

# WHOLESALE ELECTRICITY MARKET

## PROCEDURE CHANGE PROPOSAL: AEPC\_2020\_06

REDUCTION OF PRUDENTIAL EXPOSURE (PHASE 2)

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## EXECUTIVE SUMMARY

Change requested by:	AEMO
Date submitted:	10 June 2020
Type of Procedure Change Proposal:	Amendment
Market Procedures affected:	Market Procedure: Prudential Requirements Market Procedure: Capacity Credit Allocation

The publication of this Procedure Change Proposal and the accompanying call for submissions commences the Procedure Change Process conducted by AEMO to consider proposed amendments to the Market Procedure: Prudential Requirements and the Market Procedure: Capacity Credit Allocation (Procedures) under the Wholesale Electricity Market Rules (**WEM Rules**).

In July 2018, AEMO commenced the Reduction of Prudential Exposure (RoPE) project to address known issues with Prudential Requirements in the Wholesale Electricity Market (WEM). Phase 1 of the project ran from July 2018 to May 2019, and implemented the changes required under Rule Change Proposal: Reduction of the Prudential Exposure in the Reserve Capacity Mechanism (RC\_2017\_06)<sup>1</sup>, including amendments to the Individual Reserve Capacity Requirement, Capacity Credit Allocations and associated settlement and prudential processes.

AEMO is now progressing proposed amendments to the Procedures to implement phase 2 of the project, which will improve the accuracy of the Outstanding Amount calculation. The Outstanding Amount calculation is used in assessing Market Participants' Trading Margins.

The proposed amendments will implement a dynamic, daily Outstanding Amount calculation based on the settlement calculations specified in the WEM Rules, using the latest operational data or estimates of operational data when that data is not available.

AEMO also proposes minor updates to the Market Procedure: Capacity Credit Allocation to reflect amendments to the WEM Rules made by the Minister for Energy in February 2020 to introduce the concept of the Monthly Reserve Capacity Price for each Facility, which will result in various Reserve Capacity Prices in any one Capacity Year.

AEMO considers that the proposed amendments will better achieve the Wholesale Market Objectives as they will provide AEMO and Market Participants with a real-time estimate of the exposure to the market based on the latest operational data (or estimates of operational data when that data is not available). This will reduce the risk of a Default Levy under the WEM Rules and deliver other efficiencies in the administration and management of prudential requirements.

AEMO invites stakeholders to suggest alternative options or drafting where they consider that these would improve the proposed Procedures 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).

Stakeholders are invited to submit written responses on the proposed Market Procedures by 5:00 PM (Australian Western Standard Time) on 29 June 2020, in accordance with the call for submissions published with this Procedure Change Proposal.

AEMO proposes to publish an extension notice in accordance with clause 2.10.17 of the WEM Rules to extend the due date for submissions beyond the standard 20-Business Day timeframe that would otherwise apply under clause 2.10.7 of the WEM Rules, and to also extend subsequent timeframes in the Procedure Change Process. The proposed extension (until 15 July 2020) will ensure stakeholders have sufficient time to consider the proposed Procedures in conjunction with the associated system and process changes.

<sup>1</sup> [https://www.erawa.com.au/rule-change-panel/market-rule-changes/rule-change-rc\\_2017\\_06](https://www.erawa.com.au/rule-change-panel/market-rule-changes/rule-change-rc_2017_06)



## CONTENTS

EXECUTIVE SUMMARY	<b>2</b>
1. PROCEDURE CHANGE PROCESS	<b>4</b>
2. BACKGROUND	<b>5</b>
2.1. Regulatory requirements	5
2.2. Context for this consultation	6
2.3. Consultation to date	7
3. PROPOSED PROCEDURE CHANGE	<b>7</b>
3.1. Detail of the proposed procedure change	7
3.2. Proposed drafting	8
3.3. Wholesale Market Objective assessment	8
4. SUMMARY OF MATTERS FOR CONSULTATION	<b>8</b>



## 1. PROCEDURE CHANGE PROCESS

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

AEMO may initiate the Procedure Change Process in respect of Market Procedures (including Power System Operation Procedures and the Monitoring and Reporting Protocol) for which it is responsible by developing a Procedure Change Proposal. Rule Participants may notify AEMO where they consider an amendment or replacement of an AEMO Market Procedure would be appropriate.

If an Amending Rule requires AEMO to develop new Market Procedures or to amend or replace existing Market Procedures, then AEMO is responsible for the development, amendment, or replacement of Market Procedures so as to comply with the Amending Rule.

Under clause 2.9.3 of the WEM Rules, Market 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 Electricity Industry Act, the WEM Regulations and the WEM Rules; and
- (b) may be amended or replaced in accordance with clause 2.10 of the WEM Rules, and must be amended or replaced in accordance with clause 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 in clause 2.10 of the WEM Rules.

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



Process stage	Indicative date
Procedure Change Proposal published	10 June 2020
Submissions due on Procedure Change Proposal	8 July 2020
Intended extension for submissions on Procedure Change Proposal <sup>2</sup>	15 July 2020
Procedure Change Report published	31 July 2020
Proposed commencement of amended Market Procedures	1 August 2020

Prior to the submission's due date, 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 2.43.1 of the WEM Rules states:

*AEMO must develop a Market Procedure dealing with:*

- (a) determining Credit Limits;*
- (b) assessing persons against the Acceptable Credit Criteria;*
- (c) Credit Support arrangements, including:*
  - i. the form of acceptable guarantees and bank letters of credit;*
  - ii. where and how it will hold Security Deposits and how the costs and fees of holding Security Deposits will be met;*
  - iiA. the circumstances that may require Credit Support to be replaced for the purposes of clause 2.38.3; and*
  - iii. the application of monies drawn from Credit Support in respect of amounts owed by the relevant Market Participant to AEMO[;]*
- (d) calculation of Trading Margins;*
- (e) the list of factors to be taken into account for assessing the expected value of transactions;*
- (f) issuing of Margin Calls; and*
- (g) other matters relating to clauses 2.37 to 2.42.*

The current version of the Market Procedure: Prudential Requirements developed under clause 2.43.1 commenced on 9 December 2019.

Clause 9.4.18 of the WEM Rules states:

*AEMO must develop a Market Procedure dealing with:*

- (a) Capacity Credit Allocations; and*
- (b) other matters relating to sections 9.4 and 9.5.*

<sup>2</sup> AEMO proposes to publish an extension notice in accordance with clause 2.10.17 of the WEM Rules to extend the due date for submissions beyond the standard 20-Business Day timeframe that would otherwise apply under clause 2.10.7 of the WEM Rules, and to also extend subsequent timeframes in the Procedure Change Process. The proposed extension (until 15 July 2020) will ensure stakeholders have sufficient time to consider the proposed Procedures in conjunction with the associated system and process changes.



The current version of the Market Procedure: Capacity Credit Allocation developed under clause 9.4.18 commenced on 1 June 2019.

## 2.2. Context for this consultation

AEMO is now progressing proposed amendments to the Procedures to implement phase 2 of the project, which will improve the accuracy of the Outstanding Amount calculation.

Currently, a Market Participant's Outstanding Amount is calculated based on settlement outcomes that are up to 70 days out of date. This means the calculation does not accommodate real-time changes in a Market Participant's trading behaviour. This lack of real-time responsiveness increases the risk of a default levy under the WEM Rules if the Outstanding Amount calculation underestimates actual prudential exposure, and/or requires Market Participants to provide excess Credit Support in the event that the Outstanding Amount overestimates actual exposure.

The Outstanding Amount concept in the WEM Rules was designed when prudential requirements were less dynamic. However, AEMO has observed a shift towards more frequent changes in trading behaviour by Market Participants across the WEM, meaning the current method will not accurately reflect exposure in the market in real time.

AEMO's analysis indicates that the current Outstanding Amount calculation may overestimate or underestimate actual exposure by as much as \$25 million across all Market Participants. Overestimation may tie up Market Participants' security unnecessarily, whereas underestimation increases the magnitude of a Default Levy in the event of a Market Participant default event.

AEMO considers it prudent to minimise the likelihood of this occurring. This Procedure Change Proposal therefore proposes to amend the Outstanding Amount calculation to deliver a dynamic, daily Outstanding Amount calculation based on the settlement calculation specified in the WEM Rules, the latest operational data (e.g. Balancing Price, STEM Price, SCADA data, outages) or estimates of operational data when that data is not available.

This Procedure Change Proposal is being progressed in parallel with trials and participant testing of the new prudential services system. AEMO will run a parallel testing period from 3 July 2020 to 1 August 2020 that will allow Market Participants to see both the current and new Outstanding Amount calculations. This will allow Market Participants to assess the operational impact of the proposed amended calculations and processes in this Procedure Change Proposal using actual market data.

Project costs for development of the system were previously approved by the Economic Regulation Authority in the 2019 Allowable Revenue process.<sup>3</sup>

The schedule for the proposed system activities is provided in the table below:

Activity	Indicative date
RoPE Working Group Prudential Services system showcase	12 June 2020
Market trial deployment	18 June 2020
Production deployment	2 July 2020
Market Participant parallel test	3 July – 31 July 2020
Application Go- Live	1 August 2020

This Procedure Change Proposal also includes minor updates to the Market Procedure: Capacity Credit Allocation to reflect amendments to the WEM Rules made by the Minister for Energy in February 2020 in relation to Reserve Capacity Price arrangements. These changes reflect the need for a Monthly Reserve

<sup>3</sup> <https://www.erawa.com.au/electricity/wholesale-electricity-market/annual-price-setting/allowable-revenue-and-forecast-capital-expenditure-determinations>



Capacity Price to be determined for each Facility, which will result in various Reserve Capacity Prices in any one Capacity Year.

### 2.3. Consultation to date

Draft versions of the proposed amended Procedures were presented at the AEMO Procedure Change Working Group (APCWG) meeting on 21 May 2020. Minor changes were suggested. The minutes and papers from the meeting are available at: <https://aemo.com.au/en/consultations/industry-forums-and-working-groups/list-of-industry-forums-and-working-groups/wem-aemo-procedure-change-working-group>.

AEMO has since incorporated the changes suggested at the APCWG meeting, together with minor typographical amendments to the proposed Procedures.

## 3. PROPOSED PROCEDURE CHANGE

### 3.1. Detail of the proposed procedure change

The proposed changes to each of the Procedures are summarised below:

#### *Market Procedure: Prudential Requirements*

Amendments are proposed to step 5 of the Market Procedure to:

- amend the variables used in the calculation of the Outstanding Amount so that the estimated exposure for a Market Participant is calculated using known settlement data available at the time of the calculation (step 5.1); and
- specify the methodology for undertaking estimates in circumstances where AEMO is required to estimate input data that is unavailable at the time of the calculation (step 5.2).

The draft calculation formulation document that is referred to in proposed steps 5.1.2 and 5.1.3 of the Market Procedure is available on AEMO's website<sup>4</sup>. This document creates a mathematical representation of the WEM Rules settlement process, including:

- Representation of sets for use within the document.
- Mathematical representation of the estimation methodology outlined in the proposed amendments to the Market Procedure: Prudential Requirements.
- Mathematical representation of the WEM Rules pertaining to settlements.
- Specifications for the variables used by AEMO's calculation system.
- Trading Margin calculations for Market Participants.
- Monthly (Non-STEM) and Weekly (STEM) settlement.

#### *Market Procedure: Capacity Credit Allocation*

Amendments are proposed to step 8 of the Market Procedure. These amendments would require AEMO to use the latest Capacity Credit Allocation information to update the Outstanding Amount calculation when considering whether a Market Participant's Trading Margin is likely to be negative after a Capacity Credit Allocation is established or reversed.

Minor updates are also proposed to reflect amendments to the WEM Rules made by the Minister for Energy in February 2020 in relation to Reserve Capacity Price arrangements. These changes reflect the

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<sup>4</sup> <https://aemo.com.au/en/consultations/industry-forums-and-working-groups/list-of-industry-forums-and-working-groups/wem-rule-change-working-group>



need for a Monthly Reserve Capacity Price to be determined for each Facility, which will result in various Reserve Capacity Prices in any one Capacity Year.

### 3.2. Proposed drafting

AEMO has published a draft version of the Procedures incorporating the changes AEMO proposes for consultation. Clean and change-marked versions are available at:

[https://aemo.com.au/en/consultations/current-and-closed-consultations/AEPC\\_2020\\_06](https://aemo.com.au/en/consultations/current-and-closed-consultations/AEPC_2020_06).

### 3.3. Wholesale Market Objective assessment

This Procedure Change Proposal seeks to minimise the prudential risk arising from inaccurate estimates of Market Participants' Outstanding Amounts.

The prudential framework set out in Chapter 2 of the WEM Rules and the associated Procedures directly affects all Market Participants (and ultimately consumers) who provide the required Credit Support, and are subject to the Default Levy under clause 9.24.5 of the WEM Rules in the event of a Payment Default by a Market Participant. Therefore, the prudential framework aims to facilitate an efficient balance between costs and risk mitigation to provide the necessary security for Market Participants.

The current calculation of a Market Participant's Outstanding Amount does not provide an accurate, timely indication of the exposure to the market. Based on AEMO's analysis, the current calculation may overestimate or underestimate overall market exposure by as much as \$25 million. Overestimation may tie up Market Participants' security unnecessarily, whereas underestimation increases the magnitude of a Default Levy in the event of a Market Participant default event.

AEMO considers that reducing the prudential risk in the market, and correctly accounting for the reduced risk in the prudential requirements by improving the Outstanding Amount calculation:

- promotes economic efficiency consistent with Wholesale Market Objective (a); and
- minimises the long-term cost of electricity consistent with Wholesale Market Objective (d).

The proposed minor updates to the Market Procedure: Capacity Credit Allocation reflect amendments to the WEM Rules made by the Minister for Energy in February 2020. Therefore, in addition to the requirement in clause 2.9.3(b) of the WEM Rules for this Market Procedure to be amended to maintain consistency with Amending Rules, the proposed minor updates are consistent with the Wholesale Market Objectives.

## 4. SUMMARY OF MATTERS FOR CONSULTATION

AEMO invites stakeholders to suggest alternative options for drafting, where they consider these would improve the proposed Procedures or better meet the Wholesale Market Objectives. Stakeholders are invited to submit written responses on the proposed amended Procedures by 5:00 PM (Australian Western Standard Time) on 15 July 2020 in accordance with the call for submissions published with this Procedure Change Proposal.<sup>5</sup>

Stakeholders with questions in relation to the proposed amended Procedures or this Procedure Change Proposal can contact AEMO via email at [wa@aemo.com.au](mailto:wa@aemo.com.au). All correspondence in relation to this Procedure Change Proposal must be entitled "AEPC\_2020\_06: Reduction of Prudential Exposure (Phase 2) [Name of the submitting company or individual]".

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<sup>5</sup> AEMO proposes to publish an extension notice in accordance with clause 2.10.17 of the WEM Rules to extend the due date for submissions beyond the standard 20-Business Day timeframe that would otherwise apply under clause 2.10.7 of the WEM Rules, and to also extend subsequent timeframes in the Procedure Change Process. The proposed extension (until 15 July 2020) will ensure stakeholders have sufficient time to consider the proposed Procedures with the associated system and process changes.