GENERAL REQUIREMENTS

2.1.1. AEMO must take steps to verify, in accordance with clause 4.25.2 of the WEM Rules, that each Facility providing Capacity Credits can [clause 4.25.1]:

(i) 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) of the WEM Rules:

(A) 1 October to 31 March; and

(B) 1 April to 30 September; and

(ii) in the case of a Demand Side Programme, during the term the Reserve Capacity Obligations apply, and in the case of a Demand Side Programme during the period specified in clause 4.10.1(f)(vi) of the WEM Rules, decrease its consumption to operate at a level equivalent to its Required Level, adjusted to the level of Capacity Credits currently held, at least once during the period between 1 October to 31 March.

~~AEMO must take steps to verify that each Facility providing Capacity Credits can, during the term the Reserve Capacity Obligations apply, and in the case of a generation system, 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) of the WEM Rules [clause 4.25.1(a)]:~~

~~term and such level of operation during those periods must be achieved on each type of fuel notified under clause 4.10.1(e)(v) of the WEM Rules. AEMO must take steps to verify that each Facility providing Capacity Credits can term and in the case of a Demand Side Programme of the WEM Rules of The verifications conducted in accordance with step 2.1.1(a) of this Procedure must be conducted on each type of fuel available to that Facility as notified in the information provided under clause 4.10.1(e)(v) of the WEM Rules [clause 4.25.1(a)].~~

~~1.6.1.2.1.2. Facility~~ Within 10 Business Days of the start of ~~a~~ each testing period listed in step 2.1.1 of this Procedure, AEMO ~~may~~ ~~ust~~ determine and notify Market Participants of the date when AEMO (in its capacity as System Management) will start scheduling Reserve Capacity Tests, which must allow sufficient time to complete all required Reserve Capacity Tests for each testing period.

3. PREPARATORY STEPS

3.1. Temperature Dependence Curves

~~3.1.1. A Market Participant may update the Temperature Dependence Curve for a Facility by submitting a new Temperature Dependence Curve and the accompanying independent engineer's report or manufacturer's technical specifications to AEMO at least 10 Business Days before the start of either of either of the testing periods listed in step 2.1.1 of this Procedure.~~

~~3.1.2. AEMO must review the information provided in step 3.1.1 of this Procedure and may request additional information, where necessary, to assess the accuracy of the updated Temperature Dependence Curve. AEMO's review may include, but is not limited to:~~

- ~~(a) comparing the Temperature Dependence Curves of similar Facilities, if available;~~
- ~~(b) confirming that the technical characteristics of the Facility (e.g. inlet cooling or any equipment limitations) are reflected in the Temperature Dependence Curve; and~~
- ~~(c) any other factors that AEMO considers relevant.~~

- 3.1.3. AEMO must accept an updated Temperature Dependence Curve provided under step 3.1.1 of this Procedure unless, after the review in step 3.1.2 of this Procedure, it reasonably believes the Temperature Dependence Curve is not an accurate reflection of the Facility's capability. If AEMO rejects an updated Temperature Dependence Curve, it must inform the Market Participant as soon as practicable and provide reasons for the rejection.
- 3.1.4. If AEMO rejects a Temperature Dependence Curve under step 3.1.3 of this Procedure, the Market Participant may provide an updated Temperature Dependence Curve, supported by an independent engineer's report or manufacturer's technical specifications, that addresses AEMO's feedback to AEMO's reasonable satisfaction, subject to the timing considerations in step 3.1.1 of this Procedure.
- 3.1.5. Where AEMO accepts an updated Temperature Dependence Curve provided under step 3.1.1 of this Procedure, AEMO must upload the Temperature Dependence Curve to the Wholesale Electricity Market System (WEMS) to be used when assessing the results of a Facility's Observation Test or Reserve Capacity Test results.
- 3.1.6. ~~A Market Participant may update the Temperature Dependence Curve associated with a Facility at any time before they have been tested by observation in respect of a Summer Reserve Capacity Testing Cycle or Winter Reserve Capacity Testing Cycle by submitting a new Temperature Dependence Curve determined by an independent engineering firm.~~ If Capacity Credits for a Facility change during a Capacity Year, AEMO must consult with the relevant Market Participant to determine whether:
- (a) to continue to use the previously accepted Temperature Dependence Curve; or
 - (b) ~~s at 41°C at this temperature~~ at 41°C to update to a new Temperature Dependence Curve supplied by the Market Participant ~~which~~ that has been determined by an engineering firm, subject to the assessment in steps 3.1.3 and 3.1.4 of this Procedure.

3.2. Steps for AEMO and Market Participants to calibrate Temperature measurement sources Temperature Measurement Systems

3.2.1. AEMO must refer to the temperature measurement source, specified by the Market Participant under clause 4.10.1(e)(iv) of the WEM Rules, when determining the ambient temperature at the site of a generation Facility. Where no temperature source was specified under clause 4.10.1(e)(iv) of the WEM Rules, the Market Participant must notify AEMO of an appropriate temperature measurement source for the Facility's geographical location before the start of the Capacity Year.

1.7. used in association with SCADA

1.7.1. AEMO may require the Temperature Measurement Systems associated with any Facility subject to the testing requirements under Chapter 4 of the Market Rules be calibrated by an AEMO appointed Temperature Measurement Consultant.

1.7.2.3.2.2. AEMO may appoint a Temperature Measurement Consultant at any time each year to calibrate the Temperature Measurement Systems associated with each generation Facility that nominates to use the SCADA Temperature Method SCADA as the temperature measurement source under clause 4.10.1(e)(iv) of the WEM Rules.

3.2.3. If AEMO requires that the Temperature Measurement Consultant calibrate calibration of at the Facility's Temperature Measurement System, AEMO must contact the relevant Market Participant in writing with the:

- (a) time and location of the proposed calibration; and
- (b) details of the Temperature Measurement Consultant who will conduct the calibration; and a Request to Conduct Temperature Calibration.
- 1.7.3.(c) the estimated costs associated with the proposed calibration.

1.7.4. The Request to Conduct Temperature Calibration must include the following information:

- (a) Information detailing the time and location of the proposed calibration; and
- (b) Details of the Temperature Measurement Consultant that will be conducting the calibration.

1.7.5.3.2.4. Within two Business Days of receiving the Request to Conduct Temperature Calibration AEMO's notification under step 3.2.3 of this Procedure, the Market Participant must contact AEMO to either:

- (a) accept the proposed time; or
- (b) subject to step 3.2.5 of this Procedure 1.7.6, propose another time, which must be within 10 Business Days of the original request date.

~~3.2.5. The Market Participant must not refuse the Request to Conduct Temperature Calibration as proposed by AEMO accept AEMO’s proposed calibration and pay the associated costs proposed under step 3.2.3 of this Procedure, unless the Market Participant believes the calibration at the time proposed may endanger person(s) or equipment at the time proposed.~~

~~4.7.6.~~

~~4.7.7.3.2.6. AEMO must provide~~ AEMO must ~~provide~~ the results of the temperature calibration to the Market Participant within ~~five~~ 5 working days Business Days of receiving the results from the Temperature Measurement Consultant.

~~The Market Participant will be required to pay all costs associated with calibration of the Temperature Measurement Systems.~~

3.3. Required Level calculation

~~3.3.1. The Required Level for a Scheduled Generator in Trading Interval t will be determined as:~~

$$CC(t) \times \frac{TDC(Temp(t))}{TDC(41^{\circ}C)}$$

~~where:~~

Variable	Units	Definition
CC(t)	Capacity Credits	Number of Capacity Credits held for Trading Interval t.
Temp(t)	°C	Temperature during Trading Interval t, measured according to the method specified in WEMS and contained in WEMS.
TDC(Temp(t))	MW	The Facility output indicated in the Temperature Dependence Curve and specified at Temp(t), a particular temperature (denoted as (Temp)).
TDC(41°C)	MW	The Facility output indicated in the Temperature Dependence Curve at a temperature of 41°C.

~~3.3.2. The Required Level for a Demand Side Programme in Trading Interval t will be determined as:~~

~~4.7.8. The Required Level for a Demand Side Programme in Trading Interval t will be determined as: The Required Level for a Demand Side Programme in Trading Interval t will be determined as:~~

$$RD(d) - CC(t)$$

~~where:~~

Variable	Units	Definition
RD(d)	MW	The Relevant Demand for the Trading Day d, as determined in accordance with clause 4.26.2CA of the WEM Rules.
CC(t)	Capacity Credits	The number of Capacity Credits held by the Market Participant for that Facility for Trading Interval t.

4. OBSERVATION TESTS

4.1. General requirements

~~1.7.9. Steps for AEMO to verify facility outputs~~AEMO must not subject a Facility to a test of Reserve Capacity if that Facility [Clause 4.25.3A]:

~~4.1.1. The verifications referred to in step 2.1.21 of this Procedure may be achieved by a Facility successfully passing an Observation Test at any point within a testing period until AEMO (in its capacity as System Management) successfully conducts a Reserve Capacity Test for the Facility under section 5 of this Procedure.~~

~~4.1.2. AEMO must use The Observation Test results will be determined using Meter Data Submissions available to AEMO it to determine the Observation Test results up until the time the time of the Reserve Capacity Test is conducted.~~

~~4.1.3. AEMO must compile and maintain a list of Facilities that have completed Observation Tests and the results of those Observation Tests. This list may be maintained in WEMS.~~

~~4.1.4. AEMO may request a Reserve Capacity Test, under section 5 of this Procedure, if AEMO is unable to determine, in accordance with this Procedure, that the Facility was able to operate at a level equivalent to its Required Level, adjusted to the level of Capacity Credits currently held, during an Observation Test.~~

~~4.1.5. If AEMO requests a Reserve Capacity Test in accordance with step 4.1.4 of this Procedure, AEMO must provide the Market Participant with a summary of results obtained in step 4.2.1 or step 4.3.2 of this Procedure. This summary may be provided through WEMS.~~

4.2. Specific requirements for generation systems

~~4.2.1. AEMO must assess the results of an Observation Test to determine if the generation system is has operated at a level equivalent to its Required Level, adjusted to the level of Capacity Credits currently held, and. This assessment may be automated in WEMS.~~

~~4.2.2. AEMO will determine that a generation system has passed an Observation Test for a generation system to be passed if the output of the Facility, adjusted to 41°C using the Temperature Dependence Curve, was:~~

- ~~(a) at or above the Required Level calculated in accordance with step 3.3.1 of this Procedure for at least one Trading Interval; or~~
- ~~(b) at or above the output required at the 45°C shown on highest quantity of net power in MW shown on point of the Temperature Dependence Curve, where the ambient temperature measured at the site exceeded 45°C during the Trading Interval. at or above the output required at the highest quantity of net power in MW shown on the Temperature Dependence Curve, where the ambient temperature measured at the site exceeds 45°C during the Trading Interval.~~

4.3. Specific requirements for Demand Side Programmes

4.3.1. A Market Customer who wishes to perform an Observation Test for a Demand Side Programme must notify AEMO no later than two Business Days prior to the commencement of the Trading Day during which the test will take place, advising:

- (a) the identity of the Demand Side Programme that will be tested;
- (b) the Trading Interval(s) during which the test will be conducted; and
- (c) the expected reduction in Demand Side Programme Load from the Relevant Demand.

~~4.3.2. AEMO must only assess the results of an Observation Test, for which notification was provided in accordance with step 4.3.1 of this Procedure, by using Meter Data Submissions metered consumption contained in WEMS only.~~

~~4.3.3. AEMO will consider an Observation Test for that a Demand Side Programme has to be passed an Observation Test if the consumption of the Facility was at, or below, the Required Level, calculated in accordance with step 3.3.2 of this Procedure, for at least one Trading Interval.~~

~~**IS UNDERGOING A SCHEDULED OUTAGE OR OPPORTUNISTIC MAINTENANCE WHICH HAS BEEN APPROVED IN ACCORDANCE WITH CLAUSE 3.19 OF THE MARKET RULES;**~~

~~**HAS ADVISED AEMO (IN ITS CAPACITY AS SYSTEM MANAGEMENT) OF A FORCED OUTAGE OR CONSEQUENTIAL OUTAGE IN ACCORDANCE WITH CLAUSE 3.21.4 OF THE MARKET RULES; OR**~~

~~**IS UNDERGOING A COMMISSIONING TEST APPROVED IN ACCORDANCE WITH CLAUSE 3.21A OF THE MARKET RULES.**~~

~~**THE REQUIRED LEVEL FOR A SCHEDULED GENERATOR IN TRADING INTERVAL T WILL BE DETERMINED AS:**~~

~~$$CC_f \times \frac{TDC(Temp(t))}{TDC(41^{\circ}C)}$$~~

~~**WHERE:**~~

~~**CC_f IS THE NUMBER OF CAPACITY CREDITS HELD FOR TRADING INTERVAL T;**~~

~~**$Temp(t)$ IS THE TEMPERATURE DURING TRADING INTERVAL T, MEASURED ACCORDING TO THE METHOD SPECIFIED IN STANDING DATA;**~~

~~**$TDC(Temp)$ IS THE FACILITY OUTPUT INDICATED IN THE TEMPERATURE DEPENDENCE CURVE AT TEMPERATURE TEMP; AND**~~

~~**$TDC(41^{\circ}C)$ IS THE FACILITY OUTPUT INDICATED IN THE TEMPERATURE DEPENDENCE CURVE AT A TEMPERATURE OF 41°C.**~~

~~**A GENERATION FACILITY WILL BE DEEMED BY AEMO TO HAVE:**~~

~~**FOLLOWING A TEST BY AEMO (IN ITS CAPACITY AS SYSTEM MANAGEMENT) UNDER STEP 1.8.4(A)(II):**~~

PASSED A RESERVE CAPACITY TEST IF, ON AVERAGE FOR ANY TWO CONSECUTIVE TRADING INTERVALS DURING THE PERIOD OF THE TEST, THE OUTPUT IS AT OR ABOVE THE REQUIRED LEVEL CALCULATED IN ACCORDANCE WITH STEP 1.8.5:

PASSED A RESERVE CAPACITY TEST IF THE OUTPUT OF THE FACILITY IS AT OR ABOVE THE OUTPUT REQUIRED AT THE HIGHEST POINT OF THE TEMPERATURE DEPENDENCE CURVE WHERE THE AMBIENT TEMPERATURE MEASURED AT THE SITE EXCEEDS THE LARGEST VALUE SUPPLIED IN THE TEMPERATURE DEPENDENCE CURVE:

failed a Reserve Capacity Test if the ambient temperature is below the lower bound of the Temperature Dependence Curve; and

failed a Reserve Capacity Test if, ON AVERAGE FOR ALL SETS OF TWO CONSECUTIVE TRADING INTERVALS DURING THE PERIOD OF THE TEST, THE OUTPUT IS BELOW THE REQUIRED LEVEL CALCULATED IN ACCORDANCE WITH STEP 1.8.5; OR

FOLLOWING A SELF-TEST UNDER STEP 1.8.4(A)(I):

VERIFIED BY OBSERVATION IF THE OUTPUT IS AT OR ABOVE THE REQUIRED LEVEL CALCULATED IN ACCORDANCE WITH STEP 1.8.5 FOR ONE TRADING INTERVAL; AND

VERIFIED BY OBSERVATION IF THE OUTPUT OF THE FACILITY IS AT OR ABOVE THE OUTPUT REQUIRED AT THE HIGHEST POINT OF THE TEMPERATURE DEPENDENCE CURVE WHERE THE AMBIENT TEMPERATURE MEASURED AT THE SITE EXCEEDS THE LARGEST VALUE SUPPLIED IN THE TEMPERATURE DEPENDENCE CURVE.

IF A FACILITY FAILS A RESERVE CAPACITY TEST WHEN THE TEMPERATURE MEASURED BY THE TEMPERATURE METHOD SPECIFIED IN THE RELEVANT FACILITY'S STANDING DATA IS OUTSIDE OF THE RANGE 0 – 45 OC, THEN AEMO WILL CONSIDER THAT TEST TO BE AN INVALID TEST.

IF A TEST IS DEEMED TO BE AN INVALID TEST UNDER STEP 1.8.10 THEN AEMO (INCLUDING IN ITS CAPACITY AS SYSTEM MANAGEMENT) MUST RE-CONDUCT THE TEST AS SOON AS IS PRACTICABLE, WITH CONSIDERATION TO THE TIMELINES IN CLAUSE 4.25.1, 4.25.4, 4.25.5 AND 4.25.6 OF THE MARKET RULES.

IF A TEST IS DEEMED TO BE AN INVALID TEST UNDER STEP 1.8.10 AND ANOTHER TEST HAS ALREADY BEEN COMPLETED IN ACCORDANCE WITH STEP 1.10.12 OR 1.10.16, THEN AEMO MUST:

~~(a) USE THE RESULTS OF THE LATEST TEST IN PLACE OF THE INVALID TEST, IF A TEST IS STILL REQUIRED; OR~~

~~IGNORE THE RESULTS OF THE LATEST TEST, IF A TEST IS NO LONGER REQUIRED. IN ACCORDANCE WITH STEP 1.8.1, AEMO MAY USE INFORMATION GATHERED THROUGH THE WHOLESALE ELECTRICITY MARKET SYSTEM (WEMS) TO OBSERVE A FACILITY OPERATING AT A LEVEL EQUIVALENT TO ITS REQUIRED LEVEL, ADJUSTED TO THE LEVEL OF CAPACITY CREDITS CURRENTLY HELD, AS PART OF NORMAL OPERATIONS.~~

~~AEMO MAY VERIFY THE CAPABILITY OF A FACILITY BY OBSERVATION WITHIN A TESTING CYCLE UNTIL AEMO (IN ITS CAPACITY AS SYSTEM MANAGEMENT) CONDUCTS A TEST FOR THAT FACILITY. VERIFICATION BY OBSERVATION WILL BE PERFORMED USING THE METER DATA AVAILABLE TO AEMO UP UNTIL THE TIME THAT IT COMMENCES A TEST.~~

~~AEMO MUST REFER TO THE TEMPERATURE MEASUREMENT SOURCE SPECIFIED BY THE MARKET PARTICIPANT UNDER CLAUSE 4.10.1(E)(IV) WHEN DETERMINING THE AMBIENT TEMPERATURE AT THE SITE OF A GENERATION FACILITY. WHERE NO TEMPERATURE SOURCE IS SPECIFIED THE MARKET PARTICIPANT MUST NOTIFY AEMO OF A TEMPERATURE SOURCE BEFORE THE START OF THE CAPACITY YEAR.~~

~~TO VERIFY THAT A GENERATION FACILITY HAS OPERATED AT A LEVEL EQUIVALENT TO ITS REQUIRED LEVEL, ADJUSTED TO THE LEVEL OF CAPACITY CREDITS CURRENTLY HELD, AS CALCULATED IN ACCORDANCE WITH STEP 1.8.5, AEMO MUST USE THE INFORMATION CONTAINED IN THE WEMS, TOGETHER WITH THE TEMPERATURE INFORMATION, TO DETERMINE THE OPERATING OUTPUT AND AMBIENT TEMPERATURE RELATIONSHIP OF THE FACILITY.~~

~~AEMO MUST ASSESS THE RESULTS OBTAINED IN STEPS 1.9.1 THROUGH 1.9.4 AND DETERMINE IF THE GENERATION FACILITY OPERATED AT A LEVEL EQUIVALENT TO ITS REQUIRED LEVEL, ADJUSTED TO THE LEVEL OF CAPACITY CREDITS CURRENTLY HELD, AS CALCULATED IN ACCORDANCE WITH STEP 1.8.5, THROUGH THE TEMPERATURE RANGE OBSERVED.~~

~~TO VERIFY BY OBSERVATION THE PERFORMANCE OF A DEMAND SIDE PROGRAMME PERFORMING A SELF-SCHEDULED TEST, AEMO MUST ONLY CONSIDER THE PERFORMANCE IN A TRADING INTERVAL FOR WHICH AEMO HAS BEEN PROVIDED WITH NOTICE BY THE MARKET PARTICIPANT IN ACCORDANCE WITH STEP 1.11.1.~~

~~FOLLOWING VERIFICATION BY OBSERVATION AEMO MAY REQUEST A RESERVE CAPACITY TEST IF AEMO IS UNABLE TO DETERMINE IN ACCORDANCE WITH THIS PROCEDURE THAT THE FACILITY WAS ABLE TO OPERATE AT A LEVEL EQUIVALENT TO ITS REQUIRED LEVEL, ADJUSTED TO THE LEVEL OF CAPACITY CREDITS CURRENTLY HELD, DURING THE VERIFICATION BY OBSERVATION PROCESS.~~

~~IF AEMO REQUESTS A RESERVE CAPACITY TEST IN ACCORDANCE WITH STEP 1.9.7 AEMO MUST PROVIDE THE MARKET PARTICIPANT WITH A SUMMARY OF RESULTS OBTAINED IN STEP 1.9.5.~~

~~AEMO MUST COMPILE AND MAINTAIN A LIST OF FACILITIES WHO HAVE UNDERGONE THE VERIFICATION BY OBSERVATION PROCESS AND MUST KEEP RECORDS OF OUTCOMES OF THE VERIFICATION PROCESS.~~

~~1.8.~~

~~1.8.1. EACH YEAR AEMO MUST TAKE STEPS TO VERIFY THAT EACH FACILITY PROVIDING CAPACITY CREDITS CAN,~~

~~(a) IN THE CASE OF A GENERATION SYSTEM, DURING THE PERIOD THE RESERVE CAPACITY OBLIGATIONS APPLY, OPERATE AT A LEVEL EQUIVALENT TO ITS REQUIRED LEVEL, ADJUSTED TO THE LEVEL OF CAPACITY CREDITS CURRENTLY HELD, AT LEAST ONCE DURING EACH OF THE 6 MONTH PERIODS LISTED IN PROCEDURE STEP 1.8.2 BELOW [CLAUSE 4.25.1(A)].~~

~~(b) IN THE CASE OF A DEMAND SIDE PROGRAMME, DURING THE PERIOD THE RESERVE CAPACITY OBLIGATIONS APPLY, AND DURING THE PERIOD OF AVAILABILITY OF THE DEMAND SIDE PROGRAMME AS SPECIFIED IN RESPECT OF CERTIFICATION OF RESERVE CAPACITY, DECREASE ITS CONSUMPTION TO OPERATE AT A LEVEL EQUIVALENT TO ITS REQUIRED LEVEL, ADJUSTED TO THE LEVEL OF CAPACITY CREDITS CURRENTLY HELD, AT LEAST ONCE DURING THE PERIOD BETWEEN 1 OCTOBER TO 31 MARCH EACH CAPACITY YEAR [CLAUSE 4.25.1(C)].~~

~~1.8.2. THE VERIFICATION REFERRED TO IN STEP 1.8.1(A) MUST BE CONDUCTED AT LEAST ONCE DURING EACH OF THE FOLLOWING PERIODS [CLAUSE 4.25.1(A)]:~~

~~(a) 1 OCTOBER TO 31 MARCH (THE SUMMER RESERVE CAPACITY TESTING CYCLE); AND~~

~~(b) 1 APRIL TO 30 SEPTEMBER (THE WINTER RESERVE CAPACITY TESTING CYCLE).~~

- ~~1.8.3. THE VERIFICATIONS CONDUCTED IN ACCORDANCE WITH STEP 1.8.1(A) MUST BE CONDUCTED ON EACH TYPE OF FUEL AVAILABLE TO THAT FACILITY AS NOTIFIED IN THE INFORMATION PROVIDED IN RESPECT OF CERTIFICATION OF RESERVE CAPACITY REQUIRED UNDER CLAUSE 4.10.1(E)(V) OF THE MARKET RULES [CLAUSE 4.25.1].~~
- ~~1.8.4. THE VERIFICATION REFERRED TO IN STEP 1.8.1 CAN BE ACHIEVED BY AEMO:~~
- ~~(a) IN THE CASE OF A GENERATION SYSTEM:~~
- ~~(i) OBSERVING THE FACILITY OPERATING AT A LEVEL EQUIVALENT TO ITS REQUIRED LEVEL, ADJUSTED TO THE LEVEL OF CAPACITY CREDITS CURRENTLY HELD, FOR AT LEAST ONE INTERVAL DURING THE SIX MONTH PERIOD AS PART OF NORMAL OPERATIONS AS DETERMINED FROM METER DATA SUBMISSIONS; OR~~
- ~~(ii) TESTING (IN ITS CAPACITY AS SYSTEM MANAGEMENT) THE FACILITY'S ABILITY TO OPERATE AT A LEVEL EQUIVALENT TO ITS REQUIRED LEVEL, ADJUSTED TO THE LEVEL OF CAPACITY CREDITS CURRENTLY HELD, FOR NOT LESS THAN 60 MINUTES AND THE FACILITY SUCCESSFULLY PASSING THAT TEST; OR~~
- ~~(b) IN THE CASE OF A DEMAND SIDE PROGRAMME:~~
- ~~(i) OBSERVING THE FACILITY OPERATE AT A LEVEL EQUIVALENT TO ITS REQUIRED LEVEL, ADJUSTED TO THE LEVEL OF CAPACITY CREDITS CURRENTLY HELD, AT LEAST ONCE IN RESPONSE TO AN ACTIVATION OF THE FACILITY BY THE RELEVANT MARKET CUSTOMER AS MEASURED IN METERED CONSUMPTION; OR~~
- ~~(ii) TESTING (IN ITS CAPACITY AS SYSTEM MANAGEMENT) THE FACILITY'S ABILITY TO OPERATE AT A LEVEL EQUIVALENT TO THE LEVEL OF CAPACITY CREDITS CURRENTLY HELD, AT LEAST ONCE IN RESPONSE TO AN ACTIVATION OF THE FACILITY BY THE RELEVANT MARKET CUSTOMER AS MEASURED IN METERED CONSUMPTION; OR~~
- ~~(c) IN THE CASE OF INTERRUPTIBLE LOADS AND DISPATCHABLE LOADS, TESTING (IN ITS CAPACITY AS SYSTEM MANAGEMENT) THE FACILITY'S ABILITY TO REDUCE DEMAND TO A LEVEL EQUIVALENT TO ITS REQUIRED LEVEL, ADJUSTED TO THE LEVEL OF CAPACITY CREDITS CURRENTLY HELD, FOR NOT LESS THAN ONE TRADING INTERVAL AND THE FACILITY SUCCESSFULLY PASSING THAT TEST [CLAUSE 4.25.2].~~
- ~~1.8.5. THE REQUIRED LEVEL FOR A SCHEDULED GENERATOR IN TRADING INTERVAL T WILL BE DETERMINED AS:~~

~~$$CC_t \times \frac{TDC(Temp(t))}{TDC(41^{\circ}C)}$$~~

~~WHERE:~~

~~CC_t IS THE NUMBER OF CAPACITY CREDITS HELD FOR TRADING INTERVAL T;~~

~~$Temp(t)$ IS THE TEMPERATURE DURING TRADING INTERVAL T, MEASURED ACCORDING TO THE METHOD SPECIFIED IN STANDING DATA;~~

~~$TDC(Temp)$ IS THE FACILITY OUTPUT INDICATED IN THE TEMPERATURE DEPENDENCE CURVE AT TEMPERATURE TEMP; AND~~

~~$TDC(41^{\circ}C)$ IS THE FACILITY OUTPUT INDICATED IN THE TEMPERATURE DEPENDENCE CURVE AT A TEMPERATURE OF 41°C.~~

~~1.8.6. A GENERATION FACILITY WILL BE DEEMED BY AEMO TO HAVE:~~

~~(a) FOLLOWING A TEST BY AEMO (IN ITS CAPACITY AS SYSTEM MANAGEMENT) UNDER STEP 1.8.4(A)(II):~~

~~(i) PASSED A RESERVE CAPACITY TEST IF, ON AVERAGE FOR ANY TWO CONSECUTIVE TRADING INTERVALS DURING THE PERIOD OF THE TEST, THE OUTPUT IS AT OR ABOVE THE REQUIRED LEVEL CALCULATED IN ACCORDANCE WITH STEP 1.8.5;~~

~~(ii) passed a Reserve Capacity Test if the output of the Facility is at or above the output required at the highest point of the Temperature Dependence Curve where the ambient temperature measured at the site exceeds the largest value supplied in the Temperature Dependence Curve;~~

~~(iii) FAILED A RESERVE CAPACITY TEST IF THE AMBIENT TEMPERATURE IS BELOW THE LOWER BOUND OF THE TEMPERATURE DEPENDENCE CURVE; AND~~

~~(iv) FAILED A RESERVE CAPACITY TEST IF, ON AVERAGE FOR ALL SETS OF TWO CONSECUTIVE TRADING INTERVALS DURING THE PERIOD OF THE TEST, THE OUTPUT IS BELOW THE REQUIRED LEVEL CALCULATED IN ACCORDANCE WITH STEP 1.8.5; OR~~

~~(b) FOLLOWING A SELF-TEST UNDER STEP 1.8.4(A)(I):~~

~~(i) VERIFIED BY OBSERVATION IF THE OUTPUT IS AT OR ABOVE THE REQUIRED LEVEL CALCULATED IN ACCORDANCE WITH STEP 1.8.5 FOR ONE TRADING INTERVAL; AND~~

~~(ii) VERIFIED BY OBSERVATION IF THE OUTPUT OF THE FACILITY IS AT OR ABOVE THE OUTPUT REQUIRED AT THE HIGHEST POINT OF THE TEMPERATURE DEPENDENCE CURVE WHERE THE AMBIENT TEMPERATURE MEASURED AT THE SITE EXCEEDS THE LARGEST VALUE SUPPLIED IN THE TEMPERATURE DEPENDENCE CURVE.~~

~~1.8.7. A DEMAND SIDE PROGRAMME WILL BE DEEMED BY AEMO TO HAVE:~~

~~(a) FOLLOWING A TEST BY AEMO (IN ITS CAPACITY AS SYSTEM MANAGEMENT) UNDER STEP 1.8.4(B)(II):~~

~~(i) PASSED A RESERVE CAPACITY TEST IF ITS DEMAND SIDE PROGRAMME LOAD IS AT OR BELOW THE REQUIRED LEVEL, ADJUSTED TO THE LEVEL OF CAPACITY CREDITS CURRENTLY HELD, FOR ONE TRADING INTERVAL DURING THE PERIOD OF THE TEST; AND~~

~~(ii) FAILED A RESERVE CAPACITY TEST IF ITS DEMAND SIDE PROGRAMME LOAD IS ABOVE THE REQUIRED LEVEL, ADJUSTED TO THE LEVEL OF CAPACITY CREDITS CURRENTLY HELD, FOR ALL TRADING INTERVALS DURING THE PERIOD OF THE TEST; OR~~

~~(b) FOLLOWING A SELF-TEST UNDER STEP 1.8.4(B)(I) IN A TRADING INTERVAL FOR WHICH NOTIFICATION HAS BEEN PROVIDED UNDER STEP 1.11.1, VERIFIED BY OBSERVATION IF ITS DEMAND SIDE PROGRAMME LOAD IS AT OR BELOW THE REQUIRED LEVEL, ADJUSTED TO THE LEVEL OF CAPACITY CREDITS CURRENTLY HELD.~~

~~IF A MARKET PARTICIPANT CHOOSES TO SELF-SCHEDULE A TEST FOR A DEMAND SIDE PROGRAMME, IT MUST NOTIFY AEMO NO LATER THAN 2 BUSINESS DAYS PRIOR TO THE COMMENCEMENT OF THE TRADING DAY DURING WHICH THE TEST WILL TAKE PLACE, ADVISING:~~

~~THE IDENTITY OF THE DEMAND SIDE PROGRAMME THAT WILL BE TESTED;~~

~~THE TRADING INTERVAL(S) IN WHICH THE TEST WILL BE CONDUCTED; AND~~

~~THE EXPECTED REDUCTION IN DEMAND SIDE PROGRAMME LOAD FROM THE RELEVANT DEMAND.~~

~~THE RESULTS OF THE TEST WILL ONLY BE CONSIDERED BY AEMO IF THIS NOTIFICATION IS SENT.~~

~~1.8.9.1. A MARKET PARTICIPANT MAY UPDATE THE TEMPERATURE DEPENDENCE CURVE ASSOCIATED WITH A FACILITY AT ANY TIME BEFORE THEY HAVE BEEN TESTED BY OBSERVATION IN RESPECT OF A SUMMER RESERVE CAPACITY TESTING CYCLE OR WINTER RESERVE CAPACITY TESTING CYCLE BY SUBMITTING A NEW TEMPERATURE DEPENDENCE CURVE DETERMINED BY AN INDEPENDENT ENGINEERING FIRM.~~

~~1.8.9.1. AEMO MUST NOT SUBJECT A FACILITY TO A TEST OF RESERVE CAPACITY IF THAT FACILITY [CLAUSE 4.25.3A]:~~

~~(a)1. IS UNDERGOING A SCHEDULED OUTAGE OR OPPORTUNISTIC MAINTENANCE WHICH HAS BEEN APPROVED IN ACCORDANCE WITH CLAUSE 3.19 OF THE MARKET RULES;~~

~~(b)1. HAS ADVISED AEMO (IN ITS CAPACITY AS SYSTEM MANAGEMENT) OF A FORCED OUTAGE OR CONSEQUENTIAL OUTAGE IN ACCORDANCE WITH CLAUSE 3.21.4 OF THE MARKET RULES; OR~~

~~(c)1. IS UNDERGOING A COMMISSIONING TEST APPROVED IN ACCORDANCE WITH CLAUSE 3.21A OF THE MARKET RULES.~~

~~1.8.10.1 IF A FACILITY FAILS A RESERVE CAPACITY TEST WHEN THE TEMPERATURE MEASURED BY THE TEMPERATURE METHOD SPECIFIED IN THE RELEVANT FACILITY'S STANDING DATA IS OUTSIDE OF THE RANGE 0 – 45 OC, THEN AEMO WILL CONSIDER THAT TEST TO BE AN INVALID TEST.~~

~~1.8.11.1 IF A TEST IS DEEMED TO BE AN INVALID TEST UNDER STEP 1.8.10 THEN AEMO (INCLUDING IN ITS CAPACITY AS SYSTEM MANAGEMENT) MUST RE-CONDUCT THE TEST AS SOON AS IS PRACTICABLE, WITH CONSIDERATION TO THE TIMELINES IN CLAUSE 4.25.1, 4.25.4, 4.25.5 AND 4.25.6 OF THE MARKET RULES.~~

~~1.8.12.1 IF A TEST IS DEEMED TO BE AN INVALID TEST UNDER STEP 1.8.10 AND ANOTHER TEST HAS ALREADY BEEN COMPLETED IN ACCORDANCE WITH STEP 1.10.12 OR 1.10.16, THEN AEMO MUST:~~

~~(a)1. USE THE RESULTS OF THE LATEST TEST IN PLACE OF THE INVALID TEST, IF A TEST IS STILL REQUIRED; OR~~

~~(b) IGNORE THE RESULTS OF THE LATEST TEST, IF A TEST IS NO LONGER REQUIRED.~~

- ~~1.8.13. IF A FACILITY CANNOT BE TESTED DUE TO RESTRICTIONS IMPOSED BY THE TIMELINES IN CLAUSES 4.25.1, 4.25.4, 4.25.5 AND 4.25.6 OF THE MARKET RULES, AEMO (INCLUDING IN ITS CAPACITY WITH SYSTEM MANAGEMENT) WILL:~~
- ~~(a) IN THE CASE OF THE FIRST RESERVE CAPACITY TEST NOT BEING ABLE TO BE COMPLETED WITHIN THE RELEVANT RESERVE CAPACITY TESTING CYCLE, CONDUCT THE TESTS AS SOON AS PRACTICABLE IN THE NEXT RESERVE CAPACITY TESTING CYCLE;~~
 - ~~(b) IN THE CASE OF THE SECOND RESERVE CAPACITY TEST NOT BEING ABLE TO BE COMPLETED WITHIN 14-28 DAYS AFTER THE FIRST TEST, RE-CONDUCT THE FIRST TEST, IN ACCORDANCE WITH STEPS 1.9 AND 1.10; OR~~
 - ~~(c) IN THE CASE OF THE THIRD RESERVE CAPACITY TEST (“RE-TEST”) NOT BEING ABLE TO BE COMPLETED WITHIN 7 DAYS, LIAISE WITH THE MARKET PARTICIPANT TO DETERMINE A PERIOD DURING WHICH THE RETEST CAN BE CONDUCTED.~~

~~1.9. STEPS FOR AEMO TO VERIFY BY OBSERVATION~~

- ~~1.9.1. IN ACCORDANCE WITH STEP 1.8.1, AEMO MAY USE INFORMATION GATHERED THROUGH THE WHOLESALE ELECTRICITY MARKET SYSTEM (WEMS) TO OBSERVE A FACILITY OPERATING AT A LEVEL EQUIVALENT TO ITS REQUIRED LEVEL, ADJUSTED TO THE LEVEL OF CAPACITY CREDITS CURRENTLY HELD, AS PART OF NORMAL OPERATIONS.~~
- ~~1.9.2. AEMO MAY VERIFY THE CAPABILITY OF A FACILITY BY OBSERVATION WITHIN A TESTING CYCLE UNTIL AEMO (IN ITS CAPACITY AS SYSTEM MANAGEMENT) CONDUCTS A TEST FOR THAT FACILITY. VERIFICATION BY OBSERVATION WILL BE PERFORMED USING THE METER DATA AVAILABLE TO AEMO UP UNTIL THE TIME THAT IT COMMENCES A TEST.~~
- ~~1.9.3. AEMO MUST REFER TO THE TEMPERATURE MEASUREMENT SOURCE SPECIFIED BY THE MARKET PARTICIPANT UNDER CLAUSE 4.10.1(E)(IV) WHEN DETERMINING THE AMBIENT TEMPERATURE AT THE SITE OF A GENERATION FACILITY. WHERE NO TEMPERATURE SOURCE IS SPECIFIED THE MARKET PARTICIPANT MUST NOTIFY AEMO OF A TEMPERATURE SOURCE BEFORE THE START OF THE CAPACITY YEAR.~~

- ~~1.9.4. TO VERIFY THAT A GENERATION FACILITY HAS OPERATED AT A LEVEL EQUIVALENT TO ITS REQUIRED LEVEL, ADJUSTED TO THE LEVEL OF CAPACITY CREDITS CURRENTLY HELD, AS CALCULATED IN ACCORDANCE WITH STEP 1.8.5, AEMO MUST USE THE INFORMATION CONTAINED IN THE WEMS, TOGETHER WITH THE TEMPERATURE INFORMATION, TO DETERMINE THE OPERATING OUTPUT AND AMBIENT TEMPERATURE RELATIONSHIP OF THE FACILITY.~~
- ~~1.9.5. AEMO MUST ASSESS THE RESULTS OBTAINED IN STEPS 1.9.1 THROUGH 1.9.4 AND DETERMINE IF THE GENERATION FACILITY OPERATED AT A LEVEL EQUIVALENT TO ITS REQUIRED LEVEL, ADJUSTED TO THE LEVEL OF CAPACITY CREDITS CURRENTLY HELD, AS CALCULATED IN ACCORDANCE WITH STEP 1.8.5, THROUGH THE TEMPERATURE RANGE OBSERVED.~~
- ~~1.9.6. TO VERIFY BY OBSERVATION THE PERFORMANCE OF A DEMAND SIDE PROGRAMME PERFORMING A SELF-SCHEDULED TEST, AEMO MUST ONLY CONSIDER THE PERFORMANCE IN A TRADING INTERVAL FOR WHICH AEMO HAS BEEN PROVIDED WITH NOTICE BY THE MARKET PARTICIPANT IN ACCORDANCE WITH STEP 1.11.1.~~
- ~~1.9.7. FOLLOWING VERIFICATION BY OBSERVATION AEMO MAY REQUEST A RESERVE CAPACITY TEST IF AEMO IS UNABLE TO DETERMINE IN ACCORDANCE WITH THIS PROCEDURE THAT THE FACILITY WAS ABLE TO OPERATE AT A LEVEL EQUIVALENT TO ITS REQUIRED LEVEL, ADJUSTED TO THE LEVEL OF CAPACITY CREDITS CURRENTLY HELD, DURING THE VERIFICATION BY OBSERVATION PROCESS.~~
- ~~1.9.8. IF AEMO REQUESTS A RESERVE CAPACITY TEST IN ACCORDANCE WITH STEP 1.9.7 AEMO MUST PROVIDE THE MARKET PARTICIPANT WITH A SUMMARY OF RESULTS OBTAINED IN STEP 1.9.5.~~
- ~~1.9.9. AEMO MUST COMPILE AND MAINTAIN A LIST OF FACILITIES WHO HAVE UNDERGONE THE VERIFICATION BY OBSERVATION PROCESS AND MUST KEEP RECORDS OF OUTCOMES OF THE VERIFICATION PROCESS.~~

~~**STEPS FOR AEMO TO CONDUCT A RESERVE CAPACITY TEST** AEMO WILL DEEM A RESERVE CAPACITY TEST TO BE AN INVALID TEST IF:~~

~~A FACILITY FAILS A RESERVE CAPACITY TEST WHEN THE TEMPERATURE MEASURED BY THE TEMPERATURE METHOD SPECIFIED IN THE STANDING DATA FOR THE FACILITY IS OUTSIDE OF THE RANGE 0 -45°C; OR~~

~~AEMO CONSIDERS THAT AN ERROR WAS MADE IN THE DETERMINATION OF THE RESULTS OF ANY RESERVE CAPACITY TEST~~

IF A TEST IS DEEMED TO BE AN INVALID TEST UNDER STEP 1.10.18 THEN AEMO (IN ITS CAPACITY AS SYSTEM MANAGEMENT) MUST CONDUCT THE TEST AGAIN AS SOON AS IS PRACTICABLE, TAKING INTO ACCOUNT THE TIMELINES IN CLAUSES 4.25.1, 4.25.4, 4.25.5 AND 4.25.6 OF THE MARKET RULES.

IF A TEST IS DEEMED TO BE AN INVALID TEST UNDER STEP 1.10.18 AND ANOTHER TEST HAS ALREADY BEEN COMPLETED IN ACCORDANCE WITH STEPS 1.10.12 OR 1.10.16 THEN AEMO MUST:

USE THE RESULTS OF THE LATEST TEST IN PLACE OF THE INVALID TEST RESULTS:
OR

IF THE INVALID TEST IS NO LONGER REQUIRED, IGNORE THE RESULTS OF THE LATEST TEST.

IF A FACILITY CANNOT BE TESTED DUE TO RESTRICTIONS IMPOSED BY THE TIMELINES IN CLAUSES 4.25.1, 4.25.4, 4.25.5 AND 4.25.6 OF THE MARKET RULES, AEMO (INCLUDING IN ITS CAPACITY AS SYSTEM MANAGEMENT) WILL:

IN THE CASE OF THE FIRST RESERVE CAPACITY TEST NOT BEING ABLE TO BE COMPLETED WITHIN THE RELEVANT RESERVE CAPACITY TESTING CYCLE, CONDUCT THE TESTS AS SOON AS PRACTICABLE IN THE NEXT RESERVE CAPACITY TESTING CYCLE:

IN THE CASE OF THE SECOND RESERVE CAPACITY TEST NOT BEING ABLE TO BE COMPLETED WITHIN 14-28 DAYS AFTER THE FIRST TEST, RE-CONDUCT THE FIRST TEST, IN ACCORDANCE WITH STEPS 1.9 AND 1.10; OR

IN THE CASE OF THE THIRD RESERVE CAPACITY TEST NOT BEING ABLE TO BE COMPLETED WITHIN 7 DAYS, LIAISE WITH THE MARKET PARTICIPANT TO DETERMINE A PERIOD DURING WHICH THE THIRD RESERVE CAPACITY TEST CAN BE REPEATED.

5. RESERVE CAPACITY TESTS

5.1. Conducting Reserve Capacity Tests

5.1.1. AEMO may conduct a Reserve Capacity Test if:

- (a) AEMO determines the most appropriate course of action is to test the Facility (in its capacity as System Management) in accordance as described in with clause 4.25.2(a)(ii), clause 4.25.2(b)(ii) or clause 4.25.2(c) of the WEM Rules;
- (b) the Facility has not passed an Observation Test, as detailed under section 4 of this Procedure, before the deadline specified in step 2.1.32 of this Procedure;

- (c) ~~AEMO requires a re-test in accordance with clause 4.25.4 of the WEM Rules; or~~
- (d) ~~a Market Participant requests a re-test in accordance with clause 4.25.5 of the WEM Rules.~~
- 5.1.2. ~~AEMO must not subject a Facility to a test of Reserve Capacity Test if that Facility **[clause 4.25.3A]**:~~
- (a) ~~that Facility is undergoing a Scheduled Outage or Opportunistic Maintenance Outage which has been approved in accordance with clause 3.19 of the WEM Rules;~~
- (b) ~~the relevant Market Participant has advised AEMO (in its capacity as System Management) of a Forced Outage or Consequential Outage in accordance with clause 3.21.4 of the WEM Rules; or~~
- (c) ~~that Facility is undergoing a Commissioning Test for the Facility that is approved in accordance with clause 3.21A of the WEM Rules.~~
- 5.1.3. ~~AEMO (in its capacity as System Management) must conduct Reserve Capacity Tests in accordance with the requirements in clause 4.25.9 of the WEM Rules.~~
- 5.1.4. ~~If a second Reserve Capacity Test is required in accordance with step 5.2.23(c) of this Procedure, AEMO (in its capacity as System Management) must, in accordance with clause 4.25.4 of the WEM Rules, re-test that Facility **[clause 4.25.4]**:~~
- (a) ~~not earlier than 14 days after the first Reserve Capacity Test; and~~
- (b) ~~not later than 28 days after the first Reserve Capacity Test.~~
- 5.1.5. ~~If a Facility cannot be tested due to restrictions imposed by the timelines in clause 4.25.1, clause 4.25.4, and clause 4.25.5, or clause 4.25.6 of the WEM Rules, AEMO (including in its capacity as System Management) will:~~
- (a) ~~in the case of the first Reserve Capacity Test not being able to be completed within the relevant Reserve Capacity testing period in accordance with clause 4.25.1 Test cycle, of the WEM Rules, conduct the Reserve Capacity Test as soon as practicable in the next Reserve Capacity Test cycle testing period;~~
- (b) ~~in the case of the second Reserve Capacity Test not being able to be completed within 14 to 28 days after the first Reserve Capacity Test, conduct the first Reserve Capacity Test again, in accordance with, subject to the limitations in step 5.1.2 and step 5.1.3 of this Procedure; or~~
- (c) ~~in the case of where a re-test requested under clause 4.25.5 of the WEM Rules is the third Reserve Capacity Test ("re-test") not being able to be completed within seven days, in accordance with clause 4.25.5 of the WEM Rules, liaise with the Market Participant to determine a period during which the re-test can be conducted **[clause 4.25.5]**.~~

5.1.6. If a Demand Side Programme fails a Reserve Capacity Test under clause 4.25.2(b)(ii) of the WEM Rules and is issued a Dispatch Instruction by AEMO to decrease its consumption to a level equivalent to its Required Level, adjusted to the level of Capacity Credits currently held, for not less than one Trading Interval prior to a second Reserve Capacity Test being undertaken, in accordance with clause 4.25.4 of the WEM Rules, then the activation shall be deemed to be the second Reserve Capacity Test [clause 4.25.3B].

5.2. Assessing the results of Reserve Capacity Tests

5.2.1. Within 10 Business Days of completing a Reserve Capacity Test and receiving Meter Data Submissions and temperature (if applicable) data for the Facility, AEMO must determine the result of the Reserve Capacity Test as follows:

(a) for a generation system, that the Facility:

- (i) passed a Reserve Capacity Test, if the output is at or above the Required Level, calculated in accordance with step 3.3.1 of this Procedure, in at least two Trading Intervals (not necessarily consecutive) during the period of the test;
- (ii) passed a Reserve Capacity Test, if the output of the Facility is at or above the output required at the highest quantity of net power in MW shown on point of the Temperature Dependence Curve, where the ambient temperature measured at the site exceeds 45°C during the Trading Interval; and
- (iii) failed a Reserve Capacity Test, if the output is not above the Required Level, calculated in accordance with step 3.3.1 of this Procedure, in at least two Trading Intervals during the period of the test; or

(b) for a Demand Side Programme:

- (i) passed a Reserve Capacity Test, if its Demand Side Programme Load is at, or below, the Required Level, calculated in accordance with step 3.3.2 of this Procedure~~xx~~, adjusted to the level of Capacity Credits currently held, for one Trading Interval during the period of the test; and
- (ii) failed a Reserve Capacity Test if its Demand Side Programme Load is above the Required Level, calculated in accordance with step 3.3.2 of this Procedure~~xx~~, adjusted to the level of Capacity Credits currently held, for all~~ny~~ Trading Intervals during the period of the test.

5.2.2. For the purposes of determining the results of a Reserve Capacity Test, the test period includes any Trading Intervals when the Facility was required to increase its output or decrease its consumption in response to an~~the~~ Operating Instruction issued in accordance with clause 4.25.9(h) of the WEM Rules.

5.2.3. If a Facility has failed a Reserve Capacity Test, AEMO must:

- (a) inform the Market Participant that the Facility has failed the Reserve Capacity Test;
- (b) provide the Market Participant with a copy of the results produced; and
- (c) where the Reserve Capacity Test was a first test, re-test under this step (in its capacity as System Management) the Facility under step 5.1.1(d) of this Procedure, in accordance with subject to -the limitations in step 5.1.5 of this Procedure. ~~clause 4.25.4].~~

The notifications under this step 5.2.3 may be provided through WEMS.

~~5.2.4. In the event that~~ If a Facility has passed the Reserve Capacity Test, AEMO must:

- ~~(a) inform the Market Participant that the Facility has passed the Reserve Capacity Test; and~~
- ~~(b) provide a copy of the results produced.~~

~~This notification under this step 5.2.4 may be provided through WEMS.~~

~~AEMO determines the Facility has passed the Reserve Capacity Test, AEMO must inform the Market Participant that the Facility has passed, and provide the Market Participant with a copy of the results produced. This must be completed within 10 Business Days of the date AEMO (including in its capacity as System Management) completes the test, and receives metering data for the Facility and, where applicable, temperature data for the Facility.~~

~~5.2.5. AEMO must deem a Reserve Capacity Test to be an Invalid Test if:~~

- ~~(a) the temperature measured by the temperature method specified in WEMS for the Facility is outside of the range 0°C to 45°C, and step 5.2.1(ii) of this Procedure does not apply; or~~
- ~~(b) AEMO considers under step 7.1.3(a)(iii) of this Procedure that an error was made in the determination of the results of any Reserve Capacity Test and AEMO has not re-determined the results of the Reserve Capacity Test under step 7.1.3(a)(i) of this Procedure. in accordance with step 7.1.3(a)(ii) of this Procedure.~~

~~5.2.6. If a Reserve Capacity Test is deemed to be an Invalid Test under step 5.2.45 of this Procedure, then AEMO (including in its capacity as System Management) must re-conduct the Reserve Capacity Test as soon as practicable in accordance with step 5.1 of this Procedure, with consideration to the timelines in clause 4.25.1, clause 4.25.4, and clause 4.25.5, and clause 4.25.6 of the WEM Rules.~~

~~5.2.7. If a Reserve Capacity Test is deemed to be an Invalid Test under step 5.2.45 of this Procedure and another Reserve Capacity Test has already been completed in accordance with step 5.1.1 of this Procedure, then AEMO must:~~

- ~~(c) if another Reserve Capacity Test has already been completed in accordance with step 5.1.1 of this Procedure, use the results of the latest Reserve Capacity Test in place of the Invalid Test under step 5.1.1 of this Procedure; or~~
- (d) disregard the results of the latest Reserve Capacity Test, if a Reserve Capacity Test is no longer required under clause 4.25.3B of the WEM Rules.

~~AEMO must record the results of the test including:~~

- ~~Information regarding the conduct of the Reserve Capacity Test;~~
- ~~Information regarding the results of the Reserve Capacity Test;~~
- ~~The determination of the outcome of the Reserve Capacity Test (passed or failed); and~~
- ~~Information regarding any action taken in accordance with steps 1.10.11, 1.10.14 and 1.10.16, as applicable.~~

~~In the event that AEMO determines the Facility has failed the Reserve Capacity Test, AEMO must:~~

- ~~inform the Market Participant that the Facility has failed the Reserve Capacity Test;~~
- ~~provide the Market Participant with a copy of the results produced;~~

~~re-test (in its capacity as System Management) the Facility in accordance with step 1.10.12 below:~~

5.3. Capacity Credit reductions after failing the second Reserve Capacity Test

~~5.3.1. In accordance with clause 4.25.4 of the WEM Rules, if a Facility fails the second Reserve Capacity Test outlined in step 5.1.4 of this Procedure~~3.4~~, then AEMO must, from the second Trading Day following the Scheduling Day on which AEMO determines that the second Reserve Capacity Test was failed in accordance with step 5.2.1 of this Procedure, **clause 4.25.4**:~~

- ~~(a) if the Reserve Capacity Test related to a generation system, reduce the number of Capacity Credits held by the relevant Market Participant for that Facility to reflect the maximum capabilities achieved in either Reserve Capacity Test performed (after adjusting these results to the equivalent values at a temperature of 41°C and allowing for the capability provided by operation on different types of fuels); or~~
- ~~(b) if the Reserve Capacity Test related to a Demand Side Programme or Interruptible Load, reduce the number of Capacity Credits held by the relevant Market Participant for that Facility to the maximum level of reduction achieved in either of the two Reserve Capacity Tests.~~

~~1.9.10.5.3.2. AEMO must determine the results of the outcome of the second Reserve Capacity Test and notify the Market Participant of the outcome of the second Reserve Capacity Test in accordance with the process described in section 5.2 of this Procedure. If the Facility failed the second Reserve Capacity Test as determined under step 5.2.1 of this Procedure, AEMO must notify the Market Participant that the Capacity Credits will be reduced and the:~~

- ~~(a) level that the Capacity Credits will be reduced to; and~~
- ~~(b) effective date for the reduction.~~

~~The notification under this step 5.3.2 may be provided through WEMS.~~

~~===== In the event that a re-test is required in accordance with step 1.10.11(c), AEMO (in its capacity as System Management) must re-test that Facility **Clause 4.25.4**:~~

~~===== not earlier than 14 days after the first test; and~~

~~===== not later than 28 days after the first test.~~

~~———— If a Demand Side Programme fails a Reserve Capacity Test under clause 4.25.2(b)(ii) and is issued a Dispatch Instruction to decrease its consumption to a level equivalent to its Required Level, adjusted to the level of Capacity Credits currently held, for not less than one Trading Interval prior to a second Reserve Capacity Test being undertaken then the activation shall be deemed to be the second Reserve Capacity Test. [Clause 4.25.3B].~~

5.4. Reserve Capacity re-test under clause 4.25.45 of the WEM Rules

~~5.4.1. If a Market Participant is notified by AEMO that the Capacity Credits for a Facility have been reduced under step 5.3.22 of this Procedure, then the Market Participant may request that AEMO conduct a re-test [clause 4.25.5], subject to the following conditions ~~[clause 4.25.5]~~:~~

~~1.9.11. —~~

~~1.9.12. Reserve Capacity Tests may be conducted if:~~

- ~~(a) — AEMO determines the most appropriate course of action is to test the Facility (in its capacity as System Management) in accordance with clause 4.25.2 (a)(ii), 4.25.2(b)(ii) or 4.25.2(c) of the Market Rules;~~
- ~~(b) — AEMO determines that the operation of the Facility has not passed the verification by observation process detailed at setp 1.9;~~
- ~~(c) — AEMO requires that a Reserve Capacity Test be conducted in respect of any Network Control Service Contract, Ancillary Service Contract as required under the Market Rules;~~
- ~~(d) — AEMO requires a re-test in accordance with clause 4.25.4 of the Market Rules; or~~
- ~~(e) — A Market Participant requests a re-test in accordance with clause 4.25.5 of the Market Rules.~~

~~1.9.13. [Blank]~~

~~1.9.14. [Blank]~~

~~1.9.15. [Blank]~~

~~1.9.16. — AEMO (in its capacity as System Management) must conduct tests in accordance with the requirements as outlined in clause 4.25.9 of the Market Rules.~~

~~1.9.17. [Blank]~~

~~1.9.18. [Blank]~~

~~1.9.19. — When AEMO (including in its capacity as System Management) has completed the test, and has received metering data for the Facility and, where applicable, temperature data for the Facility, AEMO must, within 10 Business Days, make a determination that the Facility has either passed or failed the Reserve Capacity Test in accordance with clause 4.25.3A and steps 1.8.6 and 1.8.7.~~

~~1.9.20.1.1. — AEMO must record the results of the test including:~~

- ~~(a) — Information regarding the conduct of the Reserve Capacity Test;~~
- ~~(b)(a) Information regarding the results of the Reserve Capacity Test;~~
- ~~(c)(a) The determination of the outcome of the Reserve Capacity Test (passed or failed); and~~

~~(d)(a) Information regarding any action taken in accordance with steps 1.10.11, 1.10.14 and 1.10.16, as applicable.~~

~~1.9.21.1.1.1. In the event that AEMO determines the Facility has passed the Reserve Capacity Test, AEMO must inform the Market Participant that the Facility has passed, and provide the Market Participant with a copy of the results produced. This must be completed within 10 Business Days of the date AEMO (including in its capacity as System Management) completes the test, and receives metering data for the Facility and, where applicable, temperature data for the Facility.~~

~~1.9.22.1.1.1. In the event that AEMO determines the Facility has failed the Reserve Capacity Test, AEMO must:~~

~~(e)(a) inform the Market Participant that the Facility has failed the Reserve Capacity Test;~~

~~(f)(a) provide the Market Participant with a copy of the results produced;~~

~~(g)(a) re-test (in its capacity as System Management) the Facility in accordance with step 1.10.12 below.~~

~~1.9.23.1.1.1. In the event that a re-test is required in accordance with step 1.10.11(c), AEMO (in its capacity as System Management) must re-test that Facility [Clause 4.25.4]:~~

~~(a) not earlier than 14 days after the first test; and~~

~~(b)(a) not later than 28 days after the first test.~~

~~1.9.24.1.1.1. If a Demand Side Programme fails a Reserve Capacity Test under clause 4.25.2(b)(ii) and is issued a Dispatch Instruction to decrease its consumption to a level equivalent to its Required Level, adjusted to the level of Capacity Credits currently held, for not less than one Trading Interval prior to a second Reserve Capacity Test being undertaken then the activation shall be deemed to be the second Reserve Capacity Test. [Clause 4.25.3B].~~

~~1.9.25. If a Facility fails the second Reserve Capacity Test (the re-test) outlined in steps 1.10.11 and 1.10.12 then, from the second Trading Day following the Scheduling Day on which AEMO determines that the second test was failed AEMO must:~~

~~(a) if the test related to a generation system, reduce the number of Capacity Credits held by the relevant Market Participant for that Facility to reflect the maximum capability achieved in either of the tests performed (after adjusting these results to the equivalent values at a temperature of 41oC and allowing for the capability provided by operation on different types of fuels if the test related to a generation system; or~~

~~(b) if the test related to a Dispatchable Load, Demand Side Programme or Interruptible Load, reduce the number of Capacity Credits held by the relevant Market Participant for that Facility to the maximum level of reduction achieved in either of the two tests [Clause 4.25.4].~~

~~1.9.26. In the case that the Capacity Credits are reduced in accordance with step 1.10.14 a Market Participant may apply to AEMO to have the Facility re-tested (the third test) subject to the following conditions:~~

~~(a) The Facility may only be re-tested once in accordance with step 1.10.12 during prior to the end of the remaining Reserve Capacity YearCycle [Clause 4.25.5];~~

~~(b) AEMO (in its capacity as System Management) must conduct the re-test during the within seven days from following receiving the request from the Market Participant [Clause 4.25.5]; and~~

~~(c) — AEMO (in its capacity as System Management) must undertake the re-test in accordance with this Procedure and the WEM Market Rules.~~

~~(c)~~

~~(d) — AEMO must set the number of Capacity Credits held by the relevant Market Participant for that Facility to reflect the maximum capabilities achieved in the re-test (after adjusting these results to the equivalent values at a temperature of 41oC and allowing for the capability provided by operation on different types of fuel), but not to exceed the number of Capacity Credits originally confirmed by AEMO for that Facility under clause 4.20 of the Market Rules in respect of the relevant Reserve Capacity Cycle [Clause 4.25.6].~~

~~5.4.2. If a Reserve Capacity re-test is conducted in accordance with step 1.10.125.4.1 of this Procedure, AEMO must determine the outcome (step 1.10.85.2.1 of this Procedure), record the results (step 1.10.95.5.1 of this Procedure) and notify the Market Participant in accordance with steps 1.10.11(a) and 1.10.11(b)~~step 5.2.23 of this Procedure or step 5.2.3-4 of this Procedure~~, as appropriate.~~

~~5.4.3. AEMO must set the number of Capacity Credits held by the relevant Market Participant for the Facility to reflect the maximum capabilities achieved in the re-test (after adjusting these results to the equivalent values at a temperature of 41°C and allowing for the capability provided by operation on different types of fuel), WHICH ARE but are not to exceed the number of Capacity Credits which must not exceed the Capacity Credits originally confirmed by AEMO for that Facility under clause section 4.20 of the WEM Rules for the relevant Reserve Capacity Cycle.~~

~~1.9.27. relevant Reserve Capacity Cycle. In the event that the Market Participant is notified by AEMO that the Capacity Credits in respect of a Facility has been reduced as a result of the Reserve Capacity Testing process, then the Market Participant may request that AEMO conduct a re-test [Clause 4.25.5].~~

~~5.4.4. The Capacity Credits must be set in accordance with under step 5.4.3 of this Procedure within two Business Days of the determination of the re-test results under step 5.4.2 of this Procedure. The Market Participant may only request a re-test once during the remaining Reserve Capacity Cycle. [Clause 4.25.5]~~

~~1.9.28. —~~

~~**1.10.** Recording and Where a Facility is tested, excluding a Demand Side Programme, the Dispatch Schedule for that Facility during the period of the test is to reflect the energy scheduled in the test [Clause 4.25.10].~~

5.5. Recording and publishing Reserve Capacity Test results

~~1.10.1.1.1. AEMO will deem a Reserve Capacity Test to be an Invalid Test if:~~

- ~~(a) 1.1.1. a Facility fails a Reserve Capacity Test when the temperature measured by the temperature method specified in the standing data for the Facility is outside of the range 0-45°C; or~~
- ~~(b) 1.1.1. AEMO considers that an error was made in the determination of the results of any Reserve Capacity Test~~

~~1.10.2.1.1. If a test is deemed to be an Invalid Test under step 1.10.18 then AEMO (in its capacity as System Management) must conduct the test again as soon as is practicable, taking into account the timelines in clauses 4.25.1, 4.25.4, 4.25.5 and 4.25.6 of the Market Rules.~~

~~1.10.3.1.1. If a test is deemed to be an Invalid Test under step 1.10.18 and another test has already been completed in accordance with steps 1.10.12 or 1.10.16 then AEMO must:~~

- ~~(a) 1.1.1. use the results of the latest test in place of the Invalid Test results; or~~
- ~~(b) 1.1.1. if the Invalid Test is no longer required, ignore the results of the latest test.~~

~~1.10.4.1.1. If a Facility cannot be tested due to restrictions imposed by the timelines in clauses 4.25.1, 4.25.4, 4.25.5 and 4.25.6 of the Market Rules, AEMO (including in its capacity as System Management) will:~~

- ~~(i) 1.1.1. in the case of the first Reserve Capacity Test not being able to be completed within the relevant Reserve Capacity Testing cycle, conduct the tests as soon as practicable in the next Reserve Capacity Testing cycle;~~
- ~~(ii) 1.1.1. in the case of the second Reserve Capacity Test not being able to be completed within 14-28 days after the first test, re-conduct the first test, in accordance with steps 1.9 and 1.10; or~~
- ~~(iii) 1.1.1. in the case of the third Reserve Capacity Test not being able to be completed within 7 days, liaise with the Market Participant to determine a period during which the third Reserve Capacity Test can be repeated.~~

1.11. Steps for the Market Participant

~~1.11.1.1.1. If a Market Participant chooses to self-schedule a test for a Demand Side Programme, it must notify AEMO no later than 2 Business Days prior to the commencement of the Trading Day during which the test will take place, advising:~~

~~(a) 1.1.1. the identity of the Demand Side Programme that will be tested;~~

~~(b) 1.1.1. the Trading Interval(s) in which the test will be conducted; and~~

~~(c) 1.1.1. the expected reduction in Demand Side Programme Load from the Relevant Demand;~~

~~1.1.1. The results of the test will only be considered by AEMO if this notification is sent.~~

~~1.11.2. If the Market Participant is contacted by AEMO with results of a Reserve Capacity Test that indicate that AEMO determined a Facility to have failed a test, a second test be conducted between 14 and 28 days from the first test [Clause 4.25.4].~~

~~1.11.3. If the Market Participant is contacted by AEMO with the results of the second Reserve Capacity Test, which indicate that AEMO determined a Facility to have failed a Reserve Capacity Test, the Market Participant will also be notified that the Capacity Credits in respect of that Facility will be reduced and the date from which the reduction will occur.~~

~~1.11.4.1.1. In the event that the Market Participant is notified by AEMO that the Capacity Credits in respect of a Facility has been reduced as a result of the Reserve Capacity Testing process, then the Market Participant may request that AEMO conduct a re-test [Clause 4.25.5].~~

~~1.11.5.1.1. The Market Participant may only request a re-test once during the remaining Reserve Capacity Cycle. [Clause 4.25.5]~~

~~1.11.6. The re-test performed at the request of the Market Participant in accordance with steps 1.11.4 and 1.11.5 should be performed by AEMO (in its capacity as System Management) within seven days of receiving the request, subject to the provisions of this Procedure.~~

~~1.11.7. Following a re-test requested by a Market Participant in accordance with steps 1.11.4 and 1.11.5, AEMO must set the number of Capacity Credits for that Facility to reflect the maximum output over two consecutive Trading Intervals during the period of the test (after adjusting these results to the equivalent values at a temperature of 41°C and allowing for the capability provided by operation on different types of fuel), but not to exceed the number of Capacity Credits originally confirmed by AEMO for that Facility in respect of the relevant Reserve Capacity Cycle. The setting of Capacity Credits must occur within 2 Business Days of the re-test result being determined.~~

~~1.11.8. If the Market Participant considers an error has been made by AEMO in the calculation of the Required Level, adjusted to the level of Capacity Credits currently held, of a Facility in either a test or by observation, it can request AEMO to review the results of the test. If AEMO determines that an error has been made then the test result will be re-determined.~~

~~1.12. Steps for AEMO to publish the results of Reserve Capacity Tests~~publishing Reserve Capacity Test results

~~5.5.1. AEMO must record the results of Reserve Capacity Tests in WEMS including:~~

- ~~(a) information regarding the conduct of the Reserve Capacity Test;~~
- ~~(b) the results of the Reserve Capacity Test;~~
- ~~(c) the determination of the outcome of the Reserve Capacity Test (passed or failed); and~~
- ~~(d) information regarding any action taken in accordance with steps 4.10.145.2.23, 5.3.1, and 5.4.3 of this Procedure, as applicable.~~

~~This information may be stored in WEMS.~~

~~1.12.1.5.5.2. Every three months AEMO must publish details of [cClause 4.25.11]:~~

- ~~(a) Facilities ~~tested~~that have undergone a Reserve Capacity Test during the preceding three months; and~~
- ~~(b) whether any of those Reserve Capacity Testtests were delayed and the reasons for the delay.~~

~~1.12.2.5.5.3. The details published under step 1.12.15.5.2 of this Procedure may~~ust~~ be published on the Market Web Site or in ~~the~~WEMS, at AEMO's discretion ~~as appropriate~~.~~

~~1.13. Steps for AEMO when setting the level of Certified Reserve Capacity and Reserve Capacity Obligation Quantities~~

~~Each year, Market Participants are required to re-certify the capacity of their Facilities (apply for Certification of Reserve Capacity). Under clause 4.11 of the Market Rules and the Market Procedure: Certification of Reserve Capacity, AEMO is required to set the level of Certified Reserve Capacity assigned to a Facility for facilities that have been tested in accordance with this Procedure. This decision is not a reviewable decision under the Market Rules.~~

- ~~1.13.1. — Each year, AEMO must use the information, data and results obtained from Reserve Capacity Tests and verification by observation when considering the level of Certified Reserve Capacity assigned to a Facility.~~
- ~~1.13.2. — AEMO may reduce the level of Certified Reserve Capacity in respect of an application for Certification of Reserve Capacity if AEMO believes the results obtained through the Reserve Capacity Tests in conjunction with the level of Certified Reserve Capacity being applied for

 - ~~(a) — constitutes a potentially limiting factor in accordance with the Reserve Capacity Procedure: Certification of Reserve Capacity; and/or~~
 - ~~(b) — if AEMO believes the level of Certified Reserve Capacity being applied for exceeds AEMO’s reasonable expectation that the amount of capacity likely to be available in accordance with clause 4.11.1(a) of the Market Rules.~~~~
- ~~1.13.3. — AEMO may use the information, data and results obtained from Reserve Capacity Tests and verification by observation when setting the Reserve Capacity Obligation Quantities in respect of that Facility in subsequent Reserve Capacity Cycles [Clause 4.25.12].~~

1.14.6. STEPS FOR AEMO FOR VERIFICATION OF A DEMAND SIDE PROGRAMME
VERIFICATION TESTS FOR DEMAND SIDE PROGRAMMES

~~1.14.1.6.1.1. In each In eEach Reserve Capacity Year, a Market Customer must undertake a Verification Test during the period specified in clause 4.10.1(f)(vi) of the WEM Rules; or for each of its registered Demand Side Programme registered to the Market Customer. Each test must be conducted in accordance with this Procedure and carried out as follows [clause 4.25A.1] registered to the Market Customer:~~

- ~~(a) within 20 Business Days of registration as notified by AEMO under clause 2.31.6 of the WEM Rules; or~~
- ~~(b) between 1 October and 30 November [Clause 4.25A.1].~~

~~6.1.2. A Market Participant Customer must notify AEMO no later than two Business Days prior to the commencement of the Trading Day during which it intends to conduct a Verification Test will take place, advising:~~

- ~~(a) the identify of the Demand Side Programme that will be tested;~~
- ~~(b) the Trading Interval(s) in which the Verification Test will be conducted; and~~
- ~~(c) the expected reduction in Demand Side Programme Load from the Relevant Demand.~~

~~If AEMO does not receive notification in accordance with this step 6.1.2, The results of the Verification Test will not only be considered by AEMO if this notification is sent provided.~~

~~(b) —~~

~~1.14.2.6.1.3. To undertake a Verification Test the Market Customer will must activate the Demand Side Programme and provide evidence satisfactory to AEMO of the Trading Intervals during which the Verification Test was conducted [cClause 4.25A.2].-~~

~~1.14.3.1.1.1. A Market Participant must notify AEMO no later than 2 Business Days prior to the commencement of the Trading Day during which a Verification Test will take place, advising:~~

- ~~(c)(a) the identify of the Demand Side Programme that will be tested;~~

~~(d)(a) the Trading Interval(s) in which the Verification Test will be conducted; and~~
~~(e)(a) the expected reduction in Demand Side Programme Load from the Relevant Demand.~~
~~The results of the Verification Test will only be considered by AEMO if this notification is sent.~~

~~4.14.4-6.1.4.~~ A Demand Side Programme will be deemed to have failed the Verification Test unless a reduction in demand equal to at least 10% of the Capacity Credits, when measured against the Demand Side Programme's Relevant Demand determined under clause 4.26.2CA of the WEM Rules, is ~~not~~ identified from the Demand Side Programme Load associated with that Demand Side Programme [~~cc~~**Clause 4.25A.3**].

~~4.14.5-6.1.5.~~ Where a Demand Side Programme fails a Verification Test AEMO must reduce the Capacity Credits assigned to the Demand Side Programme to zero from the second Trading Day following the Scheduling Day on which AEMO determines that the Verification Test was failed under clause 4.25A.3 of the WEM Rules. [~~cc~~**Clause 4.25A.4**].

~~6.1.6.~~ Where a Demand Side Programme fails a Verification Test, the relevant Market ~~Participant~~ Customer may request that a second Verification Test be undertaken. If the Demand Side Programme fails the second Verification Test then the Capacity Credits assigned to the Demand Side Programme are to remain at zero until the end of the relevant ~~Reserve~~ Capacity Year [~~cc~~**Clause 4.25A.5**].

~~7.~~ **REVIEWING RESULTS**

~~2.~~ **REVIEWING RESULTS**

~~7.1.1.~~ A Market Participant who believes that an error has been made in determining the results of an Observation Test, Reserve Capacity Test, or Verification Test, may contact AEMO to request an investigation into the results.

~~7.1.2.~~ On receiving a request under step 7.1.1 of this Procedure, AEMO must review the results of the Observation Test, Reserve Capacity Test, or Verification Test and determine, at its discretion, whether an error was made. An investigation may include, but is not limited to, the accuracy of the following:

- ~~(a)~~ inputs into the Required Level calculation, including (where relevant):
 - ~~(i)~~ the Relevant Demand calculation and any applicable Consumption Deviation Applications;
 - ~~(ii)~~ Temperature Dependence Curve; and
- ~~(b)~~ Meter Data Submissions used to calculate the results.

~~7.1.3.~~ As soon as practicable after receiving a request under step 7.1.1 of this Procedure, AEMO must inform the Market Participant of the results of the investigation , at AEMO's sole discretion, either:

- ~~(a)~~ if an error was made:
 - ~~(i)~~ its re-determination of the Observation Test, Reserve Capacity Test, or Verification Test results;

(ii) its determination that the Reserve Capacity Test or Verification Test was an Invalid Test; or

(b) if it determines no error was made, notify the Market Participant accordingly do nothing.