

09 May 2024







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

We pay respect to Elders past and present.

Agenda



- 1. Welcome
- 2. Discussion Item: WEM Procedure: Long Term Projected Assessment of System Adequacy
- 3. Discussion Item: WEM Procedure: Reserve Capacity Mechanism Constraint Formulation
- 4. Next Steps and Other Business

Please note that this meeting will be recorded by AEMO and may be accessed and used by AEMO for review and minuting purposes. By continuing, you consent to AEMO recording the call and using the recording for this purpose. If you do not consent, you may exit the meeting.



Discussion Item

WEM Procedure: Long Term Projected Assessment of System Adequacy

Sandy Ng

Contents



- Background
- Summary of updates and proposed changes to Procedure
- Consultation timelines

Background



- AEMO is amending the WEM Procedure: LT PASA to reflect:
 - New drivers to be considered when preparing demand and consumption forecasts.
 - Updated scope requirement for Reserve Capacity Target assessment in the WEM Rules.
 - Introduction of Availability Duration Gap Load Scenario requirement in the WEM Rules.
 - Replacement of Availability Classes with Capability Classes as per update in the WEM Rules.
 - Minor editorial and formatting changes to improve readability.
 - Changes required from a legal perspective to ensure consistency with WEM Rules and other Procedures.

This meeting is being recorded for note taking purposes

Procedure update:

Example of changes

Table 1 → Definitions¶

Term¤	Definition¤	Þ
ESOO¤	Electricity-Statement-of-Opportunities¤	þ
ESOO-Consumption¤	ESOO-Consumption-refers-to-ESOO-Operational-Consumption-and-ESOO- Unscheduled-Operational-Consumption_¤	þ
ESOO-Demand¤	ESOO-Demand-refers-to-ESOO-Operational-Demand-and-ESOO-Unscheduled- Operational-Demand_¤	þ
Operational-Consumption-p	Electricity-consumption that is met-by-all-utility-scale-generation, including consumption from electric-vehicles and excluding impacts of distributed-PV-and-battery-storage. Operational Consumption is measured in MWh.¤	Þ
Operational-Demand¤	Electricity-demand-that is-met-by-all-utility-scale-generation,-including-demand-from- electric-vehicles-and-excluding-impacts-of-distributed-PV-and-battery-storage. Operational-Demand-is-measured-in-MW, averaged-over-a-30-minute-period-x	Þ
ESOO-Operational- Consumption¤	Electricity-consumption-(power-used-over-a-period-of-time)-that-is-delivered-by-sent-out-generation-supplied-by-all-market-registered-Energy-Producing-Systems.	p

2.1. Rule Participant information requests

- 2.1.1. Clauses 4.5.3, to 4.5.3A, 4.5.4 and; clauses 4.5.6, 4.5.7, and to 4.5.8 apply with respect to AEMO's right to seek information from Rule Participants, as well applying to, and the process of provision of information by; those Rule Participants.
- 2.1.2. Notices to Rule Participants under clause 4.5.3, will be sent by email to that Rule Participant's main contact user's nominated email address registered in the Wholesale Electricity Market System |
- 4.1.3. AEMO will determine the Expected Unserved Energy for each Capacity Year in the Long Term PASA Study Horizon for the purposes of meeting the Planning Criterion in clause 4.5.9(b).
- 4.1.4. AEMO will assess the extent to which the anticipated installed capacity of the Energy Producing Systems and Demand Side Programmes is capable of satisfying the Planning Criterion (taking into account network congestion), and identifying any shortfalls in Peak Capacity for the Relevant Year and scenario as specified under clause 4.5.12 (aA).
 - 4.1.5. AEMO will identify and assess any potential capacity shortfalls isolated to a sub-region of the

 SWIS resulting from expected restrictions on transmission capability or other factors and which
 cannot be addressed by additional Peak Capacity outside that sub-region required under clause





Summary of other draft changes



Change	Rationale
Changes to version history and heads of power etc	Required changes
Update of some definitions	To align with current version of the WEM Rules
New factors to be considered for ESOO consumption and demand forecasts	Hydrogen production and electrification are new factors considered in the latest ESOO forecasts
Changes to scenario and inclusion of specific scope requirements for Reserve Capacity Target assessment	To align with current version of the WEM Rules
Replacement of the term Availability Classes with Capability Classes	To align with current version of the WEM Rules
Introduction of Availability Duration Gap Load Scenario and Availability Duration Gap	To align with current version of the WEM Rules

Consultation Timeline:



- Consultation on the WEM Procedure: Long Term Project Assessment of System Adequacy commenced on 1 May 2024.
- Consultation information is available at https://www.aemo.com.au/consultations/current-and-closed-consultations/aepc_2024_03
- More information on the consultation is available by emailing WA.FutureSystemDesign@aemo.com.au

Process Stage	Date
Publication of consultation	1 May 2024
Closing date for submissions on Procedure Change Proposal	29 May 2024
Publication of Final Procedure	6 June 2024
Proposed commencement of amended WEM Procedure	6 June 2024



Discussion Item

WEM Procedure: Reserve Capacity Mechanism Constraint Formulation

Lucas Zieland

Contents



- Background
- Summary of updates and proposed changes to Procedure
- Consultation timelines





- This Procedure covers:
 - (with respect to RCM Constraint Equations and, historically, Preliminary RCM Constraint Equations)
 - the processes to be followed and the methodology to be used by AEMO in determining Constraint Equation terms and coefficients for Network Constraints
- The RCM Review recommended the removal of Preliminary RCM Constraint Equations from the WEM Rules.
 - This update includes changes to align with the current rules.

Procedure Update:

Example of changes

- 1.1.4. The purpose of this Procedure is to document (with respect to Preliminary RCM Constraint Equations):
- 3.1.1. For a relevant Reserve Capacity Cycle, AEMO must publish the information provided by each Network Operator under clause 4.4B.5the following information in the Constraints Library by the date and time specified in clause 4.4B.6, or (for the 2022 Reserve Capacity Cycle only) as modified by AEMO under clause 1.36B or (for the 2023 and subsequent Reserve Capacity Cycles) as modified by AEMO under clause 4.1.1C.:
 - (a) the information provided by each Network Operator under clause 4.4B.5; and
 - (b) Preliminary RCM Constraint Equations.
- 4.1.1. AEMO must compose the unique identifier for RCM Constraint Equations as an ordered series of the following components, each separated by a hyphen [clause 2.27A.10(b)(ii)]:
 - (a) A prefix code comprised of the following elements, each separated by a hyphen:
 - (i)(iii) "RCM" for RCM Constraint Equations (as opposed to other types of Constraint Equations unrelated to RCM Constraint Equations): or "P-RCM" for Preliminary RCM Constraint Equations;



Summary of other draft changes



Change	Rationale
Removal of references to "Preliminary RCM Constraint Equations"	To align with current version of the WEM Rules
Update of some definitions	To align with current version of the WEM Rules
Changes to version history and heads of power etc.	Required changes



Consultation

- Consultation on the WEM Procedure: RCM Constraint Formulation began on 2 May 2024. Submissions close on 30 May 2024.
- Consultation information is available at https://www.aemo.com.au/consultations/current-and-closed-consultations/aepc_2024_04
- If you have further questions on the consultation, please contact <u>WA.MarketDevelopment@aemo.com.au</u>.

Process Stage	Indicative Date
Publication of consultation	2 May 2024
Closing date for submissions on Procedure Change Proposal	30 May 2024
Publication of Final Procedure	14 June 2024
Proposed commencement of amended WEM Procedure	14 June 2024

Feedback Process

AEMO

- AEMO invites stakeholders to suggest alternative options for drafting, where they consider these would improve the proposed Procedure or better meet the Wholesale Market Objectives in section 122(2) of the *Electricity Industry Act 2004* (and clause 1.2.1 of the WEM Rules).
- Should any stakeholder want to discuss the impact of the proposed changes with AEMO, please contact the relevant team via their inbox.

LT PASA	Submissions close 29 May 2024
RCM Constraint Formulation	Submissions close 30 May 2024



• Stakeholders are invited to submit written responses to these consultations via wa.marketdevelopment@aemo.com.au by 5pm WST on the closing date.

Questions?



• Any feedback or further questions can be sent to WA.MarketDevelopment@aemo.com.au



For more information visit

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