AEMO Procedure Change Working Group (APCWG)

14 June 2023







We acknowledge the Traditional Owners of country throughout Australia and recognise their continuing connection to land, waters and culture.

We pay respect to their Elders past, present and emerging.

Agenda



- 1. Welcome
- 2. Discussion item: WEM Procedure: Supplementary Capacity
- 3. Discussion item: WEM Procedure: Reserve Capacity Security
- 4. Next Steps and Other Business

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Discussion Item

WEM Procedure: Supplementary Capacity*

James McIntosh, Regulatory Affairs

* Currently titled WEM Procedure: Supplementary Reserve Capacity

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AEMO

Where we are:

- AEMO is amending the WEM Procedure:
 Supplementary Capacity to reflect amendments to the WEM Rules, which were gazetted on 28 April 2023.
- This follows a review by the Coordinator of Energy regarding potential improvements to processes for the procurement of supplementary capacity.
- A review of the activation and deployment of supplementary capacity services (Stage 2) is currently underway and may result in further Rule/Procedure Changes.



Steps so far



AEMO:

- held two workshops with Western Power on 1 May 2023 and 10 May 2023 regarding network access elements
- published the proposed replacement Procedure, Procedure Change Proposal, and Call for Submissions on its website on 25 May 2023

https://aemo.com.au/consultations/current-and-closed-consultations/aepc 2023 01

Procedure Updates (1)



The Procedure is being amended to include:

4.24.18(b) requirements regarding the information and assistance AEMO may require from Western Power to support an expression of interest process or a procurement process for supplementary capacity under this section 4.24;

4.24.18(c) requirements, developed in consultation with Western Power, regarding the information that must be provided by those applying to provide Eligible Services, who request assistance or an assessment from Western Power in accordance with clause 4.24.18B;

4.24.18(d) timelines, developed in consultation with Western Power where applicable, for the provision of requested information and for assistance or an assessment of requests submitted; and

4.24.18(e) contact details for Western Power which must be used by AEMO or those applying to provide Eligible Services when assistance or assessment by Western Power is requested in accordance with clause 4.24.18B.

Amendments also involve moving the Procedure to AEMO's new WEM Procedure template and making editorial and typographical changes as required.

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Procedure Updates (2)



Other Relevant Amendments

- **4.24.18A.** Western Power must provide information and respond to requests for assistance or assessment related to the provision of supplementary capacity under this section 4.24 in accordance with the WEM Procedure referred to in clause 4.24.18.
- **4.24.18B**. A request to Western Power for assistance or an assessment by those applying to provide Eligible Services or a request to Western Power by AEMO must:
 - (a) be in writing and addressed to the contact nominated by Western Power in the WEM Procedure referred to in clause 4.24.18;
 - (b) allow sufficient time to enable Western Power to provide the assistance or make the assessment requested in accordance with the timelines specified under clause 4.24.18(d); and
 - (c) contain the information and analysis as may be required under the WEM Procedure referred to in clause 4.24.1.

Procedure Updates (3)



Other Relevant Amendments (Cont'd)

- **4.24.1C.** Following the close of a call for expressions of interest for supplementary capacity in accordance with clause 4.24.1A, AEMO:
- (a) must assess all responses received by the closing date, and may assess any late responses;
- (b) must consult with Western Power on any network access matters related to the proposed Eligible Services specified in the responses in accordance with the WEM Procedure referred to in clause. 4.24.18; and
- (c) must, for each response assessed by it, provide feedback to each respondent on whether AEMO or Western Power, as applicable, consider the Eligible Services they propose to provide would be capable of meeting the requirements outlined in the call for expressions of interest and contained in the standard Supplementary Capacity Contract.





Elaborate the EOI process steps (if undertaken) and the tender process

- 1. Introduction
- 2. Call for expressions of interest for supplementary capacity
 - 2.1 Advertisement of call for expressions of interest
 - 2.2 Consultation with Western Power
- 3. Tender process
 - 3.1. Call for tenders
 - 3.2. Applicants requesting assistance or an assessment from Western Power
 - 3.3. Assessment of tender responses
- 4. Direct negotiation process
 - 4.1. Western Power support of the direct negotiation process
- 5. Western Power Contact Details
- 6. Settlement
- 7. Determination of the Maximum Contract Value





Clarifying the role of Western Power in providing information and assistance

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Clarifying the role of Western Power in providing information and assistance

- 2. Call for expressions of interest for supplementary capacity
- 2.2 Consultation with Western Power
 - AEMO must request information and assistance from Western Power in relation to any identified network access matters related to EoI responses.
 - Where assistance is requested, Western Power must categorise the proposed service as being 'capable' or 'not capable'.
 - Western Power may request more information from AEMO to enable them to offer assistance.
 - Western Power must provide the requested information and assistance within 20 Business Days unless the timeframe is extended by AEMO.

What we are doing:



Clarifying the role of Western Power in providing information and assistance

3. Tender process

3.2. Applicants requesting assistance or an assessment from Western Power

- In accordance with clause 4.24.18B, those applying to provide an Eligible Service may request assistance or an assessment from Western Power.
- Upon receiving such a request, Western Power must:
 - Acknowledge the request within 2 Business Days; and
 - Provide assistance or an assessment in accordance with clause 4.24.18A within 20 Business Days, unless otherwise agreed by AEMO and Western Power;
- Western Power may decide not to provide assistance in instances where Western Power has previously deemed the service as being substantively the same as one that has be categorised as 'not capable' of meeting the requirements of the EoI and SCC.

What we are doing:



Clarifying the role of Western Power in providing information and assistance

3. Tender process

3.3. Assessment of tender responses

- In assessing tender responses, AEMO may request Western Power's information and assistance in relation to:
 - any identified network access matters, including whether the Eligible Service will have access to the network by the commencement date specified in the applicant's tender; and
 - any other information that AEMO considers is likely to be available to Western Power that will assist in assessing the Eligible Service.
- Western Power must provide its response, including any relevant information and analysis to AEMO within **20 Business Days**, unless otherwise agreed by AEMO and Western Power.
- Western Power or AEMO may contact an applicant for further information, which the provide may (but is not obliged to) provide.
- AEMO must consider Western Power's response.





Clarifying the role of Western Power in providing information and assistance

4. Direct negotiation process

4.1. Western Power support of the direct negotiation process

- If AEMO decides to procure Eligible Services by direct negotiation in accordance with clause 4.24.2(b)(ii), it may request information or assistance from Western Power regarding network access matters.
- AEMO will provide relevant information to enable Western Power to respond to the request.
- Timing for responding to requests is to be determined on a case by case basis given the need to be responsive to timing and other factors.



What we are doing:

New Table 3, which provides required information from applicants (under clause 4.24.18(c))

• Information types organised by Eligible Service sub-types.

Category of Proposed Service	Information required to support assessment
Load Reduction, under clause 4.24.3(a)	National Metering Identifier(s).Associated NMI contact details.
Production of electricity by Energy Producing Systems that are not Registered Facilities, under clause 4.24.3(b)	 Information about the relevant connection point, including its location, capacity, voltage and any other information the applicant considers relevant. Evidence to allow confirmation of compliance with the Technical Rules. Relevant technical data, including protection data, size of energy producing systems, technical specifications, metering, synchronising/desynchronising methodologies.
Production of electricity by Energy Producing Systems that are Registered Facilities provided by capacity that is accredited in a future capacity year, under clause 4.24.3(c)(i), 4.24.3(c)(ii) and 4.24.3(c)(iii)	 Evidence regarding Arrangement for Access, including an up-to-date generation system model. Evidence demonstrating compliance with the Technical Rules, or Generator Performance Standards (clause 3A and Appendix 12 of the WEM Rules), as applicable.
Production of electricity by Energy Producing Systems that are Registered Facilities, under clause 4.24.3(c)(iv)	 Evidence regarding Arrangement for Access, including an up-to-date generation system model. Evidence demonstrating compliance with the Technical Rules, or Generator Performance Standards (clause 3A and Appendix 12 of the WEM Rules) as applicable. Evidence demonstrating how the installation of physical equipment will enable the provision of the offered capacity. Evidence that the offered capacity is additional to that which existed prior to the installation of the physical equipment.
Load Reduction provided by a Market Participant, under clause 4.24.3(c)(iv)	 National Metering Identifier(s). Associated NMI contact details. Evidence demonstrating how the installation of physical equipment will enable the provision of the offered capacity. Evidence that the offered capacity is additional to the maximum amount of load that can be curtailed, which existed prior to the installation of the physical equipment.







To respond to the outcomes of the Coordinator's review and Amending Rules.



To support the efficient procurement of supplementary capacity ahead of any expected need to activate relevant services



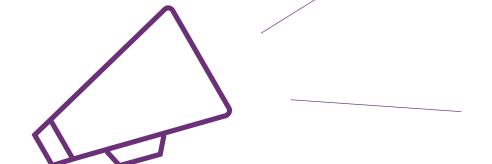
To clarify the role and responsibilities of different parties in the expressions of interest process and procurement process.





Are the timelines indicated in the Procedure are reasonable?

Are there are any other relevant issues that have not been considered?



Do the proposed changes effectively implement AEMO's intended outcomes and give effect to the Amending Rules?

N.B. We have identified and fixed some cross-referencing errors in paragraphs 2.2.8, 3.3.11, 3.3.12, 4.1.3 from PDF conversion



Next Steps

- 23 June 2023: Submissions close for AEPC_2023_01
- 30 June 2023: Publication of Procedure Change Report
- 1 July 2023: Commencement of replacement Procedure*

^{*} assumes that no significant changes are required following the consultation process.





Rebecca Petchey – Specialist, WA Market Reforms

14 June 2023

Context



- The WEM Procedure: Reserve Capacity Security (RCS) covers the processes AEMO and Market Participants must follow when providing and returning RCS and DSM RCS.
- Key changes:
 - Allow signed and scanned copies of deeds, undertakings, and guarantees to be submitted.
 - Required Level calculations.
- Head of power: 4.13.8 and 4.13A.23.



Staging of changes

This consultation relates to two versions of the WEM Procedure that will commence at different times.

IMMEDIATE COMMENCEMENT (AUGUST 2023)

- Amendment to allow scanned security documents to be submitted.
- Changes to align with AEMO's current Procedure style (e.g. removal of Rule repetition).
- New template and other minor and typographical changes.

FUTURE COMMENCEMENT (OCTOBER 2023)

- Updates to the Required Level calculations to incorporate components.
- All other changes from the August 2023 version.





- The WEM Procedure currently requires original hard copy deeds, undertakings, and guarantees to be submitted before the deadline.
- This was impractical for the 2022 Reserve Capacity Cycle, particularly for Market Participants whose Directors and/or Company Secretary are located overseas.
- AEMO has amended the WEM Procedure to allow submission of signed and scanned copies of deeds, undertakings, and guarantees.
- Originals must still be provided within 20 business days.

Required Level



- AEMO must determine a Required Level for all Facilities and components assigned Capacity Credits.
- Required Level is used for multiple purposes including:
 - Returning RC Security.
 - RC Testing.
 - RC Deficit Refunds IGS and NSF.
- It is a threshold to which a Facility or component's output will be compared.
- Changes have been made to the Required Level calculations to consider components and ESR (MR 4.11.3B, 4.11.3BA, 4.11.3BB, 4.11.3BC, 4.11.3BD)





- For Scheduled Facilities and Semi-Scheduled Facilities, the Required Level is calculated for each component subject to the Technology Type.
 - The Required Level for the Facility is the sum of the Required Level calculated for each component, unless the sum exceeds the DSOC, in which case the DSOC will set the Facility Required Level.
- Required Level continues to be calculated at Facility level for an NSF or DSP.



Required Level - NIGS, ESR and NSF*

Calculated by adjusting Capacity Credits for the temperature in the Trading Interval.

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

Variable	Units	Definition
CC_{int}	MW	The number of Capacity Credits initially associated with the component/Facility.
TDC(Temp(t))	MW	The output indicated in the Temperature Dependence Curve at temperature t.
Temp(t)	°C	The temperature during Trading Interval t measured according to the method specified in Standing Data.
<i>TDC</i> (41°C)	MW	The output indicated in the Temperature Dependence Curve at a temperature of 41°C.

^{*} NSF assigned CRC using the Linearly Derating Capacity method





Calculated by adjusting the value in the independent expert report by Capacity Credits.

$$RL_{int} imes rac{CC_{int}}{CRC}$$

Variable	Units	Definition
RL_{CRC}	MW	 Either: The <u>5% POE</u> of expected generation output, submitted to AEMO in the expert report provided in the CRC application. A proposed alternative value provided in the expert report.
CC_{int}	MW	The number of Capacity Credits initially associated with the component/Facility.
CRC	MW	The CRC assigned to the component/Facility.

^{*} NSF assigned CRC using the Relevant Level Methodology





Formula:

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

$$CC_{int} = 100$$

 $Temp(t) = 38.5$ °C

TDC

Temp	Value
38.5	105
41	102

Required Level = 100*(105/102)= 102.9

Formula:

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

$$RL_{int} = 45$$

$$CC_{int} = 20$$

$$CRC = 25$$

Required Level =
$$45*(20/25)$$

= 36





Comments or questions can be directed to AEMO by email to wa.capacity@aemo.com.au.



Other Business

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