

MARKET PROCEDURE: CERTIFICATION OF RESERVE CAPACITY

PREPARED BY: System Capacity (WA)

DOCUMENT REF:

VERSION: 7.0

EFFECTIVE DATE: 1 October 2017

STATUS [DRAFT FOR CONSULTATION](#)

Approved for distribution and use by:

APPROVED BY: Peter Geers

TITLE: Executive General Manager, Markets

VERSION RELEASE HISTORY

Version	Effective date	Summary of changes
1.0	21 September 2006	Market Procedure for Certification of Reserve Capacity
2.0	27 June 2008	Amendments to Market Procedure resulting from PC_2008_04
3.0	15 December 2010	Amendments to Market Procedure resulting from PC_2009_04
4.0	18 March 2013	Amendments to Market Procedure resulting from PC_2012_07
5.0	1 January 2015	Amendments to Market Procedure resulting from PC_2013_06
6.0	30 November 2015	Changes resulting from the transfer of functions from the IMO to AEMO
7.0	1 October 2017	Amendments to Market Procedure resulting from AEPC_2017_04

CONTENTS

1.	PROCEDURE OVERVIEW	5
1.1.	Relationship with the Wholesale Electricity Market Rules	5
1.2.	Interpretation	5
1.3.	Purpose and application of this Procedure	5
1.4.	Associated documents	6
2.	MODIFICATION OF TIMEFRAMES	7 6
3.	APPLICATIONS FOR CERTIFICATION OF RESERVE CAPACITY	7 6
3.1.	Submission of applications	7 6
3.2.	Specific requirements for Early Certified Reserve Capacity	8
4.	PROCESSING OF APPLICATIONS FOR CERTIFICATION OF RESERVE CAPACITY	8
4.1.	Acknowledgement of application	8
4.2.	Data accuracy and sufficiency assessment	8
4.3.	Assessment of application where Facility has previously been assigned Conditional Certified Reserve Capacity	9
4.4.	Timing assessment	10 9
4.5.	Constrained Access Entitlement assessment	10
4.6.	Outage assessment	10
4.7.	Balancing Facility Requirements	12
4.8.	Facilities sharing a Declared Sent Out Capacity	12
4.9.	Facility specific assessment	13
4.10.	Notifications regarding Certified Reserve Capacity	13
5.	ASSESSMENT FOR GENERATION FACILITIES BEING ASSESSED UNDER CLAUSE 4.11.1(A)	14 13
5.1.	Plant capability assessment	14 13
5.2.	Network access assessment	14
5.3.	Assessment of fuel supply, staffing constraints and other restrictions	15
5.4.	Environmental approval assessment	15
5.5.	Assignment of Certified Reserve Capacity	16 15
5.6.	Initial Reserve Capacity Obligation Quantity	16
6.	ASSESSMENT FOR GENERATION FACILITIES BEING ASSESSED UNDER CLAUSE 4.11.2(B) OF THE WEM RULES	16
6.1.	Consideration of nomination to use the methodology under clause 4.11.2(b) of the WEM Rules	16
6.2.	Network access assessment	17
6.3.	Assessment of Independent Expert Report	17
6.4.	Assignment of Certified Reserve Capacity	18 17
6.5.	Initial Reserve Capacity Obligation Quantity	18

7.	ASSESSMENT FOR DEMAND SIDE PROGRAMMES, INTERRUPTIBLE LOADS OR DISPATCHABLE LOADS	18
7.1.	Assessment of availability restrictions	18
7.2.	Facility capability assessment	18
7.3.	Assignment of Certified Reserve Capacity	19
7.4.	Initial Reserve Capacity Obligation Quantity	19

LIST OF TABLES

Table 1: Defined terms	5
------------------------	---

1. PROCEDURE OVERVIEW

1.1. Relationship with the Wholesale Electricity Market Rules

1.1.1. This Market Procedure for Certification of Reserve Capacity (Procedure) is made in accordance with clauses 4.9.10 and 4.28C.15 of the Wholesale Electricity Market Rules (WEM Rules).

1.1.2. References to particular WEM Rules within the Procedure, which are in bold and square brackets **[Clause XX]** or **[Section XX]** are current as at 1 October 2017. These references are included for convenience only and are not part of this Procedure.

1.2. Interpretation

1.2.1. In this Procedure:

- (a) terms that are capitalised but not defined in this Procedure have the meaning given in the WEM Rules;
- (b) to the extent that this Procedure is inconsistent with the WEM Rules, the WEM Rules prevail to the extent of the inconsistency;
- (c) a reference to the WEM Rules or Market Procedures includes any associated forms required or contemplated by the WEM Rules or Market Procedures; and
- (d) words expressed in the singular include the plural or vice versa.

1.2.2. In addition, the following defined terms have the meaning given.

Table 1: Defined terms

Term	Definition
DSOC Owner	In respect of Facilities sharing, or proposing to share, a Declared Sent Out Capacity (DSOC), the party that holds, or proposes to hold, the access arrangement to which the DSOC applies.
System Capacity (WA)	The group within AEMO responsible for the certification of Reserve Capacity. Contact details for System Capacity (WA) are available on the Market Web Site. ¹
Temperature Dependence Curve	The information provided by a Market Participant under clause 4.10.1(e)(i) of the WEM Rules, as detailed in the manufacturer's technical specifications or as determined by an independent engineering firm.
Wholesale Electricity Market System (WEMS)	An interface system that AEMO uses to administer and operate the Wholesale Electricity Market.

1.3. Purpose and application of this Procedure

1.3.1. The Procedure describes the processes that:

- (a) Market Participants must follow when applying for Certified Reserve Capacity **[Clause 4.9.10(a)]** or Early Certified Reserve Capacity **[Clause 4.28C.15]**;

¹ Available at <http://aemo.com.au/Electricity/Wholesale-Electricity-Market-WEM/Reserve-capacity-mechanism>.

- (b) AEMO must follow in processing an application for Certified Reserve Capacity, including how:
 - (i) Certified Reserve Capacity is assigned; and
 - (ii) Reserve Capacity Obligation Quantities are set [**Clause 4.9.10(b)**]; and
 - (c) AEMO must follow in approving Capacity Credits associated with Early Certified Reserve Capacity [**Clause 4.28C.15**].
- 1.3.2. This Procedure also specifies the format of data required to be submitted by a Market Participant applying for Certified Reserve Capacity [**Clause 4.9.3(a)**].
- 1.3.3. In this Procedure, where obligations are conferred on a Rule Participant, that Rule Participant must comply with the relevant obligations in accordance with clauses 2.9.6, 2.9.7, 2.9.7A and 2.9.8 of the WEM Rules, as applicable.

1.4. Associated documents

- 1.4.1. The following Market Procedures (available on the Market Web-site²) provide background information to this Procedure:
- (a) Declaration of Bilateral Trades and the Reserve Capacity Auction;
 - (b) Reserve Capacity Security;
 - (c) Reserve Capacity Testing;
 - (d) Reserve Capacity Performance Monitoring;
 - (e) Facility Registration, De-Registration and Transfer;
 - (f) Rule Participant Registration and De-Registration;
 - (g) Balancing Facility Requirements; and
 - (h) Notices and Communications.
- 1.4.2. The following Power System Operation Procedure (available on the Market Web-site³) provides background information to this Procedure:
- (a) Facility Outages.
- 1.4.3. The following market documents provide background information to this Procedure:
- (a) WEMS User Guide;⁴ and⁵
 - (b) Load for Scheduled Generation – help guide.⁶

² Available at <http://aemo.com.au/Electricity/Wholesale-Electricity-Market-WEM/Procedures>.

³ Available at <http://aemo.com.au/Electricity/Wholesale-Electricity-Market-WEM/Procedures>.

⁴ Available from the help section of the WEMS Market Participant Interface (MPI): <https://wems.aemo.com.au/mpi>.

⁵ Available from the help section of the WEMS Market Participant Interface (MPI): <https://wems.aemo.com.au/mpi>.

⁶ Available at <https://aemo.com.au/Electricity/Wholesale-Electricity-Market-WEM/Reserve-capacity-mechanism/Certification-of-reserve-capacity>.

2. MODIFICATION OF TIMEFRAMES

- 2.1.1. AEMO may modify or extend the dates or times specified in this Procedure. If AEMO extends a date or time, then it must publish a notice of the modified or extended time or date on the Market Web Site, which must include when the modified or extended date or time takes effect **[Clause 4.1.32]**.

3. APPLICATIONS FOR CERTIFICATION OF RESERVE CAPACITY

3.1. Submission of applications

- 3.1.1. A Market Participant may lodge an application for Certified Reserve Capacity (including all supporting documentation) in respect of a Reserve Capacity Cycle between:
- (a) 9.00 AM on the first Business Day falling on or following 1 May of Year 1 of the Reserve Capacity Cycle; and
 - (b) 5.00 PM on the last Business Day falling on or before 1 July of Year 1 of the Reserve Capacity Cycle **[Clauses 4.1.7, 4.1.11 and 4.9.1(a)]**.
- 3.1.2. A Market Participant may lodge an application for Conditional Certified Reserve Capacity for a future Reserve Capacity Cycle at any time prior to 9:00 AM on the first Business Day falling on or following 1 May of Year 1 of the Reserve Capacity Cycle to which the application relates **[Clauses 4.1.7 and 4.9.1(b)]**. A Market Participant must provide to AEMO an Application Fee to cover the cost of processing applications for Conditional Certified Reserve Capacity for a Facility **[Clause 4.9.3(c)]**. The relevant fees are available on the Market Web Site.
- 3.1.3. A Market Participant with a Facility that meets the criteria outlined in clause 4.28C.1 of the WEM Rules may lodge an application for Early Certified Reserve Capacity at any time before 1 January of Year 1 of the Reserve Capacity Cycle to which the application relates **[Clause 4.28C.2]**. Each application for Early Certified Reserve Capacity must relate to a single future Reserve Capacity Cycle **[Clause 4.28C.3]**. A Market Participant must provide to AEMO an Application Fee to cover the cost of subsequent processing applications for Early Certified Reserve Capacity for a Facility **[Clause 4.9.3(c)]**.
- 3.1.4. Before submitting an application for a Facility under step 3.1.1, 3.1.2 or 3.1.3 an applicant must ensure that:
- (a) it is registered as a Market Participant; and
 - (b) the Facility name is registered in the WEMS for the purposes of Certified Reserve Capacity in accordance with the Market Procedure for Facility Registration, De-Registration and Transfer. Note that this is not the same as being a Registered Facility under the WEM Rules.
- 3.1.5. A Market Participant may apply for certification of Reserve Capacity if the Facility meets the requirements outlined in clause 4.8.1 of the WEM Rules.
- 3.1.6. A Market Participant who lodges an application for Certified Reserve Capacity for a Facility must provide the information specified in clause 4.9.3 of the WEM Rules to AEMO. The format for the data in clause 4.10.1 that must be provided, is set out in step 3.1.7 below. The information provided for each Facility must be valid for the relevant Reserve Capacity Cycle. Further details on supporting information requirements are indicated by 'mandatory' and 'optional' submission fields for Certified Reserve Capacity in WEMS.

- 3.1.7. A Market Participant must lodge an application for Certified Reserve Capacity, including any supporting documentation, through WEMS. Participants must include documentation for all mandatory submission fields, and may include documentation for the optional submission fields where appropriate. Supporting documentation may be submitted in any of the following formats:
- (a) compressed ZIP files (where the files in the archive must be in any of the formats listed below);
 - (b) MS Office (.xlsx, .xls, .docx, doc, pptx or .ppt);
 - (c) Adobe PDF;
 - (d) .txt or .csv; or
 - (e) common image formats (.jpg, .png, .gif, .bmp).

3.2. Specific requirements for Early Certified Reserve Capacity

- 3.2.1. In addition to the requirements of step 3.1.6, an application for Early Certified Reserve Capacity must:
- (a) relate to a single future Reserve Capacity Cycle **[Clause 4.28C.3]**; and
 - (b) state that the applicant intends to trade all assigned Certified Reserve Capacity bilaterally as defined in clause 4.14.2 of the WEM Rules **[Clause 4.28C.4]**.
- 3.2.2. An applicant for Early Certified Reserve Capacity must, within 30 Business Days of receiving the notification under step 4.10.3, ensure that AEMO holds the benefit of a Reserve Capacity Security equal to 25 percent of the Benchmark Reserve Capacity Price included in the most recent Request for Expressions of Interest, multiplied by an amount equal to the amount of Early Certified Reserve Capacity assigned to the Facility under step [4.10.3](#)⁷ **[Clause 4.28C.8]**. For further details of the process refer to the Market Procedure for Reserve Capacity Security.

4. PROCESSING OF APPLICATIONS FOR CERTIFICATION OF RESERVE CAPACITY

4.1. Acknowledgement of application

- 4.1.1. AEMO must notify each applicant for Certified Reserve Capacity that its application has been received within one Business Day **[Clause 4.9.6]**. This notification is automated and provided through WEMS.
- 4.1.2. An applicant must contact AEMO and arrange to resubmit its application for Certified Reserve Capacity where it has not received a notification of receipt of the application within the timeframe in step 4.1.1. The resubmission of an application must be made during the applicable lodgement period specified in steps 3.1.1, 3.1.2 or 3.1.3 or as modified by AEMO under step [2.1.1](#) **[Clause 4.9.7]**.

4.2. Data accuracy and sufficiency assessment

- 4.2.1. AEMO must check that:
- (a) all required information has been provided;
 - (b) the information provided is of sufficient detail; and

⁷—See clause 4.28C.9 of the WEM Rules.

(c) supporting information has been provided in respect of the capacity of the Facility.

4.2.2. A complete application with all supporting documentation for a submission must be provided prior to the close of the certification window specified in step 3.1.1(b) **[Clause 4.1.11]**. Supporting information required is described under clause 4.10 of the WEM Rules.

4.2.3. Where AEMO, following its assessment in step 4.2.1, requires clarification of the information provided originally and/or further information to process the application:

- (a) AEMO must as soon as practicable request clarification or further information; and
- (b) the applicant must respond to the request as soon as practicable.

4.3. **Assignment Assessment of application where Facility has previously been assigned Conditional Certified Reserve Capacity**

4.3.1. Where a Market Participant is re-lodging an application for Certified Reserve Capacity for a Facility that has already been assigned Conditional Certified Reserve Capacity, AEMO must check whether the:

- (a) application is consistent with the information used to assign the Conditional Certified Reserve Capacity; and
- (b) information remains correct as at 5:00 pm on the last Business Day falling on or before 1 July of Year 1 for that future Reserve Capacity Cycle. **[Clause 4.9.5]**.

4.3.2. A re-lodged application for Certified Reserve Capacity must include:

- (a) evidence of an Arrangement for Access or evidence that the Market Participant has accepted an Access Proposal from the relevant Network Operator made in respect of the Facility;
- (b) ~~and evidence~~ that the Facility will be entitled to have access from a specified date;⁸ including;
- (c) ~~where the Facility is not a Constrained Access Facility, evidence of~~ the level of unconstrained access ~~and details of any constraints that apply; or~~
- (d) ~~where relevant, whether the Facility is a Constrained Access Facility; and~~
- (e) ~~details of any constraints that may apply~~ **[Clause 4.10.1(bA)]**.

4.3.2.4.3.3. Where a re-lodged application does not include details of network access as required under step 4.3.2, AEMO must reject the application on the basis that the Market Participant has not provided all the information required under clause 4.10.1(bA) of the WEM Rules **[Clause 4.9.5(b)]**.

4.3.3.4.3.4. Where AEMO determines that a re-lodged application for Certified Reserve Capacity:

- (a) is consistent with the information used to assign the Conditional Certified Reserve Capacity;
- (b) is accurate; and
- (c) provides details of network access required under step 4.3.2,

AEMO must confirm the Certified Reserve Capacity, Reserve Capacity Obligation Quantity and the Reserve Capacity Security levels. For an Intermittent Generator, the level of Certified

⁸ The specified date must be prior to when the Facility, or part of the Facility, will have completed all Commissioning Tests and be capable of meeting Reserve Capacity Obligations in full **[Clause 4.10.1(c)(iii)(7)]**.

Reserve Capacity must be re-calculated in accordance with clause 4.11.2(b) of the WEM Rules **[Clause 4.9.5(c)]**.

~~4.3.4.4.3.5.~~ Where AEMO determines that:

- (a) a re-lodged application is inconsistent with the information used to assign the Conditional Certified Reserve Capacity; or
- (b) the information in the re-lodged application is inaccurate,

AEMO must disregard the Conditional Certified Reserve Capacity when processing the application **[Clause 4.9.5(d)]**.

4.4. Timing assessment

4.4.1. AEMO must not assign Certified Reserve Capacity to a Facility that⁹:

- (a) is not operational or is not scheduled to first commence operation by 1 October of Year 3 (the Reserve Capacity Obligation commencement date) of the relevant Reserve Capacity Cycle **[Clause 4.11.1(c)(ii)]**; or
- (b) will cease operation permanently, and hence cease to meet Reserve Capacity Obligations, earlier than 1 August of Year 4 of the relevant Reserve Capacity Cycle **[Clause 4.11.1(c)(iii)]**; or
- (c) is not expected to be a Registered Facility by the time its Reserve Capacity Obligations for the relevant Reserve Capacity Cycle would commence **[Clause 4.11.1(f)]**.

4.5. Constrained Access Entitlement assessment

4.5.1. Where a Market Participant provides information under clause 4.10.1(bA) that a Facility is a Constrained Access Facility AEMO must request the Network Operator to determine the Constrained Access Entitlement for the Facility **[Clause 4.10A.1]**.

4.5.2. AEMO may confirm the information provided by the Market Participant under step 4.5.1 with the Network Operator **[Clause 4.11.5]**.

4.5.3. ~~and w~~Where there is any inconsistency between the information provided under steps 4.5.1 and 4.5.2, the requirement for AEMO to request the Network Operator to determine the Constrained Access Entitlement for the relevant Facility will be based on the confirmation provided by the Network Operator **[Clause 4.10A.2 and Clause 4.11.5]**.

4.5.4. Where the Network Operator requires information from AEMO to determine the Constrained Access Entitlement for a Constrained Access Facility, AEMO must:

- (a) where the information is reasonably available to it and within two Business Days of the request, provide any information requested irrespective of the confidentiality status of that information under the WEM Rules; and
- (b) inform the Network Operator of the confidentiality status of the information provided **[Clause 4.10A.6]**.

4.5.4.6. Outage assessment

4.5.1.4.6.1. AEMO must identify:

⁹ For a full list of circumstances where AEMO must not assign Certified Reserve Capacity, or where AEMO may assign Certified Reserve Capacity but must not exceed specified limits, see clause 4.11.1 of the WEM Rules.

- (a) each Facility that has been in Commercial Operation for at least 36 months with outage rates greater than the applicable percentage specified in the table in clause 4.11.1D of the WEM Rules, over the preceding 36 months; and
- (b) each Facility that has been in Commercial Operation for less than 36 months, or is yet to commence Commercial Operation, where AEMO has reason to believe that the Facility is likely to have outage rates greater than the applicable percentage specified in the table in clause 4.11.1D of the WEM Rules over a period of 36 months **[Clause 4.11.1(h)]**.

4.5.2.4.6.2. For the purpose of step- 4.6.1, AEMO must calculate the Planned Outage rate and Forced Outage rate for each Facility in accordance with the Power System Operation Procedure: Facility Outages **[Clause 4.11.1(h)]**.

4.5.3.4.6.3. For each Facility identified in step- 4.6.1, AEMO must notify the applicant that it has exceeded or that AEMO has reason to believe that it will exceed the outage rates in clause 4.11.1D of the WEM Rules. This notification must be provided to the applicant at least 15 Business Days prior to the deadline in step- 4.9.1.

4.5.4.4.6.4. Each notification issued under step 4.6.3 may include a request for information from the applicant in relation to the present and future performance of the Facility, including:

- (a) reasons for the outage;
- (b) the steps being taken, or that have been taken, to reduce the level of outages; and
- (c) the expected level of future outages.

4.5.5.4.6.5. Subject to clause 4.11.1B and 4.11.1C of the WEM Rules, AEMO may decide not to assign any Certified Reserve Capacity to a Facility identified in step- 4.6.1, or to assign a lesser quantity of Certified Reserve Capacity to such a Facility than it would otherwise assign in accordance with clause 4.11.1 of the WEM Rules **[Clause 4.11.1(h)]**.

4.5.6.4.6.6. In making a decision under step- 4.6.5, and without limiting the ways in which AEMO may inform itself in either case, AEMO may **[Clause 4.11.1B]**:

- (a) seek such additional information from the Market Participant that AEMO considers is relevant to the exercise of its discretion;
- (b) use information provided in reports related to the Facility submitted by:
 - (i) the Market Participant specified under clause 4.27.3 of the WEM Rules; and
 - (ii) any other person under clause 4.27.6 of the WEM Rules; and
- (c) consult with any person AEMO considers suitably qualified to provide an opinion or information on issues relevant to the exercise of AEMO's discretion.

4.5.7.4.6.7. In making a decision under step 4.6.5 AEMO **[Clause 4.11.1C]**:

- (a) must be satisfied that its decision would not, on balance, be contrary to the Wholesale Market Objectives;
- (b) may:
 - (i) consider the extent to which the Reserve Capacity that can be provided by the Facility is necessary to meet the Reserve Capacity Target;
 - (ii) consider whether the Reserve Capacity provided by the Facility is of material importance to the South West Interconnected System (SWIS), having regard to:
 - (A) the size of the Facility;
 - (B) the operational characteristics of the Facility;

- (C) the extent to which the Facility contributes to the Power System Security or Power System Reliability through fuel diversity or location; and
- (D) the demonstrated reliability of the Facility;
- (iii) assess the effectiveness of strategies undertaken by the applicant in the previous three years to reduce outages, and consider the likelihood that strategies proposed by the applicant to maximise the availability of the Facility in the relevant Capacity Cycle will be effective;
- (iv) consider whether a decision to not assign Certified Reserve Capacity to the Facility is likely to result in a material decrease in competition in at least one market;
- (v) consider any positive or negative impacts on the long term price of electricity supplied to consumers that might arise if Certified Reserve Capacity was not assigned to the Facility; and
- (vi) consider any other matter AEMO determines to be relevant.

~~4.5.8.4.6.8.~~ Where AEMO determines under step [4.6.5](#) to not assign Certified Reserve Capacity to a Facility, it must notify the applicant of its decision and the reasons for its decision in accordance with the process in step [4.10](#). Otherwise, AEMO must continue to assess the application in accordance with the WEM Rules and this Market Procedure.

~~4.5.9.4.6.9.~~ AEMO must publish the reasons for the decision made under step [4.6.5](#) on the Market Web Site to the extent those reasons do not contain confidential information [**Clause 4.11.1A**].

4.6.4.7. Balancing Facility Requirements

~~4.6.1.4.7.1.~~ AEMO must not assign Certified Reserve Capacity to a Balancing Facility with a rated capacity equal to or greater than 10 MW unless AEMO is satisfied the Facility is likely to be able to meet the Balancing Facility Requirements [**Clause 4.11.12**].

4.7.4.8. Facilities sharing a Declared Sent Out Capacity

~~4.7.1.4.8.1.~~ If AEMO receives more than one application for Certified Reserve Capacity for a Reserve Capacity Cycle that shares the same Declared Sent Out Capacity (DSOC) in an access arrangement, it must:

- (a) request that each relevant applicant provides AEMO details of how the DSOC will be shared among the Facilities; and
- (b) limit the sum of Certified Reserve Capacity so that it does not exceed the DSOC quantity [**Clauses 4.11.1(bA) and 4.11.1(bB)**].

~~4.7.2.4.8.2.~~ If a Market Participant receives a request described in step [4.8.1\(a\)](#), the Market Participant must use its best endeavours to ensure that the DSOC Owner provides a written response to AEMO attached by email within five Business Days. The response must:

- (a) be signed:
 - (i) if the DSOC Owner is a company as defined in the Corporations Act, in accordance with section 127 of the Corporations Act;
 - (ii) if the DSOC Owner is a Market Participant but not a company as defined in the Corporations Act, by an Authorised Officer nominated by the Market Participant; or
 - (iii) otherwise, in a manner reasonably acceptable to AEMO; and
- (b) identify, for each Facility proposed to share the DSOC, the level of **unconstrained network** access that will be available for use by that Facility in the relevant Capacity Year.

4.7.3.4.8.3. If AEMO receives a response from the DSOC Owner to a request sent in step **4.8.1(a)** that meets the requirements in step- **4.8.2**, then AEMO must:

- (a) within one Business Day, acknowledge receipt of the response by email; and
- (b) for each affected Facility:
 - (i) within one Business Day, notify the Market Participant by email of the share of the DSOC assigned to the Facility by the DSOC Owner; and
 - (ii) for the purposes of steps **5.2.2** and- **6.2.2**, replace the level of **unconstrained network** access provided in the application for Certified Reserve Capacity with the level specified for the Facility by the DSOC Owner in its response.

4.7.4.4.8.4. If AEMO does not receive from the DSOC Owner a response to a request sent in step **4.8.1(a)** that meets the requirements in step- **4.8.2**, then AEMO must reject all the applications referred to in the request on the grounds the applications do not meet the requirements under clause 4.10.1(bA) of the WEM Rules.

4.8.4.9. Facility specific assessment

4.8.1.4.9.1. In addition to the requirements above, AEMO must further assess applications for Certified Reserve Capacity in accordance with:

- (a) step 5, for generation facilities that have nominated to use the methodology described in clause 4.11.1(a) of the WEM Rules;
- (b) step 6, for generation facilities that have nominated to use the methodology described in clause 4.11.2(b) of the WEM Rules, including all Intermittent Generators; and
- (c) step 7, for Demand Side Programmes, Dispatchable Loads and Interruptible Loads.

4.9.4.10. Notifications regarding Certified Reserve Capacity

4.9.1.4.10.1. AEMO must notify each applicant for Certified Reserve Capacity of whether AEMO has assigned Certified Reserve Capacity to the Facility for the Reserve Capacity Cycle:

- (a) by 5.00 PM of the last Business Day on or before 19 August of Year 1 of that Reserve Capacity Cycle, for applications for the current Reserve Capacity Cycle **[Clauses 4.9.8(a) and 4.1.12]**; or
- (b) within 90 days of AEMO receiving the application, for applications for a future Reserve Capacity Cycle **[Clause 4.9.8(b)]**,

or as extended in accordance with clause 4.1.32 of the WEM Rules.

4.9.2.4.10.2. AEMO must decide whether or not to assign Certified Reserve Capacity to a Facility in respect of a Reserve Capacity Cycle, and if so, the quantity to be assigned. If AEMO assigns Certified Reserve Capacity to a Facility the notification provided to the Facility in step **4.10.1** must include the information specified in clause 4.9.9 of the WEM Rules. Note that some aspects of this notification to applicants may be provided through WEMS.

4.9.3.4.10.3. AEMO must notify each applicant for Early Certified Reserve Capacity of the quantity assigned (within 90 days of receipt of the application), the initial Reserve Capacity Obligation Quantity and, provided the Reserve Capacity Security has been provided to AEMO, the quantity of Capacity Credits assigned to the Facility **[Clauses 4.28C.6, 4.28C.7 and 4.28C.10]**.

5. ASSESSMENT FOR GENERATION FACILITIES BEING ASSESSED UNDER CLAUSE 4.11.1(A)

5.1. Plant capability assessment

- 5.1.1. AEMO must determine its reasonable expectation of the maximum Sent Out Capacity, after netting off capacity required to serve Intermittent Loads, embedded loads and Parasitic Loads, for each Facility for Peak Trading Intervals on Business Days in the period from 1 October of Year 3 of the Reserve Capacity Cycle until the end of July of Year 4 of the Reserve Capacity Cycle, assuming an ambient temperature of 41°C **[Clause 4.11.1(a)]**.
- 5.1.2. The maximum Sent Out Capacity determined in step 5.1.1 must not exceed the sum of the capacities specified by the Market Participant under clauses 4.10.1(e)(ii) and 4.10.1(e)(iii) of the WEM Rules **[Clause 4.11.1(b)]**.
- 5.1.3. In determining the maximum Sent Out Capacity in step 5.1.1, AEMO must consider the following information, as applicable:
- the historical sent out generation of the Facility, as observed from Meter Data Submissions;
 - the results of Reserve Capacity Tests that have been conducted during the previous 12 months;
 - technical specifications for the Facility, as provided by the original equipment manufacturer or an independent engineering firm; and-
 - the Temperature Dependence Curve for the Facility.

5.2. Network access assessment

5.2.1. AEMO must assess the evidence of network access provided by the applicant ~~under clause 4.10.1(bA) of the WEM Rules,~~ including that the Facility will be entitled to have access from a specified date¹⁰ **[Clauses 4.10.1(bA)(i) and Clause 4.10.1(bA)(ii)]**.

5.2.2. ~~Where the Facility is not a Constrained Access Facility, AEMO must assess evidence of the level of unconstrained access and details of any constraints that may apply [Clause 4.10.1(bA)(iii)].~~ If applicable AEMO will undertake the process in step 4.8 of this Market Procedure.

~~5.2.1.5.2.3.~~ Where the Facility is a Constrained Access Facility, AEMO must assess details of any constraints that may apply [Clauses 4.10.1(bA)(iv) and Clause 4.10.1(bA)(v)]. If applicable AEMO will undertake the processes in step 4.5 and step 4.8 of this Market Procedure.

5.2.4. In respect of a Facility that will be subject to a Network Control Service Contract, AEMO must not assign Certified Reserve Capacity in excess of:

- the Constrained Access Entitlement of the Facility if applicable; or
- ~~the capacity that AEMO believes that Facility can usefully contribute given its location and any network constraints that are likely to occur [Clause 4.11.1(g)].~~
-

¹⁰ The specified date must be prior to when the Facility, or part of the Facility, will have completed all Commissioning Tests and be capable of meeting Reserve Capacity Obligations in full **[Clause 4.10.1(c)(iii)(7)]**.

5.2.5. If AEMO requests a Network Operator to confirm data or information under clause 4.11.5(a) of the WEM Rules, it must not provide information to the Network Operator that was provided to it as part of an application for Certified Reserve Capacity, except with the permission of the applicant.

5.2.6. Step 5.2.5 does not apply if AEMO must provide information under clause 4.10A.6(a) of the WEM Rules.

~~5.2.2. Where AEMO requests information from a Network Operator in relation to an application for Certified Reserve Capacity, in accordance with clause 4.11.5 of the WEM Rules, it must not provide information to the Network Operator that was provided to it as part of an application for Certified Reserve Capacity, except with the permission of the applicant.~~

5.3. Assessment of fuel supply, staffing constraints and other restrictions

5.3.1. To determine whether AEMO reasonably expects that the Facility is likely to be available at the level of capacity determined in step 5.1.1 for Peak Trading Intervals on Business Days, AEMO must assess: **[Clause 4.11.1(a)]**

- (a) details of primary and any alternative fuels¹¹, including:
 - (i) where the Facility has primary and alternative fuels:
 - (A) the process for changing from one fuel to another; and
 - (B) the fuel or fuels which the Facility is to use in respect of the application for Certified Reserve Capacity; and
 - (ii) details acceptable to AEMO together with supporting evidence of both firm and any non-firm fuel supplies and the factors that determine restrictions on fuel availability that could prevent the Facility operating at its full capacity for Peak Trading Intervals on Business Days; ~~and~~ **[Clause 4.10.1(e)(v)]**; and
- (b) any restrictions on the availability of the Facility due to staffing constraints or other restrictions **[Clause 4.10.1(g)]**.

5.3.2. When making a determination in step 5.3.1 AEMO may:

- (a) consider the expected operational characteristics of the Facility;
- (b) consider the potential impacts that limitations on the availability of the Facility may have on its ability to contribute to Power System Adequacy; and
- (c) consider the water requirements for the Facility.

5.4. Environmental approval assessment

5.4.1. Where a Facility, or part of the Facility, is yet to enter service, AEMO must assess the evidence of Environmental Approvals or evidence that the necessary Environmental Approvals will be granted in time to meet the Facility's Reserve Capacity Obligations.

5.4.2. If AEMO reasonably expects that the Environmental Approvals that have been granted or are being sought are insufficient to satisfy the requirement of step 5.1.1, it may determine that the Facility is likely to be available for Peak Trading Intervals on Business Days at a lower level of capacity.

¹¹ A Facility may satisfy its fuel obligations using a combination of primary and alternative fuels.

5.5. Assignment of Certified Reserve Capacity

- 5.5.1. Based on the outcome of assessments in steps 5.1 to 5.4, AEMO must assign a quantity of Certified Reserve Capacity to a Facility according to its reasonable expectation of the amount of Reserve Capacity likely to be available from the Facility during Peak Trading Intervals on Business Days from 1 October in Year 3 to 31 July in Year 4 of the Reserve Capacity Cycle, assuming an ambient temperature of 41°C **[Clause 4.11.1(a)]**. This will be set to the minimum of:
- (a) the level nominated in the application;
 - (b) the maximum sent out capacity of the Facility as determined in step 5.1.1;
 - ~~(c)~~ (c) the level of unconstrained access as assessed in step 5.2.2; if applicable;
 - ~~(e)(d)~~ (d) the level of Constrained Access Entitlement in step 4.5.1; if applicable;
 - ~~(d)(e)~~ (e) a lower level of capacity as determined in step- 5.3.1, if applicable;
 - ~~(e)(f)~~ (f) a lower level of capacity as determined in step 5.4.2, if applicable.

5.6. Initial Reserve Capacity Obligation Quantity

- 5.6.1. AEMO must determine whether there are times when staffing or other factors will limit the Facility's availability to be dispatched.
- 5.6.2. AEMO must set the initial Reserve Capacity Obligation Quantity for the Facility at a level equal to the Certified Reserve Capacity except for those times determined at step 5.6.1, in which case AEMO may set the initial Reserve Capacity Obligation Quantity at a lower level for those periods **[Clause 4.12.4(b)(iii)]**.
- 5.6.3. For a generation system that is not an Intermittent Generator, and subject to clause 4.12.5 of the WEM Rules, the Reserve Capacity Obligation Quantity:
- (a) must not exceed the Certified Reserve Capacity held by the Market Participant for the Facility **[Clause 4.12.4(a)]**;
 - (b) must not be less than the amount specified in clause 4.10.1(e)(ii) except on Trading Days when the maximum daily temperature at the site of the generator exceeds 41C, in which case the Reserve Capacity Obligation Quantity must not be less than the amount specified in clause 4.10.1(e)(ii) adjusted to an ambient temperature of 45C **[Clause 4.12.4(b)(i)]**; and
 - (c) may exceed the amount in clause 4.12.4(b)(i) by an amount up to the amount specified in clause 4.10.1(e)(iii), adjusted to an ambient temperature of 45C on Trading Days when the maximum daily temperature at the site of the generator exceeds 41C, for not more than the maximum duration specified in accordance with clause 4.10.1(e)(iii) **[Clause 4.12.4(b)(ii)]**.

6. ASSESSMENT FOR GENERATION FACILITIES BEING ASSESSED UNDER CLAUSE 4.11.2(B) OF THE WEM RULES

6.1. Consideration of nomination to use the methodology under clause 4.11.2(b) of the WEM Rules

- 6.1.1. Where an applicant nominates for a Facility to be assessed under the methodology described in clause 4.11.2(b) of the WEM Rules, AEMO may reject that nomination if it reasonably believes that the capacity of the Facility has permanently declined, or is anticipated to permanently decline prior to or during the Reserve Capacity Cycle to which the Certified Reserve Capacity relates **[Clause 4.11.2(a)]**.
- 6.1.2. If AEMO rejects a nomination under step 6.1.1, it must process the application as if the applicant had nominated to use the methodology described in clause 4.11.1(a) of the WEM Rules as described in Chapter 4 **[Clause 4.11.2(aA)]**.

6.2. Network access assessment

- ~~6.2.1.~~ AEMO must assess the evidence of network access provided by the applicant ~~under clause 4.10.1(bA) of the WEM Rules,~~ including that the Facility will be entitled to have access from a specified date¹². ~~**[Clauses 4.10.1(bA)(i) and Clause 4.10.1(bA)(ii)]**.~~
- ~~6.2.2.~~ Where the Facility is not a Constrained Access Facility, AEMO must assess evidence of the level of unconstrained access and details of any constraints that may apply **[Clause 4.10.1(bA)]**. If applicable AEMO will undertake the process in step 4.8 of this Market Procedure.
- ~~6.2.1-6.2.3.~~ Where the Facility is a Constrained Access Facility AEMO must assess details of any constraints that may apply **[Clauses 4.10.1(bA)(iv) and Clause 4.10.1(bA)(v)]**. If applicable AEMO will undertake the processes in step 4.5 and step 4.8 of this Market Procedure.
- ~~6.2.4.~~ For a Facility that will be subject to a Network Control Service Contract, AEMO must not assign Certified Reserve Capacity in excess of:
- ~~(a)~~ the Constrained Access Entitlement of the Facility if applicable; or
- ~~(a)(b)~~ the capacity that AEMO believes that Facility can usefully contribute given its location and any network constraints that are likely to occur **[Clause 4.11.1(g)]**.
- ~~6.2.5.~~ If AEMO requests a Network Operator to confirm data or information under clause 4.11.5(a) of the WEM Rules, it must not provide information to the Network Operator that was provided to it as part of an application for Certified Reserve Capacity, except with the permission of the applicant.
- ~~6.2.6.~~ Step 5.2.5 does not apply if AEMO must provide information under clause 4.10A.6(a) of the WEM Rules.
- ~~6.2.2.~~ Where AEMO requests information from a Network Operator in relation to an application for Certified Reserve Capacity in accordance with clause 4.11.5 of the WEM Rules, it must not provide information to any Network Operator that was provided to it as part of an application for Certified Reserve Capacity, except with the permission of the applicant.

6.3. Assessment of Independent Expert Report

- 6.3.1. AEMO must assess the accuracy of an independent expert report provided under clause 4.10.3 of the WEM Rules. This assessment may consider the following factors:
- (a) the configuration of the Facility that was used to develop the report;

¹² The specified date must be prior to when the Facility, or part of the Facility, will have completed all Commissioning Tests and be capable of meeting Reserve Capacity Obligations in full **[Clause 4.10.1(c)(iii)(7)]**.

- (b) the level of network access available, or expected to be available, to the Facility as assessed in step 6.2.1;
- (c) the observed sent out generation of similar Facilities, if applicable;
- (d) any restrictions on the availability of the Facility, as specified by the applicant under clause 4.10.1(g) of the WEM Rules; and
- (e) any other factors that AEMO considers relevant.

6.3.2. If in step 6.3.1, AEMO considers the independent expert report to be inaccurate, it may determine alternative estimates of the expected energy that would have been sent out by the Facility had it been in operation with the configuration proposed in the application for Certified Reserve Capacity to be used in the Relevant Level Methodology [**Appendix 9, Step 10**].

6.4. Assignment of Certified Reserve Capacity

- 6.4.1. AEMO must assign a quantity of Certified Reserve Capacity equal to the minimum of:
- (a) the Relevant Level, determined in accordance with the Relevant Level Methodology prescribed in Appendix 9 of the WEM Rules; ~~and~~
 - ~~(b)~~ (b) the level of unconstrained access assessed in step- 6.2.2; if applicable; and-
 - ~~(b)(c)~~ the level of Constrained Access Entitlement in step 4.5.1; if applicable [**Clause 4.11.1(bA)**].

6.5. Initial Reserve Capacity Obligation Quantity

- 6.5.1. AEMO must set the initial Reserve Capacity Obligation Quantity to zero for an Intermittent Generator [**Clause 4.12.4(aA)**].

7. ASSESSMENT FOR DEMAND SIDE PROGRAMMES, INTERRUPTIBLE LOADS OR DISPATCHABLE LOADS

7.1. Assessment of availability restrictions

- 7.1.1. AEMO must assess the availability limits specified by the applicant under clause 4.10.1(f) of the WEM Rules and must reject any application where the specified availability limits are less than the minimum requirements specified in that clause. AEMO will reject applications where the notice period is greater than 2 hours for a Demand Side Programme [**Clause 4.11.1(c)(vi)**].
- 7.1.2. AEMO must allocate each Facility to an Availability Class [**Clause 4.11.4 and Appendix 3**]. Demand Side Programmes will be allocated Class 2, unless available for all Trading Intervals.

7.2. Facility capability assessment

- 7.2.1. AEMO must determine:
- (a) the quantity of capacity that it reasonably expects to be available from the Facility during the periods specified in clause 4.10.1(f)(vi) of the WEM Rules, after netting off capacity required to serve the Minimum Consumption for each of the Facility's Associated Loads [**Clause 4.11.1(j)(i)**]; and
 - (b) the amount by which the Facility could reduce its consumption, measured as a decrease from the Facility's Relevant Demand, by the end of one Trading Interval in response to a Dispatch Instruction requiring it to reduce consumption from the beginning of the Trading Interval at the ramp rate proposed for the Facility under clause 4.10.1(f)(vii) of the WEM

Rules, for which purpose AEMO may have regard to the ramp rate proposed under clause 4.10.1(f)(vii) of the WEM Rules and any other information AEMO considers relevant **[Clause 4.11.1(j)(ii)]**.

7.2.2. In determining the capacity in step 7.2.1, AEMO must have regard to the following information, as applicable:

- (a) the previous performance of the Facility, where applicable, including the results of Reserve Capacity Tests;
- (b) evidence of contracts with Associated Loads provided by the applicant;
- (c) evidence that loads are being actively pursued to be associated with a Demand Side Programme;
- (d) the estimated Relevant Demand for the Facility, or loads that are expected to be associated with the Facility, determined in accordance with Appendix 10;
- (e) any restrictions on the availability of the Facility due to staffing constraints or any other restrictions, as specified by the applicant under clause 4.10.1(g) of the WEM Rules;
- (f) the proposed DSP Ramp Rate Limit provided according to clause 4.10.1(f)(vii) of the WEM Rules;
- (g) the past history of the applicant in procuring DSM capacity; and
- (h) any other factors that AEMO considers relevant.

7.2.3. In making a decision in step 7.2.1, and without limiting the ways in which AEMO may inform itself in either case, AEMO may:

- (a) seek such additional information from the Market Participant that AEMO considers is relevant to the exercise of its discretion;
- (b) use information provided in reports related to the Facility submitted by:
 - (i) the Market Participant specified under clause 4.27.3; and
 - (ii) any other person under clause 4.27.6; and
- (c) consult with any person AEMO considers suitably qualified to provide an opinion or information on issues relevant to the exercise of AEMO's discretion **[Clause 4.11.1B]**.

7.3. Assignment of Certified Reserve Capacity

7.3.1. Unless it has rejected the application under step 7.1.1, AEMO must assign Certified Reserve Capacity to a Facility equivalent to the quantity determined in step 7.2.1.

7.4. Initial Reserve Capacity Obligation Quantity

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

- (a) the Reserve Capacity Obligation Quantity must not exceed the Certified Reserve Capacity held by the Market Participant for the Facility; and
- (b) except where otherwise precluded by clause 4.12.4 of the WEM Rules, the Reserve Capacity Obligation Quantity:
 - (i) will equal zero once the capacity has been dispatched under clause 7.6.1C(d) or 7.6.1C(e) of the WEM Rules for the number of hours per year that are specified under clause 4.10.1(f)(ii) of the WEM Rules;

- (ii) will equal zero for the remainder of a Trading Day in which the capacity has been dispatched under clause 7.6.1C(d) or 7.6.1C(e) of the WEM Rules for the number of hours per day that are specified under clause 4.10.1(f)(iii) of the WEM Rules;
- (iii) must account for staffing and other restrictions on the ability of the Facility to curtail energy upon request; and
- (iv) will equal zero for Trading Intervals which fall outside of the periods specified in clause 4.10.1(f)(vi) of the WEM Rules [**Clause 4.12.4(c)**].