

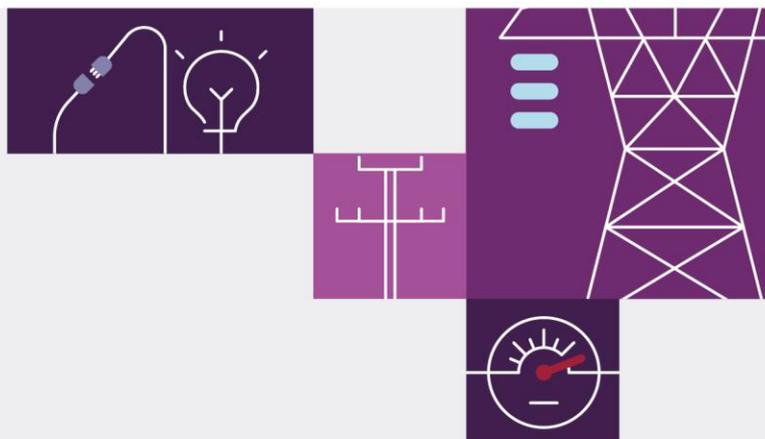
# Wholesale Electricity Market

## Procedure change report: AEPC\_2024\_03

June 2024

WEM Procedure: Undertaking the Long Term Projected Assessment of System Adequacy





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# Executive summary

## Purpose

The publication of this Procedure Change Report and the accompanying Wholesale Electricity Market (**WEM**) procedure completes the Procedure Change Process conducted by AEMO to consider proposed amendments to the WEM procedure: Undertaking the Long Term Projected Assessment of System Adequacy (**Procedure**) under the Wholesale Electricity Market Rules (**WEM Rules**).

## Proposed amendments

In December 2023, the Minister for Energy amended the WEM Rules. These amendments included:

- Introduction of Availability Duration Gap metrics and ESR Duration Requirements for Electric Storage Resources (**ESR**) and Peak Demand Side Programme Dispatch Requirement for Demand Side Programmes (**DSP**).
- Replacement of Availability Classes with Capability Classes.
- Change in the scenario required for the assessment of the extent to which the anticipated installed capacity of the Energy Producing Systems and DSP is capable of satisfying the Planning Criterion.

The Procedure Change Process addressed the associated amendments required to the WEM Procedure: Undertaking the Long Term Projected Assessment of System Adequacy.

## Consultation

AEMO published the Procedure Change Proposal and issued a call for submissions on 1 May 2024.

AEMO held an AEMO Procedure Change Working Group meeting on 9 May 2024. No feedback was received at that meeting.

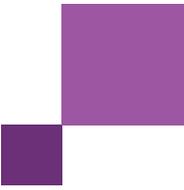
The submission period closed on 29 May 2024, and one submission was received from Synergy. AEMO has responded to the issues raised in the submission in Section 3.2 and amended the WEM Procedure where necessary.

## AEMO's decision

AEMO considers the revised Procedure:

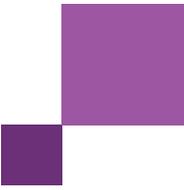
- Is consistent with the WEM Rules.
- Would better achieve Wholesale Market Objectives (a) and (d).
- Is consistent with all other Wholesale Market Objectives.
- Is consistent with the *Electricity Industry Act 2004* (WA) and the *Electricity Industry (Wholesale Electricity Market) Regulations 2004* (WA) (WEM Regulations).

As such, AEMO's decision is to accept the Procedure, as amended following the consultation period.



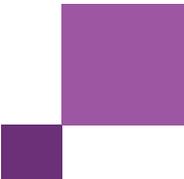
## Next steps

The revised WEM Procedure: Undertaking the Long Term Projected Assessment of System Adequacy will commence at 8:00 am on 13 June 2024.



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# 1 Background

## 1.1 Regulatory requirements

The publication of this Procedure Change Report and the accompanying Wholesale Electricity Market (**WEM**) procedure completes the Procedure Change Process conducted by AEMO to consider proposed amendments to the WEM procedure: Undertaking the Long Term Projected Assessment of System Adequacy (**PASA**) (**Procedure**) under the Wholesale Electricity Market Rules (**WEM Rules**).

The purpose of this Procedure is to describe the procedure AEMO follows in conducting the Long Term PASA [**Clause 4.5.14**].

AEMO has published this Procedure Change Report in accordance with the Procedure Change Process specified in clause 2.10 of the WEM Rules.

## 1.2 Context

In December 2023, the Minister for Energy amended the WEM Rules. These amendments included:

- Introduction of Availability Duration Gap metrics and ESR Duration Requirements for Electric Storage Resources (ESR) and Peak Demand Side Programme Dispatch Requirement for Demand Side Programmes (DSP).
- Replacement of Availability Classes with Capability Classes.
- Change in the scenario required for the assessment of the extent to which the anticipated installed capacity of the Energy Producing Systems and DSP is capable of satisfying the Planning Criterion.

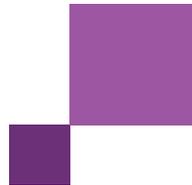
The Procedure Change Process addressed the associated amendments required to align the WEM Procedure: Undertaking the Long Term PASA with the WEM Rules update.

## 1.3 Procedure change process and timetable

On 1 May 2024, AEMO published the Procedure Change Proposal (PCP) and issued a call for submissions. The proposal was progressed using the Procedure Change Process specified in clause 2.10 of the WEM Rules with submissions required by 29 May 2024. One submission was received from Synergy.

# 2 Proposed procedure change

This section details the changes that AEMO proposed when the call for submissions was published.



## 2.1 Detail of the proposed procedure change

### 2.1.1 New factors to be considered when preparing demand and consumption forecasts

The WEM Procedure has been updated to reflect the change in the factors AEMO considers when preparing its demand and consumption forecasts. AEMO has added in references to hydrogen production and residential and business electrification as these are having a greater impact on demand.

### 2.1.2 Reserve Capacity Target assessment

AEMO made updates for the change of scenario to assess the Planning Criterion to align with the WEM Rules. AEMO has also made amendments to make the scope requirements for the Reserve Capacity Target assessment more specific.

### 2.1.3 Availability Duration Gap Load Scenario

AEMO has added in the new WEM Rules requirement for Availability Duration Gap Load Scenario and Availability Duration Gap in order to calculate the ESR Duration Requirement.

### 2.1.4 Capability Classes

AEMO has replaced the previous term Availability Classes with the updated term Capability Classes to align the WEM Procedure with the WEM Rules.

### 2.1.5 Other changes

The proposed amended Procedure contains minor administrative amendments to update the Procedure version history and scope and to improve alignment with the WEM Rules.

## 2.2 Proposed drafting

AEMO published drafts of the proposed Procedure for consultation. Clean and change-marked versions are available at: [https://aemo.com.au/consultations/current-and-closed-consultations/aepc\\_2024\\_03](https://aemo.com.au/consultations/current-and-closed-consultations/aepc_2024_03).

# 3 Consultation process

## 3.1 AEMO Procedure Change Working Group

An overview of the proposed amended Procedure was presented at the AEMO Procedure Change Working Group meeting held on 9 May 2024. No feedback was received at the meeting. The papers and minutes from the meeting can be found at: <https://aemo.com.au/consultations/industry-forums-and-working-groups/list-of-industry-forums-and-working-groups/wem-aemo-procedure-change-working-group>.

## 3.2 Submissions received during the consultation period

AEMO published the PCP and issued a call for submissions on 1 May 2024. The submission period closed on 29 May 2024 and one submission was received from Synergy. Synergy's feedback and AEMO's responses can be found in the table below.

| Respondent | Paragraph       | Summary of feedback   | AEMO response   |
|------------|-----------------|---|---|
| Synergy    | 3               | Synergy's view is that publication of the summary of the Methodology that AEMO utilises should still be required under the Procedure for the purposes of transparency and accountability.                     | AEMO notes Synergy's proposal and has updated the Procedure to require AEMO to publish its methodology.   |
| Synergy    | 3.1.4(i)        | Synergy sought clarity from AEMO on the level of certainty that would be required before hydrogen production is included in the reference case in preparing the LT PASA Study Horizon.                        | <p>Electricity consumption forecasts for hydrogen production consider both domestic and export markets, drawing from the multi-sector modelling. These forecasts are underpinned by AEMO's scenario assumptions and adjusted by AEMO for uncertainty regarding hydrogen project speed, scale, and timing. Progress of hydrogen production projects under development is cross-checked with market research in combination with the CSIRO HyResource project tracker.</p> <p>For the 2024 WEM ESOO forecasts in the reference case (Expected), AEMO considered committed projects based on our evaluation criteria, including the status of Western Power access, environmental approval, and financial investment decisions. It applied a five-year lead time for non-committed projects and a five-year production ramp-up to match the multi-sector modelling forecast levels. For future ESOO forecasts, AEMO will continue to evaluate the progress in the hydrogen industry and refine its forecasting methodology and assumption in consultation with stakeholders.</p> |
| Synergy    | Table 1         | Typographical error for utility-scale which should be utility-scale.  | AEMO has updated the definition to the Rules term Electric Storage Resource.  |
| Synergy    | 6.1.2           | The word 'or' should be inserted between the words "Statement of Opportunities Report" and "on the WEM Website"   | AEMO has updated the Procedure.   |
| Synergy    | 7.1.2 and 7.1.5 | The word "Report" should be inserted after the words "Statement of Opportunities"   | AEMO has updated the definition of ESOO in the Procedure and has updated the references in the document to ESOO.  |
| Synergy    |                 | References to the "Statement of Opportunities Report" be replaced with references to the "Electricity Statement of Opportunities Report" as it is referred to in Table 2 at paragraph 1.4.1 of the Procedure. | AEMO has updated these references to ESOO.  |
| Synergy    | 2.1.6           | Reference to "Registered Participant" be replaced with a reference to "Rule Participant"  | AEMO has updated the Procedure.   |

### 3.3 Updates to Reserve Capacity Target assessment

In its review post consultation, AEMO noted that further clarification was needed to align paragraph 4 of the Procedure with the WEM Rules for the Reserve Capacity Target assessment. AEMO has updated the title of this paragraph and also clarified that AEMO assumes no network congestion when determining the Expected Unserved Energy for each Capacity Year in the Long Term PASA Study Horizon for the purposes of the Reserve Capacity Target determination as stated in clause 4.5.10(b) of the WEM Rules.

## 4 AEMO's assessment

### 4.1 Consistency with Electricity Industry Act, WEM Regulations, and WEM Rules

The revised Procedure has been reviewed by AEMO to ensure compliance with the relevant provisions in the:

- *Electricity Industry Act 2004* (WA).
- WEM Regulations.
- WEM Rules.

### 4.2 Consistency with Wholesale Market Objectives

AEMO considers the revised Procedure is consistent with the WEM Rules, would better achieve Wholesale Market Objectives (a) and (d), and is consistent with all other Wholesale Market Objectives.

### 4.3 AEMO's decision

AEMO's decision is to accept the Procedure, as amended during the consultation process.

AEMO has made this decision on the basis that:

- The revised Procedure is consistent with:
  - The *Electricity Industry Act 2004*, WEM Regulations 2004, and WEM Rules.
  - The Wholesale Market Objectives and may better address objectives (a) and (d).
- AEMO received one submission on the proposed amendments and incorporated the feedback. AEMO has also provided further clarification on the Reserve Capacity Target determination. The changes will have minimal impact on the market and provide better clarity.



## 4.4 Implementation of the Procedure

The amended Procedure will commence at 8:00 am on 13 June 2024.

The revised WEM Procedure: Undertaking the Long Term Projected Assessment of System Adequacy is available at [https://aemo.com.au/consultations/current-and-closed-consultations/aepe\\_2024\\_03](https://aemo.com.au/consultations/current-and-closed-consultations/aepe_2024_03).