



Wholesale Electricity Market

Procedure Change Proposal No:
AEPC_2022_01

WEM Procedure: Certification of Reserve Capacity
for the 2022 and 2023 Reserve Capacity Cycles

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Australian Energy Market Operator Ltd ABN 94 072 010 327

Executive Summary

Change requested by:	AEMO
Date submitted:	11 November 2022
Type of Procedure Change Proposal:	Amendment
Market Procedures affected:	WEM Procedure: Certification of Reserve Capacity for the 2022 and 2023 Reserve Capacity Cycles

The publication of this Procedure Change Proposal and the accompanying notice of call for submissions commences the Procedure Change Process conducted by AEMO under section 2.10 of the Wholesale Electricity Market Rules (**WEM Rules**).

This Procedure Change Proposal relates to proposed amendments to the *WEM Procedure: Certification of Reserve Capacity for the 2022 and 2023 Reserve Capacity Cycles* (**Procedure**).

The purpose of the Reserve Capacity Mechanism is to provide price signals for investment in the Wholesale Electricity Market (**WEM**), thereby facilitating the efficient entry or exit of capacity to ensure Power System Security and Power System Reliability is maintained. The accurate assignment of Certified Reserve Capacity (**CRC**) is critical to provide those price signals, and to ensure reliability of supply in the South West Interconnected System (**SWIS**).

On 23 September 2022, due to a combination of issues including ongoing fuel supply limitations, AEMO called for tenders from potential suppliers of supplementary capacity for the upcoming Hot Season (1 December 2022 to 31 March 2023). This has highlighted the need for AEMO to take additional steps in its assessment of fuel availability for Non-Intermittent Generating Systems for the 2022 and future CRC process¹.

Given the importance of the CRC process for the WEM and Market Participants, AEMO proposes to amend the Procedure to:

- specify the additional information a Market Participant must provide as evidence of fuel availability in their CRC applications under clause 4.10.1(e)(v)(2) of the WEM Rules; and
- clarify the factors AEMO may consider when determining its reasonable expectation of the amount of capacity likely to be available under clause 4.11.1(a) of the WEM Rules.

AEMO has also taken the opportunity to propose the following minor and administrative changes:

- Amendment to paragraphs 5.2.2 and 5.2.3 of the Procedure to clarify that, in accordance with clause 4.11.1 of the WEM Rules, AEMO's plant capability assessment must reflect its reasonable expectation of the amount of capacity likely to be available. This may not be equal to that Facility's maximum capacity provided under clause 4.10.1(e), but must not exceed it.
- Move the Procedure to AEMO's new WEM Procedure template.
- Make minor typographical changes.

It should be highlighted that the Procedure will need to be revised again early in 2023 to reflect the *Tranche 6 Wholesale Electricity Market (WEM) Amending Rules*² as they relate to the certification

¹ The CRC application period for the deferred 2022 Reserve Capacity Cycle (2024-25 Capacity Year) opened on 18 October 2022.

² Available at: <https://www.wa.gov.au/government/document-collections/exposure-draft-2-tranche-6-wholesale-electricity-market-amending-rules>.

process. This will provide the opportunity to address issues other than fuel availability for future Reserve Capacity Cycles.

AEMO considers the proposed changes are consistent with the WEM Rules, would better achieve Wholesale Market Objectives (a) and (d), and are consistent with all other objectives. The proposed changes will provide further evidence to enable AEMO to assess that a Facility's capacity will be available when it is needed, thereby increasing security and reliability of supply. It will also provide accurate price signals for the efficient exit and entry of capacity in the WEM, thereby minimising the long-term cost of electricity supplied to customers in the SWIS.

AEMO will engage with the Market Advisory Committee (**MAC**) at its 15 November 2022 meeting and will subsequently hold an AEMO Procedure Change Working Group (**APCWG**) meeting on 21 November 2022, inviting a broader stakeholder group than usual, including those who attended the Certified Reserve Capacity workshop for the 2022 Reserve Capacity Cycle. This will provide multiple opportunities for engagement on the proposed changes.

AEMO is seeking comment and feedback on:

- whether stakeholders consider the additional information related to fuel availability proposed to be required in CRC applications for the 2022 and future Reserve Capacity Cycles provides an appropriate balance between the impost on Market Participants and risk to Power System Security and Power System Reliability, and the overall market;
- whether AEMO's proposed process to determine its reasonable expectation of fuel availability is appropriate; and
- whether the proposed changes to the Procedure effectively implement AEMO's intended changes.

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). AEMO also requests that stakeholders identify any unintended adverse consequences of the proposed amended Procedure.

Should any applicant want to discuss the impact of the proposed changes with AEMO, please contact the WA Reserve Capacity team at wa.capacity@aemo.com.au.

Stakeholders are invited to submit written responses on the proposed amended Procedure to wa.marketdevelopment@aemo.com.au, by 5:00 PM (Australian Western Standard Time) on 9 December 2022 in accordance with the call for submissions published with this Procedure Change Proposal.

1. Procedure Change Process

Section 2.10 of the WEM Rules outlines the Procedure Change Process.

AEMO may initiate the Procedure Change Process in respect of WEM Procedures for which it is responsible by developing a Procedure Change Proposal. Rule Participants may notify AEMO where they consider an amendment or replacement of a WEM Procedure would be appropriate.

Clause 2.9.3 of the WEM Rules states that WEM Procedures:

- (a) must:
 - (i) be developed, amended or replaced in accordance with the process in the WEM Rules;
 - (ii) be consistent with the Wholesale Market Objectives; and
 - (iii) be consistent with the WEM Rules, the *Electricity Industry Act* and the WEM Regulations; and
- (b) may be amended or replaced in accordance with section 2.10 of the WEM Rules and must be amended or replaced in accordance with section 2.10 of the WEM Rules where a change is required to maintain consistency with Amending Rules.

The Wholesale Market Objectives are:

- (a) to promote the economically efficient, safe and reliable production and supply of electricity and electricity related services in the South West interconnected system;
- (b) to encourage competition among generators and retailers in the South West interconnected system, including by facilitating efficient entry of new competitors;
- (c) to avoid discrimination in that market against particular energy options and technologies, including sustainable energy options and technologies such as those that make use of renewable resources or that reduce overall greenhouse gas emissions;
- (d) to minimise the long-term cost of electricity supplied to customers from the South West interconnected system; and
- (e) to encourage the taking of measures to manage the amount of electricity used and when it is used.

AEMO has published this Procedure Change Proposal in accordance with the Procedure Change Process.

AEMO's indicative timeline for this consultation is outlined below. Dates may be adjusted depending on the number and complexity of matters raised in submissions and any meetings with stakeholders.

Process Stage	Indicative date
Publication of Procedure Change Proposal	11 November 2022
MAC meeting	15 November 2022
APCWG / CRC forum	21 November 2022
Closing date for submissions on Procedure Change Proposal	9 December 2022
Publication of Procedure Change Report	15 December 2022
Proposed commencement of amended Procedure	20 December 2022

Before the closing date for submissions, stakeholders may request a meeting with AEMO to discuss the issues and proposed changes raised in this Procedure Change Proposal.

2. Background

2.1. Regulatory requirements

Clause 4.9.10 of the WEM Rules provides:

AEMO must document the following in a WEM Procedure:

- (a) *the procedures that Market Participants must follow when applying for Certified Reserve Capacity;*
- (b) *the methodology AEMO uses for determining Planned Outage rates and Forced Outage rates;*
- (c) *the procedures AEMO must follow when processing applications for Certified Reserve Capacity, including:*
 - (i) *how Certified Reserve Capacity is assigned; and*
 - (ii) *how AEMO will account for any degradation of an Electric Storage Resource, based on:*
 1. *the performance standards and specifications for the Electric Storage Resource provided by the relevant manufacturer; and*
 2. *the performance of the Electric Storage Resource in the Capacity Year at the time the application for certification of Reserve Capacity is required to be processed, where available.*

The current version of the WEM Procedure commenced on 1 March 2022.

2.2. Context for this consultation

The purpose of the Reserve Capacity Mechanism is to provide price signals for investment in the WEM, thereby facilitating the efficient entry or exit of capacity to ensure Power System Security and Power System Reliability is maintained. The accurate assignment of CRC is critical to provide those price signals, and to ensure reliability of supply in the SWIS.

On 23 September 2022, due to a combination of issues including ongoing fuel supply limitations, AEMO called for tenders from potential suppliers of supplementary capacity for the upcoming Hot Season (1 December 2022 to 31 March 2023). This has highlighted the need for AEMO to take additional steps in its assessment of fuel availability for Non-Intermittent Generating Systems for the 2022 CRC process.

Clause 4.11.1(a) of the WEM Rules requires AEMO to determine its reasonable expectation of the availability of each Facility:

...in assigning a quantity of Certified Reserve Capacity to a Facility or relevant component of a Facility for the Reserve Capacity Cycle for which an application for Certified Reserve Capacity has been submitted in accordance with section 4.10:

- (d) *the Certified Reserve Capacity for a Non-Intermittent Generating System for a Reserve Capacity Cycle must not exceed AEMO's reasonable expectation of the amount of capacity likely to be available, after netting off capacity required to serve Intermittent*

Loads, embedded loads and Parasitic Loads, for Peak Trading Intervals on Business Days from the Trading Day starting 1 October in Year 3 of the Reserve Capacity Cycle to the end of July in Year 4 of the Reserve Capacity Cycle, assuming an ambient temperature of 41 degrees Celsius;

...

AEMO's assessment is based on the information provided in the CRC application submitted to AEMO under clause 4.10.1 of the WEM Rules. Amongst other things, clause 4.10.1 requires an application is:

...supported by documented evidence and includes, where applicable, except to the extent that it is already accurately provided in Standing Data, the following information:

...

(e) *for a Non-Intermittent Generating System:*

...

(v) *details of primary and any alternative fuels,³ including:*

1. *where the Facility has primary and alternative fuels:*

(i) *the process for changing from one fuel to another; and*

(ii) *the fuel or fuels which the Facility is to use in respect of the application for Certified Reserve Capacity; and*

2. *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;*

...

Given the importance of the CRC process for the WEM and Market Participants, AEMO proposes to amend the Procedure to:

- specify the additional information a Market Participant must provide as evidence of fuel availability in their CRC applications under clause 4.10.1(e)(v)(2) of the WEM Rules; and
- clarify the factors AEMO may consider when determining its reasonable expectation of the amount of capacity likely to be available under clause 4.11.1(a) of the WEM Rules.

Further information is provided in section 3 of this proposal.

2.3. Consultation

AEMO will engage with the Market Advisory Committee (**MAC**) at its 15 November 2022 meeting, and will subsequently hold an AEMO Procedure Change Working Group (**APCWG**) meeting on 21 November 2022, inviting a broader stakeholder group than usual, including those who attended the Certified Reserve Capacity workshop for the 2022 Reserve Capacity Cycle. This will provide multiple opportunities for engagement on the proposed changes.

Should any applicant want to attend the APCWG meeting or discuss the proposed changes with AEMO, please contact the WA Reserve Capacity team at wa.capacity@aemo.com.au.

³ A Facility may satisfy its fuel obligations using a combination of primary and alternative fuels.

3. Proposed procedure change

3.1. Detail of the proposed procedure change

3.1.1. Additional information required from applicants

Under clause 4.10.1(e)(v)(2), a Market Participant must provide 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.

AEMO considers the following fuel availability information should be provided by a Market Participant to inform its determination of the reasonable expectation of the Facility's availability under clause 4.11.1(a) of the WEM Rules:

- (a) whether the contract specifies a Firm or Non-Firm arrangement;
- (b) the contractual entitlement quantity;
- (c) the actual fuel quantity delivered for each month in the previous 36 months, with reasons for any difference between the contractual entitlement quantity and the actual fuel quantity delivered;
- (d) the quantity of effective, usable fuel kept in reserve (e.g. stored or stockpiled) for each month in the previous 36 months;
- (e) the specification of contracted fuel and fuel kept in reserve;
- (f) any known or reasonably foreseeable issues that may result in restrictions on fuel availability;
- (g) for each matter specified in subsection (f), a description (with supporting evidence) of any controls and risk mitigation activities implemented by the Market Participant; and
- (h) any other information the Market Participant considers relevant.

To provide further guidance for Market Participants when developing their CRC applications, AEMO proposes to introduce new paragraph 5.3.3 of the Procedure requiring this information to be provided to AEMO as part of a CRC application.

AEMO considers the requirement for a Market Participant to provide this information is consistent with the requirements under clause 4.10.1(e)(v)(2) and are reasonable to include in its assessment under paragraph 5.3.1 of the Procedure and clause 4.11.1(a) of the WEM Rules.

As part of determining its reasonable expectation of the availability of the Facility in relation to fuel availability, AEMO proposes to consider other additional factors in its assessment which may include but are not limited to:

1. whether there is a valid fuel contract in place;
2. historical quantities delivered under each contract;
3. the likelihood and effect of known or foreseeable issues that may impact fuel availability; and
4. the suitability of any applicable risk mitigation measures in preventing fuel shortages.

3.1.2. AEMO's assessment

AEMO has considered how it will assess the additional fuel availability information it proposes to require as part of a CRC application. Proposed paragraph 5.3.10 of the Procedure provides a list of factors

AEMO may consider when determining its reasonable expectation of the availability of a Facility for the purposes of assigning CRC.

AEMO proposes to update this list to clarify that:

- AEMO's CRC assessment includes the outcomes of the plant capability assessment undertaken as part of the assessment process;
- AEMO may consider the likelihood and effect that any limitations on the availability of a Facility may have on Power System Security and Power System Reliability; and
- AEMO may consider any other fuel related information of which it is aware and considers relevant to the determination.

AEMO considers each of these factors are reasonable to include in its assessment under paragraph 5.3.1 of the Procedure and 4.11.1(a) of the WEM Rules.

3.2. Proposed drafting

AEMO has published a draft version of the *WEM Procedure: Certification of Reserve Capacity for the 2022 and 2023 Reserve Capacity Cycles* incorporating the changes AEMO proposes for consultation.

Clean and change-marked versions are available [here](#).

3.3. Wholesale Market Objective assessment

AEMO considers the proposed changes are consistent with the WEM Rules, would better achieve Wholesale Market Objectives (a) and (d), and are consistent with all other objectives. The proposed changes will provide further evidence to enable AEMO to assess that a Facility's capacity will be available when it is needed, thereby increasing security and reliability of supply. It will also provide accurate price signals for the efficient exit and entry of capacity in the WEM, thereby minimising the long-term cost of electricity supplied to customers in the SWIS.

4. Other matters

AEMO has also taken the opportunity to propose the following minor and administrative changes:

- Amendment to paragraphs 5.2.2 and 5.2.3 of the Procedure to clarify that, in accordance with clause 4.11.1 of the WEM Rules, AEMO's plant capability assessment must reflect its reasonable expectation of the amount of capacity likely to be available. This must not exceed the capacity specified under clause 4.10.1(e).
- Move the Procedure to AEMO's new WEM Procedure template.
- Make minor typographical changes.

It should be highlighted that the Procedure will need to be revised again early in 2023 to reflect the *Tranche 6 Wholesale Electricity Market (WEM) Amending Rules*⁴ as they relate to the Certified Reserve Capacity process. This will provide an opportunity to address issues other than fuel availability for future Reserve Capacity Cycles.

⁴ Available at: <https://www.wa.gov.au/government/document-collections/exposure-draft-2-tranche-6-wholesale-electricity-market-amending-rules>.

5. Summary of matters for consultation

AEMO is seeking comment and feedback on:

- whether stakeholders consider the additional information related to fuel availability proposed to be required in CRC applications provides an appropriate balance between administrative burden on Market Participants and risk to Power System Security and Power System Reliability, and the market overall;
- whether AEMO's proposed process to determine its reasonable expectation of fuel availability is appropriate; and
- whether the proposed changes to the Procedure effectively implement AEMO's intended changes.

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). AEMO also requests that stakeholders identify any unintended adverse consequences of the proposed amended Procedure.

Should any applicant want to discuss the impact of the proposed changes with AEMO, please contact the WA Reserve Capacity team at wa.capacity@aemo.com.au.

Submissions on these and any other matter relating to this Procedure Change Proposal must be made in accordance with the accompanying notice of call for submissions by 5:00 PM (Australian Western Standard Time) on 9 December 2022.