



WEM Procedure: Reserve Capacity Security

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| <u>7.0</u> | <u>1 October 2023</u> | <u>Amendments to WEM Procedure resulting from Wholesale Electricity Market Amendments (Tranche 2 and 3 Amendments) Rules 2020 and Wholesale Electricity Market Amendment (Tranche 5 Amendments) Rules 2021</u> |

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1. Introduction

1.1. Purpose and scope

- 1.1.1. This WEM Procedure: Reserve Capacity Security (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 outline processes for:
- (a) determining Reserve Capacity Security **[Clause 4.13.8(a)]**;
 - (b) assessing persons against the Acceptable Credit Criteria **[Clause 4.13.8(b)]**;
 - (c) Reserve Capacity Security arrangements, including:
 - (i) the form of acceptable guarantees and bank undertakings **[Clause 4.13.8(c)(i)]**;
 - (ii) where and how it will hold Security Deposits and how the costs and fees of holding Security Deposits will be met **[Clause 4.13.8(c)(ii)]**;
 - (iii) the circumstances that may require Reserve Capacity Security to be replaced for the purposes of clause 4.13.4 **[Clause 4.13.8(c)(iiA)]**; and
 - (iv) the application of monies drawn from Reserve Capacity Security in respect of amounts payable by the relevant Market Participant to AEMO under clause 4.13.11A **[Clause 4.13.8(c)(iii)]**;
 - (d) other matters relating to section 4.13 **[Clause 4.13.8(d)]**;
 - (e) determining DSM Reserve Capacity Security **[Clause 4.13A.23(a)]**;
 - (f) assessing persons against the Acceptable Credit Criteria **[Clause 4.13A.23(b)]**;
 - (g) DSM Reserve Capacity Security arrangements, including:
 - (i) the form of acceptable guarantees and bank undertakings **[Clause 4.13A.23(c)(i)]**;
 - (ii) where and how it will hold Security Deposits and how the costs and fees of holding Security Deposits will be met **[Clause 4.13A.23(c)(ii)]**;
 - (iii) The circumstances that may require DSM Reserve Capacity Security to be replaced for the purposes of clause 4.13A.12 **[Clause 4.13A.23(c)(iii)]**; and
 - (iv) the application of monies drawn from DSM Reserve Capacity Security in respect of amounts payable by the relevant Market Participant to AEMO under clause 4.13A.16 **[Clause 4.13A.23(c)(iv)]**; and
 - (h) requests under clause 4.13A.18, including:
 - (i) how AEMO will make a determination on whether to accept or decline a request under clause 4.13A.19 **[Clause 4.13A.23(d)(i)]**;

- (ii) the matters AEMO may take into account **[Clause 4.13A.23(d)(ii)]**;
 - (iii) the evidence a Market Participant will be required to provide in support of a request **[Clause 4.13A.23(d)(iii)]**; and
 - (iv) if AEMO declines a request, that AEMO will be required to provide reasons to the relevant Market Participant **[Clause 4.13A.23(d)(iv)]**; and
 - (i) any other matters relating to this section 4.13A **[Clause 4.13A.23(e)]**.
- 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.

Table 1 Definitions

| Term | Definition |
|---|--|
| Facility Upgrade | Either: <ul style="list-style-type: none"> a) physical works that have increased the nameplate capacity of a Facility and were completed after the date and time specified in clause 4.1.11 for the previous Reserve Capacity Cycle; or b) works expected to be completed that will increase the nameplate capacity or available capacity of a Facility, which is yet to be demonstrated through normal market operations or a Reserve Capacity Test. |
| Security | Refers to either: <ul style="list-style-type: none"> • DSM Reserve Capacity Security; or • Reserve Capacity Security. |
| Significant Maintenance | Works deemed significant by AEMO in its sole discretion, the scope and duration of which represent a risk for the late or failed return to service of the Facility, such that it would affect the Facility's ability to meet its Reserve Capacity Obligations. Examples of significant maintenance include, but are not limited to, major refurbishments of a Facility, and circumstances where major repairs or reconstruction of a Facility are required. |
| Temperature Dependence Curve | A dataset showing how an 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 style="list-style-type: none"> a) supported by relevant technical specifications for the Facility, as provided by the original equipment manufacturer; or b) accompanied by an independent engineer's report, detailing how the data was determined or verified. |
| Wholesale Electricity Market System or WEMS | An interface software system that AEMO uses to administer and operate the Wholesale 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.

Table 2 Related documents

| Reference | Title | Location |
|-------------------------------|---|-----------------------------|
| WEM Procedure | WEM Procedure: Certification of Reserve Capacity | WEM Website |
| WEM Procedure | WEM Procedure: Declaration of Bilateral Trades | WEM Website |
| WEM Procedure | WEM Procedure: Prudential Requirements | WEM Website |
| WEM Procedure | WEM Procedure: Reserve Capacity Testing | WEM Website |
| Template | Proforma deeds for: <ul style="list-style-type: none"> • Bank guarantees (also used for bank undertaking); and • Security Deposits. | WEM Website |
| Template | Contact details for bank guarantee or bank undertaking | WEM Website |
| Template | Change of contact details for bank guarantee or bank undertaking | WEM Website |
| Guideline | List of entities that meet the Acceptable Credit Criteria | WEM Website |
| Template | Acceptable Credit Criteria application | WEM Website |

- 1.4.2. A Market Participant wishing to use any template listed in Table 2 must ensure that it downloads the current version from the WEM Website.
- 1.4.3. If AEMO amends and publishes a template listed in Table 2 prior to a Market Participant's provision of Security under this Procedure, AEMO will refer to the latest amended and published version of that template to assess compliance of the Security.

1.5. Communications and provision of information

- 1.5.1. All communication 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. Modification of timeframes

- 2.1.1. AEMO (in its sole discretion) may modify or extend a date or time in this Procedure, as a result of modifying or extending a date or time under clause 4.1.1C or to the extent permitted under the WEM Rules.
- 2.1.2. If AEMO extends a date or time under paragraph 2.1.1, then it will publish on the WEM Website:
 - (a) notice of the modified or extended date or time; and
 - (b) the effective date or time of any modification or extension under paragraph 2.1.1.

3. Providing and processing Reserve Capacity Security

3.1. Determining Reserve Capacity Security

- 3.1.1. Clauses 4.13.2(a) and 4.28C.9 outline the determination of the amount of Reserve Capacity Security.

3.2. Notification requirements

- 3.2.1. The notifications in clause 4.9.9(c) and paragraph 3.2.2 will be made via WEMS, or another method determined by AEMO.
- 3.2.2. For Early Certified Reserve Capacity assigned under paragraph 4.28C, and by the date and time specified in clause 4.1.12 of the Reserve Capacity Cycle that AEMO assigns Early Certified Reserve Capacity, AEMO may notify the relevant Market Participant of:
 - (a) the amount of any Reserve Capacity Security required under clause 4.13.1, calculated in accordance with clause 4.28C.9; and
 - (b) the date by which the Market Participant must provide the Reserve Capacity Security, which is the date determined in accordance with clause 4.28C.8.

3.3. Types of Security

- 3.3.1. A Market Participant must provide Security in the form of a guarantee, bank undertaking, or Security Deposit.
- 3.3.2. A Market Participant must provide and maintain current contact details for the Security Provider with AEMO.
- 3.3.3. A Market Participant must update the contact details provided under paragraph 3.3.2 if they are no longer accurate by completing the change of contact details form on the WEM Website, referenced in Table 2, and emailing it to wa.accounts@aemo.com.au.
- 3.3.4. A Market Participant must ensure that its Reserve Capacity Security will not cease to have effect earlier than 30 November of Year 4 of the relevant Reserve Capacity Cycle.

3.4. Submitting a guarantee or bank undertaking

- 3.4.1. A Market Participant providing Security in the form of a guarantee or bank undertaking must submit a signed original hard copy to AEMO (in person or by courier, requiring a signature on receipt), or a scanned copy of the original document emailed to wa.capacity@aemo.com.au. The guarantee or bank undertaking must be in the template published by AEMO, listed in Table 2, and for the amount determined in accordance with clause 4.13.2, 4.13A.2, 4.13.4A, or 4.28C.9 as applicable.
- 3.4.2. AEMO will reject a guarantee or bank undertaking that does not meet the criteria in paragraph 3.4.1 or clauses 4.13.5 or 4.13A.6.
- 3.4.3. A Market Participant who wishes to provide Security from a provider who is not on the list of entities meeting the Acceptable Credit Criteria must follow the process outlined in paragraph 4.1 of the WEM Procedure: Prudential Requirements, reading all references to Credit Support as references to Security, prior to submitting a guarantee or bank undertaking.
- 3.4.4. In addition to the guarantee or bank undertaking document required under paragraph 3.4.1, a Market Participant must provide:
 - (a) a completed contact details form, located on the WEM Website, and referenced in Table 2, which includes the details of at least two representatives for the Market Participant, and two representatives for the Security Provider; and
 - (b) any instructions or procedures that AEMO is required to follow when drawing upon the Security.

3.4.5. If a Market Participant provides a scanned copy of a bank guarantee or bank undertaking under paragraph 3.4.1, it must deliver the original hard copy (in person or by courier, requiring a signature on receipt) within 20 Business Days of the deadline specified in clause 4.1.13 or the date determined in accordance with clause 4.28C.8, as applicable.

3.5. Submitting a Security Deposit

3.5.1. A Market Participant who intends to provide Security in the form of a Security Deposit must request, in writing, AEMO's agreement to accept a Security Deposit at least five Business Days before either:

- (a) for Certified Reserve Capacity, the date and time specified in clause 4.1.13; or
- (b) for Early Certified Reserve Capacity, the date determined in accordance with clause 4.28C.8.

3.5.2. AEMO will advise the Market Participant in writing whether a Security Deposit is acceptable and any related terms or conditions on which the Security Deposit must be provided to AEMO within one Business Day of receipt of the request under paragraph 3.5.1.

3.5.3. If AEMO advises that a Security Deposit is unacceptable under paragraph 3.5.2, the Market Participant must provide Security in the form of a guarantee or bank undertaking, in accordance with paragraph 3.4.

3.5.4. If AEMO advises that a Security Deposit is acceptable under paragraph 3.5.2, the Market Participant must submit a signed original hard copy (in person or by courier, requiring a signature on receipt), or a scanned copy of the original document emailed to wa.capacity@aemo.com.au, of a Security Deposit deed to AEMO by either:

- (a) for Certified Reserve Capacity, the date and time specified in clause 4.1.13; or
- (b) for Early Certified Reserve Capacity, the date determined in accordance with clause 4.28C.8.

3.5.5. The Security Deposit deed provided under paragraph 3.5.4 must be:

- (a) for an amount determined in accordance with clause 4.13.2, 4.13A.2, 4.13A.4, or 4.28C.9, as applicable;
- (b) in the form prescribed by AEMO, listed in Table 2 and available on the WEM Website; and
- (c) duly executed by the Market Participant.

3.5.6. A Market Participant providing Security in the form of a Security Deposit must provide the amount of the Security in cleared funds to AEMO's nominated bank account by either:

- (a) for Certified Reserve Capacity, the date and time specified in clause 4.1.13; or
- (b) for Early Certified Reserve Capacity, the date determined in accordance with clause 4.28C.8.

- 3.5.7. If a Market Participant provides an electronic copy of a Security Deposit deed, it must deliver the original hard copy (in person or by courier, requiring a signature on receipt) within 20 Business Days of the deadline specified in clause 4.1.13 or the date determined in accordance with clause 4.28C.8, as applicable.
- 3.5.8. AEMO will sign the Security Deposit deed, either electronically or in hard copy, and return a copy to the Market Participant as soon as practicable after confirming that the Security Deposit deed is compliant with paragraphs 3.5.4 and 3.5.5.

3.6. AEMO's assessment of the Security

- 3.6.1. Once AEMO has received:
- (a) completed documentation required under paragraph 3.4 or paragraph 3.5 from a Market Participant;
 - (b) any additional information requested under paragraph 3.6.2; or
 - (c) re-submitted documentation under paragraph 3.6.6;
- AEMO will, within three Business Days, review the Security's compliance with either clause 4.13.5 or 4.13A.6, as relevant, and with AEMO's template listed in Table 2.
- 3.6.2. AEMO may request more information from the Market Participant to support its Security documentation, specifying a time and date for the information to be provided, which must allow sufficient time for AEMO to complete its assessment and notify the Market Participant of the outcome within three Business Days, as required under paragraph 3.6.5.
- 3.6.3. A Market Participant may, but is not obliged to, provide additional supporting information by the time and date specified by AEMO under paragraph 3.6.2.
- 3.6.4. If a Market Participant does not provide additional information requested under paragraph 3.6.2 by the time and date specified by AEMO, AEMO will assess the compliance of the Security using the original submission.
- 3.6.5. AEMO will notify the Market Participant of the results of its compliance assessment in relation to the Security under paragraphs 3.6.1 to 3.6.4, within three Business Days of receiving complete documents under paragraph 3.4 or paragraph 3.5, or after receiving additional information under paragraph 3.6.3. If AEMO assesses the Security as non-compliant with either the WEM Rules or this Procedure, AEMO's notification to the Market Participant will include its reasons for determining the non-compliance.
- 3.6.6. If a Market Participant receives a notification, under paragraph 3.6.5, that a Security, provided under paragraph 3.4 or 3.5, is non-compliant, it must re-submit a compliant Security before either:
- (a) for Certified Reserve Capacity, the date and time specified in clause 4.1.13; or
 - (b) for Early Certified Reserve Capacity, the date determined in accordance with clause 4.28C.8.

- 3.6.7. Following a notification of non-compliance under paragraph 3.6.6, if the Market Participant fails to submit a compliant Security before the date and time specified in paragraph 3.6.6(a) or 3.6.6(b) (as relevant), the Facility or Facility Upgrade's Certified Reserve Capacity or Early Certified Reserve Capacity will lapse and the provisions of paragraph 3.7 will apply.
- 3.6.8. Once AEMO has received the original hard copy under paragraph 3.4.1, 3.4.5, 3.5.4, or 3.5.7, it will place the guarantee, bank undertaking, or Security Deposit deed in a bank safe deposit box as soon as practicable.
- 3.6.9. If the Security is a Security Deposit, AEMO will register one or more security interests on the Personal Property Securities Register in accordance with the *Personal Property Securities Act 2009* (Cth) within 10 Business Days of accepting the original or electronic Security Deposit deed under paragraph 3.6.5.

3.7. Failure to provide Security

- 3.7.1. Where Certified Reserve Capacity or Early Certified Reserve Capacity lapses under clauses 4.13.9, 4.13A.14 or 4.28C.8A, AEMO will notify the Market Participant within five Business Days that:
- (a) the Certified Reserve Capacity or Early Certified Reserve Capacity has lapsed; and
 - (b) the Facility or Facility Upgrade will not be assigned any Capacity Credits.

4. Holding and replacing Security

4.1. Holding Security Deposits and associated costs

- 4.1.1. If AEMO receives a Security Deposit in accordance with paragraph 3.5, it must:
- (a) invest the amount of the Security Deposit on behalf of the relevant Market Participant; and
 - (b) maintain individual accounts for each Market Participant's Security Deposits, which are separate from any accounts held by AEMO in relation to its operating funds.
- 4.1.2. AEMO may provide a monthly statement to a Market Participant of the interest earned at the AEMO Deposit Rate and the deduction of any accrued costs and fees.
- 4.1.3. AEMO will deduct any liabilities and expenses incurred, including bank fees and charges and the cost of registering security interests on the Personal Property Securities Register in accordance with clause 4.13.6.

4.2. Replacing Security

- 4.2.1. For the purposes of clauses 4.13.4 and 4.13A.12, circumstances that may require replacement Security include, but are not limited to:
- (a) existing Security is due to expire;
 - (b) existing Security is no longer current or valid;
 - (c) the Security Provider no longer meets any one of the Acceptable Credit Criteria;

- (d) the Security Provider ceases to, or threatens to cease to, continue to provide Security for the Market Participant; or
 - (e) the Security Provider becomes insolvent or is dissolved.
- 4.2.2. A Market Participant requiring an extension to the deadline in either clause 4.13.4(c) or 4.13A.12(c), as applicable, must request the extension from AEMO in writing.
- 4.2.3. AEMO may, in its absolute discretion, approve or reject a Market Participant's request under paragraph 4.2.2, and will notify the Market Participant of its decision as soon as practicable.
- 4.2.4. In addition to the circumstances requiring replacement Security under paragraph 4.2.1, a Market Participant may replace its Security (for example, replacing a Security Deposit with a bank undertaking) by notifying AEMO in writing of its intention prior to the replacement.
- 4.2.5. A Market Participant must include the following in its notification provided under paragraph 4.2.4:
 - (a) the type of replacement Security to be provided;
 - (b) evidence that the replacement Security will comply with clause 4.13.5 or clause 4.13A.6, as relevant; and
 - (c) the date on which the replacement Security arrangement will be provided to AEMO.

4.3. Recalculation of the amount of Security

- 4.3.1. Reserve Capacity Security may be recalculated under clause 4.13.2A, when the quantity of Capacity Credits assigned to a Facility under clause 4.20.5A(a) is less than the quantity of Certified Reserve Capacity that can be traded bilaterally under clause 4.14.9.
- 4.3.2. In respect of a Reserve Capacity Cycle, after the time and date referred to in clause 4.1.21¹, a Market Participant may apply to AEMO for a recalculation of the amount of DSM Reserve Capacity Security required to be held for a Demand Side Programme under clauses 4.13A.1 or 4.13A.4, as applicable **[Clause 4.13A.8]**.
- 4.3.3. If the recalculated amount of Security, determined under clauses 4.13.2(b), 4.13A.1(a)(ii), or set under clause 4.13A.4, is the same as the original amount calculated under clause 4.13.2, 4.13A.2, 4.13A.4, or 4.28C.9, as applicable, AEMO must notify the Market Participant accordingly within 10 Business Days of receiving the request under clause 4.13.2A or 4.13A.8.

5. Returning Reserve Capacity Security

5.1. Eligibility and timing for returning Reserve Capacity Security

- 5.1.1. For the purposes of clause 4.13.13(a), the Required Level is calculated in accordance with paragraph 5.2.1, [5.2.3](#), [5.2.4](#), or [5.2.5](#), as applicable.
- 5.1.2. AEMO must use Meter Data Submissions in making a determination under clause 4.13.13(a) or clause 4.13.10(a).
- 5.1.3. Where AEMO receives an application made under clause 4.13.13, it must, within 10 Business Days:
 - (a) determine whether the need to maintain Reserve Capacity Security has ceased **[Clause 4.13.14(a)]**;
 - (b) notify the Market Participant of its determination **[Clause 4.13.14(b)]**;
 - (c) if the Reserve Capacity Security is a Security Deposit that is no longer required to be held, return the Security Deposit (plus interest earned) **[Clause 4.13.14(c)]**; and
 - (d) if the Reserve Capacity Security is not a Security Deposit and is no longer required to be held, notify the Security Provider that AEMO relinquishes any rights to draw on the Reserve Capacity Security **[Clause 4.13.14(d)]**.
- 5.1.4. If a Market Participant that provides Reserve Capacity Security in respect of a Facility (except for a Demand Side Programme):
 - (a) either:
 - (i) operates the Facility at a level which is at least equivalent to its Required Level, adjusted to 90 percent of the level of Capacity Credits specified in clause 4.20.5A, in at least two Trading Intervals before the end of the relevant Capacity Year; or

¹ Clause 4.13A.8 references clause 4.1.23. This is a clear manifest error. The intended reference (clause 4.1.21) is used in this Procedure.

- (ii) provides AEMO with a report under clause 4.13.10C, which specifies that the Facility can operate at a level which is at least equivalent to its Required Level, adjusted to 90 percent of the Capacity Credits specified in clause 4.20.5A; and

(b) is considered by AEMO to be in Commercial Operation,

then AEMO will return the Reserve Capacity Security to the Market Participant as soon as practicable after the end of the relevant Capacity Year and in any event by 30 November of Year 4 of the relevant Reserve Capacity Cycle **[Clause 4.13.10]**.

5.1.5. For the purposes of paragraph 5.1.4(a), the adjusted Required Level is calculated by multiplying the value determined in paragraph ~~5.2.1(a), 5.2.1(b), or 5.2.1(c)~~ 5.2.1, 5.2.3, 5.2.4, or 5.2.5, as applicable, by 90%.

5.2. Required Level

~~5.2.1. In accordance with clause 4.11.3B, AEMO must determine the adjusted Required Level for a Scheduled Facility or Semi-Scheduled Facility to be achieved (which, for a Facility Upgrade, is calculated for the Facility as a whole) is the sum of each Separately Certified Component determined under clause 4.11.3A (paragraph 5.2.2), unless the sum exceeds the Facility's Declared Sent Out Capacity then the Required Level will be the Declared Sent Out Capacity of the Facility [Clause 4.11.3B], for each Facility as follows:~~

~~5.2.1.5.2.2. AEMO will use the following equations, developed in accordance with clause 4.11.3BA, to determine the Required Level for a Separately Certified Component (including any Facility Upgrades) of a Scheduled Facility or Semi-Scheduled Facility. The relevant equations are:~~

- (a) for ~~a Non-Intermittent Generating System assigned~~ Certified Reserve Capacity ~~assigned to a Facility~~ under clause 4.11.1(a), ~~or an Electric Storage Resource assigned Certified Reserve Capacity under clause 4.11.3,~~ the ~~adjusted~~ Required Level in Trading Interval t is:

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

where the variables are defined in the table below:

| Variable | Units | Definition |
|--------------------|-------|--|
| CC_{int} | MW | The number of Capacity Credits initially associated with the Non-Intermittent Generating System or Electric Storage Resource under clause 4.20.17 <u>assigned under clause 4.20.5A(a)</u> . |
| $TDC(Temp(t))$ | MW | The Facility output indicated in the Temperature Dependence Curve at temperature Temp(t). |
| $Temp(t)$ | °C | The temperature during Trading Interval t measured according to the method specified in the Standing Data <u>WEMS</u> for the Facility. |
| $TDC(41^{\circ}C)$ | MW | The Facility output indicated in the Temperature Dependence Curve at a temperature of 41°C. |

- (b) for ~~an Intermittent Generating System assigned~~ Certified Reserve Capacity ~~assigned to a Facility~~ under clause 4.11.2(b), the ~~adjusted~~ Required Level is:

$$RL_{CRC} \times \frac{CC_{int}}{CRC}$$

where the variables are defined in the table below:

| Variable | Units | Definition |
|------------|-------|---|
| RL_{CRC} | MW | Either: <ul style="list-style-type: none"> the five percent probability of exceedance of expected generation output for the Facility Intermittent Generating System, submitted to AEMO in the report described in clause 4.10.3A(b); or a proposed alternative value provided in the report described in clause 4.10.3A(c) (where AEMO has not rejected the proposed alternative value under clause 4.11.2A). |
| CC_{int} | MW | The number of Capacity Credits initially assigned under clause 4.20.5A(a) associated with the Intermittent Generating System under clause 4.20.17 . |
| CRC | MW | The Certified Reserve Capacity assigned to the Facility Intermittent Generating System . |

4.3.0-5.2.3. AEMO will use the following equation, developed in accordance with clause 4.11.3BB, to determine the Required Level for a Demand Side Programme [assigned Certified Reserve Capacity under clause 4.11.1\(j\)](#), the adjusted Required Level is:

$$RD - CC_{int}$$

where the variables are defined as per the table below:

| Variable | Units | Definition |
|------------|-------|--|
| RD | MW | The Relevant Demand as determined in accordance with clause 4.26.2CA. |
| CC_{int} | MW | The number of Capacity Credits initially assigned under clause 4.20.5A(a). |

5.2.4. AEMO will use the following equation, developed in accordance with clause 4.11.3BC, except where paragraph 5.2.5 applies, to determine the Required Level for a Non-Scheduled Facility [assigned Certified Reserve Capacity under clause 4.11.2\(b\)](#) is:

$$RL_{CRC} \times \frac{CC_{int}}{CRC}$$

where the variables are defined in the table below:

| Variable | Units | Definition |
|------------|-------|---|
| RL_{CRC} | MW | Either: <ul style="list-style-type: none"> the five percent probability of exceedance of expected generation output for the Facility, submitted to AEMO in the report described in clause 4.10.3A(b); or a proposed alternative value for the Facility provided in the report described in clause 4.10.3A(c) (where AEMO has not rejected the proposed alternative value under clause 4.11.2A). |
| CC_{int} | MW | The Capacity Credits initially assigned to the Facility under clause 4.20.5A(a). |
| CRC | MW | The Certified Reserve Capacity assigned to the Facility. |

5.2.5. AEMO will use the following equation, developed in accordance with clause 4.11.3BD, to determine the Required Level for a Non-Scheduled Facility [assigned Certified Reserve Capacity under clause 4.11.1\(bD\)](#), in Trading Interval t is:

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

where the variables are defined in the table below:

| Variable | Units | Definition |
|--------------------|-------|--|
| CC_{int} | MW | The Capacity Credits initially assigned to the Facility under clause 4.20.5A(a). |
| $TDC(Temp(t))$ | MW | The Facility output indicated in the Temperature Dependence Curve at temperature Temp(t). |
| $Temp(t)$ | °C | The temperature during Trading Interval t measured according to the method specified in the Standing Data for the Facility . |
| $TDC(41^{\circ}C)$ | MW | The Facility output indicated in the Temperature Dependence Curve at a temperature of 41°C. |

- 5.2.6. When calculating the Required Level under paragraph 5.2.5, AEMO must will use the Temperature Dependence Curve stored in Standing Data, unless paragraph 5.2.7 applies.
- 5.2.7. 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 original equipment manufacturer's technical specifications to AEMO.
- 5.2.8. AEMO must will review the information provided in paragraph 5.2.7, and may request additional information from the Market Participant, where it deems necessary. AEMO's review will focus on manifest error's (for example, the Temperature Dependence Curve is for the incorrect Facility, exceeds the Facility's maximum capacity, or does not cover the full temperature range required) and may include, but is not limited to:
- (c) comparing the Temperature Dependence Curves of similar Facilities, if available;
 - (d) confirming that the Facility's characteristics are reflected in the Temperature Dependence Curve; and
 - (e) any other factors that AEMO considers relevant.
- 5.2.9. AEMO must will accept a Temperature Dependence Curve provided under paragraph 5.2.7 unless, after the review in paragraph 5.2.8, 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.
- 5.2.10. Where AEMO accepts a Temperature Dependence Curve provided under paragraph 5.2.7, AEMO must will use this Temperature Dependence Curve when calculating the Required Level under paragraph 5.2.5, for the purposes of returning Reserve Capacity Security.
- 5.2.11. If AEMO rejects a Temperature Dependence Curve under paragraph 5.2.9, 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.
- ~~5.2.2.5.2.12.~~ 5.2.12. If the Market Participant provides an updated Temperature Dependence Curve under paragraph 5.2.11, AEMO will follow the steps in paragraph 5.2.8 -to determine whether the updated T-emperature Dependence Curve is acceptable to-

5.3. Determining Commercial Operation status

- 5.3.1. A Market Participant may make a request under clause 4.13.10A to AEMO in writing by email to wa.capacity@aemo.com.au.
- 5.3.2. The reference to a Facility in clause 4.13.10B includes any Facility Upgrade made to that Facility.
- 5.3.3. Additional information that AEMO may have regard to under clause 4.13.10B(b) in determining whether a Facility is in Commercial Operation may include, but is not limited to:
- (a) a statement by an Authorised Officer of the Market Participant;
 - (b) technical documents, such as evidence of trading, transactional documentation, or financial statements;

- (c) for a Demand Side Programme, signed contracts with Loads participating in the Facility; and
 - (d) whether the Facility has passed a Reserve Capacity Test under clause 4.25.2 or a Verification Test under clause 4.25A.1.
- 5.3.4. Information that AEMO will have regard to under clause 4.13A.25 includes the information outlined in clause 4.13.10B(b) and paragraph 5.3.3.

6. DSM Reserve Capacity Security

6.1. Obligation to provide DSM Reserve Capacity Security

6.1.1. Where AEMO assigns Certified Reserve Capacity to a Demand Side Programme, the relevant Market Participant must ensure that AEMO holds the benefit of DSM Reserve Capacity Security that is:

- (a) where:
 - (i) clause 4.1.13 applies, for an amount determined under clause 4.13A.2(a) by the date and time referred to in clause 4.1.13 **[Clause 4.13A.1(a)(i)]**; or
 - (ii) clause 4.1.21 applies, for an amount determined under clause 4.13A.2(b) by the date and time referred to in clause 4.1.21 **[Clause 4.13A.1(a)(ii)]**; and
- (b) in the form specified in clause 4.13A.6 **[Clause 4.13A.1(b)]**.

6.1.2. Where:

- (a) AEMO holds the benefit of a DSM Reserve Capacity Security in accordance with clause 4.13A in respect of a Demand Side Programme for a Reserve Capacity Cycle **[Clause 4.13A.3(a)]**; and
- (b) AEMO assigns Certified Reserve Capacity to the same Demand Side Programme for a subsequent Reserve Capacity Cycle **[Clause 4.13A.3(b)]**;

then the DSM Reserve Capacity Security for the previous Reserve Capacity Cycle will be deemed to satisfy the requirement in clause 4.13A.1 for AEMO to have the benefit of DSM Reserve Capacity Security for the subsequent Reserve Capacity Cycle if:

- (c) the amount of the DSM Reserve Capacity Security complies with clause 4.13A.4 **[Clause 4.13A.3(c)]**; and
- (d) the DSM Reserve Capacity Security remains in force at all relevant times for the purposes of clause 4.13A **[Clause 4.13A.3(d)]**.

6.1.3. A Market Participant must follow the processes in:

- (a) paragraphs 3.4 and 3.5 when providing DSM Reserve Capacity Security; and
- (b) paragraphs 4.2 and 4.3 in replacing DSM Reserve Capacity Security and requesting AEMO to recalculate the amount of DSM Reserve Capacity Security required to be provided.

6.1.4. AEMO will follow the processes in:

- (a) paragraphs 3.2 and 3.6 in notifying a Market Participant of the requirement for DSM Reserve Capacity Security and assessing compliance of DSM Reserve Capacity Security with the WEM Rules; and
- (b) paragraphs 4.1 and 4.3 in holding DSM Reserve Capacity Security and recalculating the amount of DSM Reserve Capacity Security required to be provided.

6.2. Waiving the requirement for DSM Reserve Capacity Security

E[A] DSM Reserve Capacity Security waiver timelines

The deadline for a Market Participant to provide DSM Reserve Capacity Security to AEMO under clause 4.1.13(b)(i) is 10 Business Days after the date for assignment of Certified Reserve Capacity under clause 4.1.12. AEMO requires sufficient time to assess a Market Participant's application for waiver of DSM Reserve Capacity Security, under clause 4.13A.18(b), prior to making a decision. If a Market Participant provides preliminary notice to AEMO of its intention to seek a waiver of its Reserve Capacity Security obligations and the documents and information supporting this position, this will assist AEMO to provide a prompt response to the Market Participant in relation to its application and, therefore, give the Market Participant additional time to arrange DSM Reserve Capacity Security if its application for waiver is not successful.

- 6.2.1. A Market Participant may, where the Market Participant is required to provide DSM Reserve Capacity Security in accordance with clause 4.13A, request that the requirement for DSM Reserve Capacity Security is waived **[Clause 4.13A.18(b)]**.
- 6.2.2. A Market Participant may give preliminary notice to AEMO that they intend to make a request under paragraph 6.2.1 prior to the date and time for assignment of Certified Reserve Capacity specified in clause 4.1.12.
- 6.2.3. In providing notice under paragraph 6.2.2, a Market Participant must provide the supporting documentation required under paragraph 6.2.5.
- 6.2.4. A Market Participant must make a request under paragraph 6.2.1 no later than two Business Days after the date and time for assignment of Certified Reserve Capacity specified in clause 4.1.12.
- 6.2.5. A request from a Market Participant under paragraph 6.2.1 must include the following supporting documentation and information:
 - (a) copies of contracts between the Market Participant and Associated Loads, unless previously provided to AEMO for the relevant Reserve Capacity Cycle as part of an application for certification of Reserve Capacity;
 - (b) reasons why the Market Participant considers that AEMO may reasonably decide to waive the requirement for DSM Reserve Capacity Security; and
 - (c) any other evidence the Market Participant considers relevant to support its request.

- 6.2.6. AEMO will make a determination under clause 4.13A.19 after receiving a request under paragraph 6.2.1 by taking the matters in paragraphs 6.2.8 and 6.2.9 into account.
- 6.2.7. Where AEMO rejects a waiver request made under paragraph 6.2.1, it will include reasons in the notification under clause 4.13A.19(b).
- 6.2.8. In making a determination under paragraph 6.2.6, AEMO will reject a request if the Demand Side Programme:
- (a) is not in Commercial Operation;
 - (b) has not previously passed a Reserve Capacity Test; or
 - (c) is failing to comply with its Reserve Capacity Obligations, as specified in clause 4.12, for the current Capacity Year.
- 6.2.9. In making a determination under clause 4.13A.19 (paragraph 6.2.6), AEMO must have regard to the following matters:
- (a) the size and type of the Loads associated with the Demand Side Programme **[Clause 4.13A.20(a)]**;
 - (b) the historical performance of the Demand Side Programme, including the results of any Reserve Capacity Tests or Verification Tests **[Clause 4.13A.20(b)]**; and
 - (c) any other matters AEMO considers relevant **[Clause 4.13A.20(c)]**.
- 6.2.10. AEMO may request any information it deems relevant from the Market Participant to assist in making a determination under clause 4.13A.19(a), specifying a time and date for the Market Participant to provide the requested information.
- 6.2.11. If the Market Participant does not provide additional information requested by the time and date specified by AEMO under paragraph 6.2.10, AEMO's determination in paragraph 6.2.6 will be based on information provided under paragraph 6.2.5, or, at AEMO's discretion, any other information available to AEMO at the time of making its determination.
- 6.2.12. AEMO will make all reasonable endeavours to process requests made under paragraph 6.2.1 prior to the date and time specified in clause 4.1.13(b).

6.3. Returning DSM Reserve Capacity Security

- 6.3.1. A Market Participant may, where AEMO has the benefit of DSM Reserve Capacity Security in accordance with clause 4.13A, request that the DSM Reserve Capacity Security be released **[Clause 4.13A.18(a)]**.
- 6.3.2. On receipt of a request under paragraph 6.3.1, AEMO will make a determination under clause 4.13A.19(a).
- 6.3.3. Where AEMO rejects a request under paragraph 6.3.1, it will include reasons in the notification under clause 4.13A.19(b).
- 6.3.4. In making a determination under paragraph 6.3.2, AEMO will reject a request if the Demand Side Programme:
- (a) is not in Commercial Operation;
 - (b) has not previously passed a Reserve Capacity Test; or

- (c) is failing to comply with its Reserve Capacity Obligations, as specified in clause 4.12, for the current Capacity Year.
- 6.3.5. In making a determination under clause 4.13A.19 (paragraph 6.3.2), AEMO must have regard to the following matters:
- (a) the size and type of the Loads associated with the Demand Side Programme [**Clause 4.13A.20(a)**];
 - (b) the historical performance of the Demand Side Programme, including the results of any Reserve Capacity Tests or Verification Tests [**Clause 4.13A.20(b)**]; and
 - (c) any other matters AEMO considers relevant [**Clause 4.13A.20(c)**].
- 6.3.6. In making a determination under paragraph 6.3.2, AEMO will consider the following matters:
- (a) changes in the level of Capacity Credits assigned in subsequent Reserve Capacity Cycles;
 - (b) changes in the amount of DSM Reserve Capacity Security determined under clause 4.13A.4; and
 - (c) historical changes in the Demand Side Programme's Associated Loads.
- 6.3.7. If AEMO determines that a Market Participant no longer has any Reserve Capacity Obligations with respect to any Capacity Year for which the Market Participant was assigned Capacity Credits, AEMO must return any DSM Reserve Capacity Security to the Market Participant as soon as practicable after the end of the relevant Capacity Year and in any event by 30 November of Year 4 of the relevant Reserve Capacity Cycle [**Clause 4.13A.24**].
- 6.3.8. Where AEMO determines that it is appropriate to release DSM Reserve Capacity Security under clause 4.13A.19(a), or is required to release DSM Reserve Capacity Security under paragraph 6.3.7, it will:
- (a) if the DSM Reserve Capacity Security is a Security Deposit that is no longer required to be held, in consultation with the Market Participant return the Security Deposit (plus interest earned); or
 - (b) if the DSM Reserve Capacity Security is not a Security Deposit and is no longer required to be held, notify the Security Provider that AEMO relinquishes any rights to draw on the DSM Reserve Capacity Security.

6.4. Requirement to provide DSM Reserve Capacity Security if waiver or release no longer applicable

- 6.4.1. If, at any time, AEMO is no longer satisfied that an assessment under clause 4.13A.20 (paragraph 6.2.6, 6.3.2, or 6.3.7) would result in AEMO determining to release a DSM Reserve Capacity Security or waive the requirement for a Market Participant to provide AEMO with the benefit of DSM Reserve Capacity Security, AEMO must give notice to the Market Participant specifying:
- (a) that the Market Participant must provide AEMO with the benefit of DSM Reserve Capacity Security [**Clause 4.13A.21(a)**];
 - (b) the reasons for its decision [**Clause 4.13A.24(b)**];

- (c) the amount of the DSM Reserve Capacity Security as determined in accordance with clauses 4.13A.1 or 4.13A.4, as applicable **[Clause 4.13A.24(c)]**; and
 - (d) the date by which the Market Participant must provide AEMO with the benefit of DSM Reserve Capacity Security, which must not be before the date which is five Business Days after the date of the notice **[Clause 4.13A.24(d)]**.
- 6.4.2. In making an assessment under paragraph 6.4.1, AEMO may consider changes in the Demand Side Programme's Associated Loads, including reductions in Relevant Demand or other changes in consumption patterns that affect the Demand Side Programme's ability to meet its Reserve Capacity Obligations.
- 6.4.3. Where a Market Participant receives a notice under clause 4.13A.21 (paragraph 6.4.1), the Market Participant must provide AEMO with the benefit of DSM Reserve Capacity Security for an amount and by the date specified in the notice **[Clause 4.13A.22]**.

7. Drawing upon Security

- 7.1.1. Rule Participants will comply with clauses 4.13.11, 4.13.11A, and 4.13A.16 when drawing upon Security.
- 7.1.2. If a Market Participant that provides DSM Reserve Capacity Security in respect of a Demand Side Programme fails to reduce the consumption of the Associated Loads for that Demand Side Programme to a level which is at least equivalent to its Required Level, adjusted to 90% of the level of Capacity Credits specified in clause 4.20.5A, in at least two Trading Intervals before the end of the relevant Capacity Year, then the Market Participant must pay to AEMO, as compensation to the market, an amount equal to the DSM Reserve Capacity Security amount for that Demand Side Programme for that Capacity Year as soon as practicable after the end of the relevant Capacity Year and in any event by 30 November of Year 4 of the relevant Reserve Capacity Cycle **[Clause 4.13A.15]**.
- 7.1.3. For the purposes of paragraph 7.1.2, the adjusted Required Level is calculated by multiplying the value determined in ~~5.2.1(c)~~5.2.3 by 90%.
- 7.1.4. If the Reserve Capacity Security or DSM Reserve Capacity Security drawn upon under clauses 4.13.11A or 4.13A.16 (paragraph 7.1.1) is a Security Deposit, then the Market Participant forfeits the amount of the Security Deposit **[Clauses 4.13.12 and 4.13A.17]**.

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 |
|------------------|
| 4.13.8(a) |
| 4.13.8(c)(i) |
| 4.13.8(c)(ii) |
| 4.13.8(c)(iiA) |
| 4.13.8(c)(iii) |
| 4.13.8(d) |
| 4.13A.23(a) |
| 4.13A.23(c)(i) |
| 4.13A.23(c)(ii) |
| 4.13A.23(c)(iii) |
| 4.13A.23(c)(iv) |
| 4.13A.23(d)(i) |
| 4.13A.23(d)(ii) |
| 4.13A.23(d)(iii) |
| 4.13A.23(d)(iv) |
| 4.13A.23(e) |