

# WEM Procedure: Reserve Capacity Testing

| AEMO           |
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| 10.0           |
| 1 October 2024 |
| FINAL          |
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#### Approved for distribution and use by:

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| Date:        | 26 September 2024                                            |

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# Version Release History

| Version | Effective Date    | Summary of Changes                                                                                                                                                                  |
|---------|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.0     | 21 September 2006 | Market Procedure for Reserve Capacity Testing as at Market Start                                                                                                                    |
| 2.0     | 1 June 2010       | Amended changes resulting from the Procedure Change Proposal PC_2009_10                                                                                                             |
| 3.0     | 1 October 2010    | Amended changes resulting from the Procedure Change Proposal PC_2009_10                                                                                                             |
| 4.0     | 1 October 2011    | Amended changes resulting from the Procedure Change Proposal PC_2011_05                                                                                                             |
| 5.0     | 30 November 2015  | Changes resulting from the transfer of functions from the IMO to AEMO                                                                                                               |
| 6.0     | 18 April 2017     | Changes resulting from the transfer of System Management functions to AEMO                                                                                                          |
| 7.0     | 1 August 2020     | Changes resulting from Procedure Change Proposal AEPC_2020_04                                                                                                                       |
| 8.0     | 1 October 2021    | Changes resulting from Procedure Change Proposal AEPC_2021_01                                                                                                                       |
| 9.0     | 1 October 2023    | Changes resulting from Wholesale Electricity Market Amendment (Tranches 2 and 3 Amendments) Rules 2020 and Wholesale Electricity Market Amendment (Tranche 5 Amendments) Rules 2021 |
| 10.0    | 1 October 2024    | WEM Procedure amended to define the process used by AEMO to provide Reserve Capacity Test notifications.                                                                            |

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### 1. Introduction

#### 1.1. Purpose and scope

- 1.1.1. This WEM 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).
- 1.1.2. The *Electricity Industry Act 2004* (WA), the WEM Regulations and the WEM Rules prevail over this Procedure to the extent of any inconsistency.
- 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 clause 2.9.7A, 2.9.7D or 2.9.8 of the WEM Rules, as applicable.
- 1.1.4. The purpose of this Procedure is to describe the processes to be followed in performing Reserve Capacity Tests, including the situations in which AEMO may deem a Reserve Capacity Test to be invalid **[Clause 4.25.14].**
- 1.1.5. Appendix A of this Procedure outlines the head of power clauses that this Procedure is made under, as well as other obligations in the WEM Rules covered by this Procedure.

#### 1.2. Definitions

- 1.2.1. Terms defined in the *Electricity Industry Act 2004* (WA), the WEM Regulations and the WEM Rules have the same meanings in this Procedure unless the context requires otherwise.
- 1.2.2. The following definitions apply in this Procedure unless the context requires otherwise.

| Term                                  | Definition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Invalid Test                          | A test that was completed but its results are disregarded.                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| SCADA                                 | Supervisory Control and Data Acquisition (SCADA) is a system that is used to monitor and control field device(s) at remote locations.                                                                                                                                                                                                                                                                                                                                                                   |
| Temperature Dependence<br>Curve       | A dataset showing how a Energy Producing System's (other than an Intermittent Generating System) 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:                                                                                                                                                                                                                        |
|                                       | <ul> <li>a) supported by relevant technical specifications for the Facility, as provided by the<br/>original equipment manufacturer; or</li> </ul>                                                                                                                                                                                                                                                                                                                                                      |
|                                       | <li>b) accompanied by an independent engineer's report, detailing how the data was<br/>determined or verified.</li>                                                                                                                                                                                                                                                                                                                                                                                     |
| Temperature Measurement<br>Consultant | A consultant or organisation appointed by AEMO to calibrate Temperature Measurement Systems.                                                                                                                                                                                                                                                                                                                                                                                                            |
| Temperature Measurement<br>System     | The sensors, systems and data used to measure ambient temperature at a Facility where the information is provided to AEMO through the SCADA system.                                                                                                                                                                                                                                                                                                                                                     |
| Verification by Observation           | Verification of a Non-Intermittent Generating System or Electric Storage Resource in accordance with clauses 4.25.1(a), 4.25.2(a)(i) and 4.25.2(e)(i), initiated by a Market Participant and conducted by observing the Facility or Separately Certified Component, operating at a level equivalent to its Required Level calculated in accordance with paragraph 2.3.1, as part of normal market operations determined from Meter Data Submissions and/or meter data recorded by Facility SubMetering. |

#### Table 1 Definitions



| Term                         | Definition                                                                          |
|------------------------------|-------------------------------------------------------------------------------------|
| Wholesale Electricity Market | An interface software system that AEMO uses to administer and operate the Wholesale |
| System or WEMS               | Electricity Market.                                                                 |

### 1.3. Interpretation

- 1.3.1. The following principles of interpretation apply in this Procedure unless the context requires otherwise.
  - (a) Clauses 1.3 to 1.5 of the WEM Rules apply in this Procedure.
  - (b) References to time are references to Australian Western Standard Time.
  - (c) Terms that are capitalised, but not defined in this Procedure, have the meaning given in the WEM Rules.
  - (d) A reference to the WEM Rules or WEM Procedures includes any associated forms required or contemplated by the WEM Rules or WEM Procedures.
  - (e) Words expressed in the singular include the plural and vice versa.
  - (f) A reference to a paragraph refers to a paragraph of this Procedure.
  - (g) A reference to an appendix refers to an appendix of this Procedure.
  - (h) A reference to a clause refers to a clause or section of the WEM Rules.
  - (i) References to WEM Rules in this Procedure in bold and square brackets **[Clause XXX]** are included for convenience only, and do not form part of this Procedure.
  - (j) Text located in boxes and headed as E[X] in this Procedure is included by way of explanation only and does not form part of this Procedure. The Procedure prevails to the extent of any inconsistency with the explanatory notes contained within it.
  - (k) The body of this Procedure prevails to the extent of any inconsistency with the figures, diagrams, appendices, schedules, annexures or attachments contained within this document.

#### 1.4. Related documents

1.4.1. The documents in Table 2 are associated with this Procedure.

| Reference     | Title                                                  | Location    |
|---------------|--------------------------------------------------------|-------------|
|               |                                                        |             |
| WEM Procedure | WEM Procedure: Certification of Reserve Capacity       | WEM Website |
| WEM Procedure | WEM Procedure: Notices and Communications              | WEM Website |
| WEM Procedure | WEM Procedure: Reserve Capacity Performance Monitoring | WEM Website |
| WEM Procedure | WEM Procedure: Facility Dispatch Process               | WEM Website |

#### Table 2 Related documents



### 1.5. Communications and provision of information

- 1.5.1. All communications and provision of information by a Market Participant to AEMO under this Procedure must be conducted via email, unless otherwise specified in this Procedure.
- 1.5.2. All communication and provision of information by AEMO to a Market Participant under this Procedure will be conducted via email, unless otherwise specified in this Procedure.

### 2. Preparatory steps

### 2.1. Temperature Dependence Curves

- 2.1.1. AEMO will use a Temperature Dependence Curve previously provided under clause 4.10.1(e)(i) or 4.10.1(fA)(i) for the relevant Reserve Capacity Cycle for the purposes of a Reserve Capacity Test, unless paragraph 2.1.2, 2.1.3, or 2.1.4 applies.
- 2.1.2. A Market Participant with a Non-Intermittent Generating System who has not previously provided a Temperature Dependence Curve under clause 4.10.1(e)(i) for the relevant Reserve Capacity Cycle must submit a Temperature Dependence Curve and the accompanying independent engineer's report or original equipment manufacturer's technical specifications to AEMO at least 10 Business Days before the start of the testing period in either clause 4.25.1(a)(i) or 4.25.1(a)(ii).
- 2.1.3. A Market Participant with an Electric Storage Resource who has not previously provided a Temperature Dependence Curve under clause 4.10.1(fA)(i) for the relevant Reserve Capacity Cycle must submit a Temperature Dependence Curve and the accompanying independent engineer's report or original equipment manufacturer's technical specifications to AEMO at least 10 Business Days before the start of the testing period in either clause 4.25.1(a)(i) or 4.25.1(a)(ii).
- 2.1.4. A Market Participant may update the Temperature Dependence Curve for a Facility or Separately Certified Component by submitting a new Temperature Dependence Curve and the accompanying independent engineer's report or original equipment manufacturer's technical specifications to AEMO at least 10 Business Days before the start of the relevant testing period listed in clause 4.25.1(a)(i) or 4.25.1(a)(ii).
- 2.1.5. A Market Participant may, at least 10 Business Days before the start of the relevant testing period listed in clause 4.25.1(a)(i) or 4.25.1(a)(ii), request AEMO to use a Temperature Dependence Curve provided in Standing Data where:
  - (a) the Temperature Dependence Curve is accompanied by an independent engineer's report or original equipment manufacturer's technical specifications; and
  - (b) AEMO accepts the Temperature Dependence Curve under paragraph 2.1.7 after completing its review and assessment under paragraph 2.1.6.



- 2.1.6. AEMO will review and assess the information provided in paragraph 2.1.2, 2.1.3, 2.1.4, or 2.1.5, as applicable, before the start of the relevant testing period listed in clause 4.25.1(a)(i) or 4.25.1(a)(ii), and may request additional information from the Market Participant, where necessary. AEMO's review will focus on manifest errors (for example, where the Temperature Dependence Curve is for the incorrect Facility or Separately Certified Component, exceeds the Facility or Separately Certified Component's maximum capacity, or does not cover the full temperature range required) and may include, but is not limited to:
  - (a) comparing the Temperature Dependence Curves of similar Facilities or Separately Certified Components, if available;
  - (b) confirming that the Facility or Separately Certified Component's characteristics are reflected in the Temperature Dependence Curve; and
  - (c) any other factors that AEMO considers relevant.
- 2.1.7. AEMO will accept a Temperature Dependence Curve submitted under paragraph 2.1.2, 2.1.3, or 2.1.4, as applicable, unless, after the review in paragraph 2.1.6, it identifies manifest errors in the Temperature Dependence Curve. If AEMO rejects a Temperature Dependence Curve, it must inform the Market Participant as soon as practicable and provide reasons for the rejection.
- 2.1.8. If AEMO rejects a Temperature Dependence Curve under paragraph 2.1.7, the Market Participant may provide an updated Temperature Dependence Curve, supported by an independent engineer's report or original equipment manufacturer's technical specifications, that addresses AEMO's feedback, subject to this documentation being provided at least 10 Business Days before the start of the testing period in either clause 4.25.1(a)(i) or 4.25.1(a)(ii)...
- 2.1.9. Where AEMO accepts a Temperature Dependence Curve provided under paragraph 2.1.2, 2.1.3, 2.1.4, or 2.1.8, as applicable, AEMO will upload the Temperature Dependence Curve to WEMS to be used when assessing the results of the Facility or Separately Certified Component's Verification by Observation or Reserve Capacity Test.
- 2.1.10. If the quantity of Capacity Credits assigned to a Facility or Separately Certified Component changes during a Capacity Year, AEMO will consult with the relevant Market Participant and determine whether:
  - (a) AEMO will continue to use the previously accepted Temperature Dependence Curve; or
  - (b) the Market Participant must provide a new Temperature Dependence Curve that has been determined or verified by an independent engineer.



2.1.11. Where a new Temperature Dependence Curve is provided under paragraph 2.1.10(b), AEMO will perform an assessment under paragraph 2.1.6.

#### 2.2. Temperature measurement sources

- 2.2.1. Where a Facility contains a Non-Intermittent Generating System or an Electric Storage Resource, the Market Participant must nominate a Temperature Measurement System at least 10 Business Days before submitting a Temperature Dependence Curve, unless it has previously made a nomination and this information is already stored in WEMS.
- 2.2.2. AEMO will use the Temperature Measurement System nominated under paragraph 2.2.1 when determining the ambient temperature at the site of an Intermittent Generating System or an Electric Storage Resource.
- 2.2.3. Where the Market Participant does not notify AEMO of an appropriate Temperature Measurement System under paragraph 2.2.1, AEMO will use the Temperature Measurement System stored in Standing Data.
- 2.2.4. AEMO may appoint a Temperature Measurement Consultant at any time to calibrate the Temperature Measurement Systems associated with each Energy Producing System where the Market Participant nominates to use SCADA as the temperature measurement source under paragraph 2.2.1 or SCADA is the Temperature Measurement System identified in Standing Data.
- 2.2.5. If AEMO requires calibration of a Facility's Temperature Measurement System, AEMO will contact the relevant Market Participant in writing with the:
  - (a) date, time and location of the proposed calibration;
  - (b) details of the Temperature Measurement Consultant who will conduct the calibration; and
  - (c) the Temperature Measurement Consultant's costs associated with the proposed calibration.
- 2.2.6. Within five Business Days of receiving AEMO's notification under paragraph 2.2.5, the Market Participant must contact AEMO to:
  - (a) accept the proposed date and time; or
  - (b) propose alternative dates and times, which must be within 10 Business Days of the original request date, subject to AEMO's approval.
- 2.2.7. AEMO will consider the dates and times proposed under paragraph 2.2.6(b) and notify the Market Participant of the selected date and time for the calibration to occur.
- 2.2.8. The Market Participant must comply with AEMO's calibration requirement, by facilitating the calibration by the Temperature Measurement Consultant at AEMO's proposed date and time or an alternative date and time agreed with AEMO, and must pay the costs associated with the proposed calibration.
- 2.2.9. AEMO will provide the results of the temperature calibration to the Market Participant within five Business Days of receiving the results from the Temperature Measurement Consultant.



### 2.3. Required Level calculation

2.3.1. AEMO will use the following equation, developed in accordance with clause 4.11.3BA, to determine the Required Level in Trading Interval t for a Non-Intermittent Generating System assigned Certified Reserve Capacity using the principles under clause 4.11.1(a), or an Electric Storage Resource assigned Certified Reserve Capacity calculated in accordance with clause 4.11.3:

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

where the variables are defined in the table below:

| Variable                   | Units | Definition                                                                                                                                    |
|----------------------------|-------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| CC(t)                      | MW    | The number of Capacity Credits associated with the Non-Intermittent Generating System or<br>Electric Storage Resource for Trading Interval t. |
| TDC(Temp(t))               | MW    | The output indicated in the Temperature Dependence Curve at temperature Temp(t).                                                              |
| Temp(t)                    | °C    | The temperature during Trading Interval t measured according to the Temperature Measurement System specified in WEMS for the Facility.        |
| <i>TDC</i> (41° <i>C</i> ) | MW    | The output indicated in the Temperature Dependence Curve at a temperature of 41°C.                                                            |

2.3.2. AEMO will use the following equation, developed in accordance with clause 4.11.3BB, to determine the Required Level in Trading Interval t on Trading Day d for a Demand Side Programme assigned Certified Reserve Capacity under clause 4.11.1(j):

#### RD(d) - CC(t)

where the variables are defined in the table below:

| Variable | Units | Definition                                                                               |
|----------|-------|------------------------------------------------------------------------------------------|
| RD(d)    | MW    | The Relevant Demand for Trading Day d, as determined in accordance with clause 4.26.2CA. |
| CC(t)    | MW    | The number of Capacity Credits associated with the Facility for Trading Interval t.      |



# 3. Verification by Observation for Non-Intermittent Generating Systems or Electric Storage Resources

- 3.1.1. The verification referred to in clause 4.25.1 may be achieved by a Non-Intermittent Generating System or Electric Storage Resource successfully demonstrating Verification by Observation during a testing period listed in clause 4.25.1(a) prior to the date specified in clause 4.25.2B(b)(i) or 4.25.2B(b)(ii), as applicable.
- 3.1.2. When determining whether a Separately Certified Component has successfully demonstrated Verification by Observation, AEMO will use:
  - the most recent Meter Data Submissions available, where the Separately Certified Component is part of a Facility that is not required to install Facility Sub-Metering under clause 2.29.12; or
  - (b) the most recent Meter Data Submissions available, including meter data recorded by Facility Sub-Metering and provided to AEMO under clause 4.25.2A, where the Separately Certified Component is part of a Facility that is required to install Facility Sub-Metering under clause 2.29.12.
- 3.1.3. A Market Participant who provides meter data recorded by Facility Sub--Metering under clause 4.25.2A must email the data in Microsoft Excel (.xlsx) or comma delimited (.csv) format to wa.capacity@aemo.com.au.
- 3.1.4. AEMO may conduct a Verification by Observation assessment through an automated process in WEMS.
- 3.1.5. AEMO will determine that a Non-Intermittent Generating System has demonstrated Verification by Observation if the output for at least two consecutive Trading Intervals is:
  - (a) at or above the Required Level calculated in accordance with paragraph 2.3.1 and the ambient temperature measured at the site is less than or equal to 45°C during the Trading Interval; or
  - (b) 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.
- 3.1.6. AEMO will determine that an Electric Storage Resource has demonstrated Verification by Observation if its average output is equal to or exceeds its average Required Level across the Electric Storage Resource Obligation Duration.



- 3.1.7. AEMO will compile and maintain a list of Facilities or Separately Certified Components that have successfully completed Verification by Observation and their results. This list may be maintained in WEMS.
- 3.1.8. If AEMO requests a Reserve Capacity Test for a Facility or Separately Certified Component in accordance with paragraph 5, AEMO will provide the Market Participant with a summary of AEMO's Verification by Observation assessments for the Facility or Separately Certified Component in the relevant testing period. This summary may be provided through WEMS.

### 4. Verification Tests for Demand Side Programmes

- 4.1.1. A Market Participant must notify AEMO at least two Business Days prior to the commencement of the Trading Day during which it intends to conduct a Verification Test under clause 4.25A.1, advising:
  - (a) the identity of the Demand Side Programme that will be tested; and
  - (b) the Trading Interval(s) in which the Verification Test will be conducted.
- 4.1.2. If AEMO does not receive notification in accordance with paragraph 4.1.1, the test is deemed not to be conducted in accordance with this Procedure and the results of the Verification Test will not be considered.
- 4.1.3. The notification in paragraph 4.1.1 must be provided through WEMS.
- 4.1.4. If a Demand Side Programme fails a Verification Test and Capacity Credits are reduced to zero, the Market Participant will be notified in the form of an email.
- 4.1.5. A Market Participant may request that a second Verification Test be undertaken in accordance with clause 4.25A.5 and following the steps in paragraph 4.1.1.

### 5. Reserve Capacity Tests

### 5.1. Conducting Reserve Capacity Tests

- 5.1.1. AEMO must conduct Reserve Capacity Tests in accordance with the requirements in clause 4.25.2B and 4.25.9.
- 5.1.2. If a Facility or a Separately Certified Component cannot be tested due to restrictions imposed by clause 4.25.3A, AEMO will:
  - (a) in the case of the first Reserve Capacity Test not being able to be completed within the relevant Reserve Capacity testing period outlined in clause 4.25.1, conduct a Reserve Capacity Test as soon as practicable in the next Reserve Capacity testing period; or
  - (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 in accordance with clause 4.25.4, conduct the first Reserve Capacity Test again as soon as practicable and, if required, conduct a second Reserve Capacity Test in accordance with the timeframe specified in clause 4.25.4.



- 5.1.3. In conducting a Reserve Capacity Test, AEMO will provide the notification required under clause 4.25.9(h) in the form of an email to the Market Participant. The email will include the specific Trading Day and Trading Intervals that the Reserve Capacity Test is to be conducted over, as well as other details required by clause 4.25.9(h). AEMO may also provide additional notification via a phone call to the Market Participant.
- 5.1.4. A Demand Side Programme may be exempt from being subject to a Reserve Capacity Test if AEMO has verified that the Demand Side Programme has operated at its Required Level through operational dispatch under clauses 4.25.2(b).
- 5.1.5. Following verification under paragraph 5.1.4, AEMO will provide notification by email to the Market Participant confirming the Demand Side Programme's exemption from a Reserve Capacity Test.

#### 5.2. Assessing the results of Reserve Capacity Tests

- 5.2.1. For a Facility that is not required to install Facility Sub-Metering, within 10 Business Days of AEMO receiving Meter Data Submissions and temperature data for the Facility, if applicable, AEMO will determine the results of the Reserve Capacity Test in accordance with paragraph 5.2.3 or 5.2.4, as applicable.
- 5.2.2. For a Facility that is required to install Facility Sub-Metering, within 10 Business Days of AEMO receiving:
  - (a) meter data recorded by Facility Sub-Metering and provided by the Market Participant under clause 4.25.2C;
  - (b) Meter Data Submissions for the Facility; and
  - (c) temperature data for the Facility;

AEMO will determine the results of a Reserve Capacity Test in accordance with paragraph 5.2.3 or 5.2.4, as applicable.

- 5.2.3. AEMO will determine that a Non-Intermittent Generating System has passed a Reserve Capacity Test if the output for at least two consecutive Trading Intervals during the period of the test is:
  - (a) at or above the Required Level calculated in accordance with paragraph 2.3.1 and the ambient temperature measured at the site is less than or equal to 45°C during the Trading Interval; or
  - (b) 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.
- 5.2.4. AEMO will determine that an Electric Storage Resource has passed a Reserve Capacity Test if its average output is equal to or exceeds its average Required Level across the Electric Storage Resource Obligation Duration.
- 5.2.5. AEMO will determine that a Demand Side Programme has passed a Reserve Capacity Test if its Demand Side Programme Load is at, or below, the Required Level, calculated in accordance



with paragraph 2.3.2, for at least two consecutive Trading Intervals during the period of the Test.

- 5.2.6. If AEMO does not determine that a Facility has passed a Test under paragraphs 5.2.3, 5.2.4, or 5.2.5, then it is determined that the Facility has failed the Test.
- 5.2.7. For the purposes of determining the results of a Reserve Capacity Test, the period of the Test includes any Trading Intervals identified in the notification issued under clause 4.25.9(h).
- 5.2.8. For the purposes of determining the results of a Reserve Capacity Test for a Demand Side Programme under paragraph 5.2.5, AEMO will measure the maximum level of reduction in each Trading Interval.
- 5.2.9. If a Facility or Separately Certified Component fails a Reserve Capacity Test, AEMO will:
  - (a) notify the Market Participant that the Facility or Separately Certified Component has failed the Reserve Capacity Test;
  - (b) provide the Market Participant with a copy of the results of the Test; and
  - (c) where the Reserve Capacity Test was a first Test, re-test the Facility or Separately Certified Component, subject to the limitations in clauses 4.25.3A, 4.25.4, and 4.25.9.
- 5.2.10. If a Facility or Separately Certified Component passes the Reserve Capacity Test, AEMO will:
  - (a) notify the Market Participant that the Facility or Separately Certified Component has passed the Reserve Capacity Test; and
  - (b) provide a copy of the results of the Test.
- 5.2.11. The notifications under paragraphs 5.2.9 and 5.2.10 may be provided through WEMS.
- 5.2.12. AEMO will deem a Reserve Capacity Test to be an Invalid Test if:
  - (a) the temperature measured by the Temperature Measurement System specified in WEMS for the Facility is outside of the range 0°C to 45°C, and paragraph 5.2.3(b) does not apply;
  - (b) AEMO considers that there is an error in the data used to determine the results of the Test, such an error or errors in Meter Data Submissions, including Meter Data Submissions from Facility Sub-Metering;
  - (c) the output of a Facility was reduced to correct any over-frequency events;
  - (d) the Facility was constrained during the period of the Test because of an Outage of an item of equipment that is part of a Network; or
  - (e) AEMO, in its sole discretion, considers that an error was made in the conduct of a Reserve Capacity Test.
- 5.2.13. If a Reserve Capacity Test is deemed to be an Invalid Test under paragraph 5.2.12, then AEMO will:
  - (a) re-conduct the Reserve Capacity Test as soon as practicable in accordance with paragraph 5.1, with consideration to the timelines in clauses 4.25.1, 4.25.4, and 4.25.5; or



- (b) use the results of the latest Reserve Capacity Test in place of the Invalid Test, where another Reserve Capacity Test has already been completed in accordance with paragraph 5.1.1.
- 5.2.14. Where a Demand Side Programme fails a first Reserve Capacity Test and the relevant Market Participant does not provide a notice to AEMO under clauses 4.25.4G and 4.25.4H, AEMO will re-test the Demand Side Programme in accordance with clause 4.25.4, subject to the limitations in clauses 4.25.3A, 4.25.4, and 4.25.9.

### 5.3. Capacity Credit reductions

- 5.3.1. AEMO must determine the results of the second Reserve Capacity Test and notify the Market Participant in accordance with the process described in paragraph 5.2.
- 5.3.2. If a Facility or Separately Certified Component fails a second Reserve Capacity Test, as determined under paragraph 5.2.3 or 5.2.4, AEMO must notify the Market Participant that the Capacity Credits assigned to that Facility or Separately Certified Component will be reduced and:
  - the quantity that the Capacity Credits will be reduced to in accordance with clause
     4.25.4; and
  - (b) the effective date for the reduction.
- 5.3.3. Where a Market Participant does not provide Meter Data Submissions from Facility Sub-Metering for either the first or second Reserve Capacity Test by the time determined under clause 4.25.2C, AEMO will notify the Market Participant that the Capacity Credits assigned to the relevant Facility or Separately Certified Component will be reduced to zero and the effective date for the reduction.
- 5.3.4. The notifications in paragraphs 5.3.1, 5.3.2, and 5.3.3 may be provided through WEMS.

### 5.4. Reserve Capacity re-test under clause 4.25.5

- 5.4.1. If a Reserve Capacity re-test is conducted in accordance with clause 4.25.5, AEMO must:
  - (a) determine the outcome in accordance with paragraph 5.2.3 or 5.2.4;
  - (b) record the results under paragraph 5.5.1; and
  - (c) notify the Market Participant in accordance with paragraph 5.2.9 or 5.2.10.
- 5.4.2. After a re-test is conducted in accordance with clause 4.25.5, the number of Capacity Credits to be assigned to a Facility or Separately Certified Component will be set under clause 4.25.6 within two Business Days of the determination of the re-test results under paragraph 5.4.1.

### 5.5. Recording and publishing Reserve Capacity Test results

- 5.5.1. AEMO will record the following about Reserve Capacity Tests:
  - (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 clauses 4.25.2D, 4.25.4, or 4.25.6, as applicable.
- 5.5.2. The information recorded under paragraph 5.5.1 may be recorded in WEMS.
- 5.5.3. AEMO will publish the details required by clause 4.25.11 on the WEM Website.

### 6. Reviewing results

- 6.1.1. A Market Participant who considers that an error has been made in determining the results of Verification by Observation, a Reserve Capacity Test, or a Verification Test, may contact AEMO to request an investigation into the results.
- 6.1.2. On receiving a request under paragraph 6.1.1, AEMO will review the results of the Verification by Observation, Reserve Capacity Test, or Verification Test, as applicable, and will determine, at its discretion, whether an error was made. An investigation may include, but is not limited to, review of 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; and
    - (ii) the Temperature Dependence Curve; and
    - (iii) temperature data obtained by AEMO; and
  - (b) Meter Data Submissions, including from Facility Sub-Metering, used to calculate the results.
- 6.1.3. As soon as practicable after receiving a request under paragraph 6.1.1, AEMO will inform the Market Participant of the results of the investigation as follows:
  - (a) if an error was made:
    - (i) its re-determination of the Verification by Observation, Reserve Capacity Test, or Verification Test results, as applicable; or
    - (ii) its determination that the Reserve Capacity Test or Verification Test was an Invalid Test; and
  - (b) otherwise that it has determined that no error was made.
- 6.1.4. Where AEMO identifies that it has made an error in determining the results of a Verification by Observation, Reserve Capacity Test, or Verification Test, AEMO will:
  - (a) re-determine the Verification by Observation, Reserve Capacity Test, or Verification Test results, as applicable;
  - (b) if necessary, revise the number of Capacity Credits associated with the Facility or Separately Certified Component, where the error related to a Reserve Capacity Test conducted under clause 4.25.4; and



(c) notify the Market Participant of the re-determination under paragraph 6.1.4(a), and, if necessary, of the revised number of Capacity Credits assigned under paragraph 6.1.4(b).



## Appendix A. Relevant clauses of the WEM Rules

Table 3 details:

- (a) the head of power clauses in the WEM Rules under which the Procedure has been developed; and
- (b) each clause in the WEM Rules requiring an obligation, process or requirement be documented in a WEM Procedure, where the obligation, process or requirement has been documented in this Procedure.

Table 3 Relevant clauses of the WEM Rules

| Clause  |  |
|---------|--|
| 4.25.14 |  |