

WHOLESALE ELECTRICITY MARKET

PROCEDURE CHANGE PROPOSAL: AEPC_2019_03

REDUCTION OF THE PRUDENTIAL EXPOSURE IN THE
RESERVE CAPACITY MECHANISM

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EXECUTIVE SUMMARY

Change requested by:	AEMO
Date submitted:	18 March 2019
Type of Procedure Change Proposal:	Amendment
Market Procedures affected:	Individual Reserve Capacity Requirements Capacity Credit Allocation Prudential Requirements

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 Procedures: Individual Reserve Capacity Requirements, Capacity Credit Allocation and Prudential Requirements under the Wholesale Electricity Market (WEM) Rules.

On 31 May 2018, the Rule Change Panel published its final decision on AEMO's Rule Change Proposal: Reduction of the prudential exposure in the Reserve Capacity Mechanism (RC_2017_06). AEMO submitted the Rule Change Proposal on 17 July 2017 to address the identified shortfall of prudential support held as a result of the inadequate consideration of the Individual Reserve Capacity Requirements (IRCR) related payments that would be owed on any given day.

The Rule Change Panel decided to approve the proposed amending rules as modified following a call for further submissions after the second round of consultation. Specifically, RC_2017_06 implemented the following changes:

- a change to the responsible party reference month¹ in the IRCR calculation from month n-3 to month n, so that Market Customers no longer incur IRCR liabilities for any future periods;
- amendments to the Capacity Credit Allocation process to allow Capacity Credit Allocations to be made by Market Generators and accepted by Market Customers prior to the Market Customers incurring the IRCR liability, where these Capacity Credit Allocations cannot be reversed by AEMO without consideration of the prudential implications; and
- consequential amendments to support the implementation of the proposed changes.

The Rule Change Panel's final decision implemented transitional provisions which commenced on 1 August 2018, to allow the necessary actions to be undertaken with respect to the calculation of the Indicative IRCR, and the Capacity Credit Allocation process under both the existing and new WEM Rules².

The remainder of the proposed Amending Rules come into effect on 1 June 2019. This Procedure Change Proposal addresses the necessary consequential changes to AEMO's Market Procedures as required to be developed and progressed under clause 2.10.3 of the WEM Rules.

¹ The responsible party reference month is the reference period used to allocate a meter's IRCR charges to a Market Customer. That is, the Market Customer(s) to which the meter is registered in the Meter Registry during the responsible party reference month will incur the IRCR charges for that meter.

² This will allow Market Participants to perform actions (and be deemed compliant) under both the old Capacity Credit Allocation process, and the new Capacity Credit Allocation process during May 2019. This transition is required to allow the necessary obligations to be met by all Rule Participants prior to the beginning of the June Trading Month from which the new process will apply.



Market Procedure: Individual Reserve Capacity Requirements

This procedure is proposed to be amended to remove the concept of an initial IRCR in October, with an updated IRCR in every other Trading Month, and replace it with, for each Trading Month:

- the Indicative IRCR, calculated prior to the Trading Month;
- the IRCR, calculated prior to the initial Non-STEM Settlement Statement; and
- three adjustments to the IRCR, calculated as part of settlement adjustments.

Market Procedure: Capacity Credit Allocation

This procedure is proposed to be amended twice. The first proposed amended procedure (version 3.0) will introduce transitional arrangements that will allow Rule Participants to perform any actions under the proposed new amended procedure prior to the procedure being effective, and they will be deemed to be compliant where appropriate.

The second proposed amended procedure (version 4.0) will reflect the new Capacity Credit Allocation process in the WEM Rules effective from 1 June 2019. The new procedure provides information on the following processes:

- the new ability for Market Generators to make multiple Capacity Credit Allocations to multiple Market Customers in any Trading Month;
- reversing a Capacity Credit Allocation; and
- the methodology for AEMO to assess the Trading Margin of a:
 - a. Market Generator when approving or rejecting a Capacity Credit Allocation Submission or Capacity Credit Allocation Acceptance; and
 - b. Market Customer when reversing a Capacity Credit Allocation.

Market Procedure: Prudential Requirements

The procedure is proposed to be amended to:

- change the calculation of the Outstanding Amount to more accurately reflect a Market Participant's Capacity Credit Allocations, rather than projecting forward their Capacity Credit Allocations from the last issued Non-STEM Settlement Statement; and
- reflect AEMO's templates and process for Market Participants to provide Credit Support under a Security Deposit deed or corresponding Security Deposit direction.

AEMO considers the Market Procedures, if amended as proposed, would better achieve the Wholesale Market Objectives as they provide the necessary process related information for AEMO and other Rule Participants to comply with the requirements of the Amending Rules approved in the Rule Change Proposal RC_2017_06.

AEMO held a meeting of the AEMO Procedure Change Working Group on 21 February 2019. Market Participants did not raise any material issues with the proposed amended procedures. Since the meeting, AEMO has made minor and administrative updates to improve the procedures, and has introduced a staged approach to transition the Capacity Credit Allocation process.

AEMO invites stakeholders to suggest alternative options or drafting where they consider that these would improve the 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. AEMO also asks stakeholders to identify any unintended adverse consequences of the proposed amended procedures.

Stakeholders are invited to submit written responses on the proposed Market Procedures by 5:00 PM (Australian Western Standard Time) on 15 April 2019, in accordance with the call for submissions published with this paper.



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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 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.

Under clause 2.10.3 of the WEM Rules, 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 WEM Rules, the *Electricity Industry Act* and the 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 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	18 March 2019
Submissions due on Procedure Change Proposal	15 April 2019
Procedure Change Report published	29 April 2019
Proposed commencement of amended Market Procedures	<p>1 May 2019 Capacity Credit Allocation v3.0</p> <p>1 June 2019 Capacity Credit Allocation v4.0 Individual Reserve Capacity Requirements</p> <p>27 June 2019 Prudential Requirements</p>



Prior to the submissions 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

AEMO proposes to amend three Market Procedures as a result of the Rule Change Proposal: Reduction of the prudential exposure in the Reserve Capacity Mechanism (RC_2017_06). The Rule Change Panel's final decision on RC_2017_06 implemented the following key amendments:

- transitional provisions in section 1.26 of the WEM Rules, which commenced on 1 August 2018 to allow the necessary actions to be undertaken with respect to the calculation of the Indicative IRCR, and the Capacity Credit Allocation process under both the existing and new WEM Rules³;
- changes to section 4.1 of the WEM Rules to amend the timing of various steps performed in relation to the IRCR under the Reserve Capacity Mechanism;
- changes to section 4.28 of the WEM Rules to reflect the new process for IRCR calculations; and
- introducing a new Capacity Credit Allocation process in section 9.4 of the WEM Rules.

This Procedure Change Proposal addresses the necessary consequential changes to AEMO's Market Procedures as required to be developed and progressed under clause 2.10.3 of the WEM Rules, specifically related to the Market Procedures:

- Individual Reserve Capacity Requirements;
- Capacity Credit Allocation; and
- Prudential Requirements.

Clause 4.28.12 of the WEM Rules provides the requirement for the Market Procedure: Individual Reserve Capacity Requirements:

4.28.12. AEMO must document the process to be followed in initially calculating, and subsequently revising, Individual Reserve Capacity Requirements in a Market Procedure, and AEMO and Market Customers must follow that documented Market Procedure.

The current version of the Market Procedure: Individual Reserve Capacity Requirements commenced on 3 November 2017.

Clause 9.4.3 of the WEM Rules provides the requirement for version 3.0 of the Market Procedure: Capacity Credit Allocation:

9.4.3. A Market Participant making a Capacity Credit Allocation Submission must provide to AEMO the information specified in clause 9.5.1 using the form prescribed by AEMO and the method prescribed in the Settlement Procedure.

The current version (version 2.0) of the Market Procedure: Capacity Credit Allocation commenced on 30 November 2015.

³ This will allow Market Participants to perform actions (and be deemed compliant) under both the old Capacity Credit Allocation Process, and the new Capacity Credit Allocation process during May 2019. This transition is required to allow the necessary obligations to be met by all Rule Participants prior to the beginning of the June Trading Month from which the new process will apply.



Clause 9.4.18 of the WEM Rules, to be introduced in RC_2017_06 provides the requirement for version 4.0 of the Market Procedure: Capacity Credit Allocation:

9.4.18. *AEMO must develop a Market Procedure dealing with:*

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

This will replace version 3.0 of the Market Procedure: Capacity Credit Allocation which will commence on 1 May 2019.

Clause 2.43.1 of the WEM Rules provides the requirement for the Market Procedure: Prudential Requirements:

2.43.1. *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 cash deposits and how the costs and fees of holding cash deposits will be met;*
 - 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,*

and Market Participants and AEMO must comply with that Market Procedure.

The current version of the Market Procedure: Prudential Requirements commenced on 18 April 2017.

AEMO has developed and reviewed the proposed amended Market Procedures as a whole to ensure compliance with the relevant provisions in the Electricity Industry Act, Regulations and WEM Rules (as in force and as decided to be amended).

2.2. Context for this consultation

Under clause 2.10.3 of the WEM Rules, 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.

On 31 May 2018, the Rule Change Panel published its final decision on AEMO's Rule Change Proposal: Reduction of the prudential exposure in the Reserve Capacity Mechanism (RC_2017_06). AEMO submitted the rule change proposal on 17 July 2017 to address the identified shortfall of prudential support held as a result of the inadequate consideration of the IRCR related payments that would be owed on any given day.



The Rule Change Panel decided to approve the proposed Amending Rules as modified following a call for further submissions after the second round of consultation. Specifically, RC_2017_06 implemented the following changes:

- a change to the responsible party reference month⁴ in the IRCR calculation from month n-3 to month n, so that Market Customers no longer incur IRCR liabilities for any future periods;
- amendments to the Capacity Credit Allocation process to allow Capacity Credit Allocations to be made by Market Generators and accepted by Market Customers prior to the Market Customers incurring the IRCR liability, where these Capacity Credit Allocations cannot be reversed by AEMO without consideration of the prudential implications; and
- consequential amendments to support the implementation of the proposed WEM Rule and Market Procedure changes.

The Rule Change Panel's final decision implemented transitional provisions which commenced on 1 August 2018, to allow the necessary actions to be undertaken with respect to the calculation of the Indicative IRCR, and the Capacity Credit Allocation process under both the existing and new WEM Rules⁵.

The remainder of the proposed Amending Rules come into effect on 1 June 2019. This Procedure Change Proposal addresses the necessary consequential changes to AEMO's Market Procedures for IRCR, Capacity Credit Allocation and Prudential Requirements.

2.3. Consultation to date

Draft versions of the proposed amended Market Procedures were presented at the 'AEMO WEM Procedure Change' workshop held on 21 February 2019.

Market Participants from Kleenheat, Bluewaters, Perth Energy, Synergy and ERM Power attended the workshop and did not raise any material issues with the proposed amended procedures.

Market Participants suggested that more comprehensive feedback on the proposed amended procedures would be able to be provided though this consultation period, as it would allow the procedures to be tested against the relevant system changes. AEMO has scheduled this consultation period in parallel to the scheduled system testing. More information about the testing program will be available in the WEMS version 3.30 release notes available at: <https://www.aemo.com.au/Electricity/Wholesale-Electricity-Market-WEM/Dispatch-and-market-notice>.

Minor changes were suggested and the relevant procedures have been updated accordingly.

Since the meeting, AEMO has made minor and administrative updates to improve the procedures, and has introduced transitional arrangements to allow participants to perform the necessary actions in relation to the Capacity Credit Allocation processes in May 2019, under both the Pre-Amending Rules and Post-Amending Rules. These procedural transitional arrangements align with those included by the Rule Change Panel in section 1.26 of the WEM Rules.

Details of the AEMO WEM Procedure Change workshop are available at: <http://aemo.com.au/Stakeholder-Consultation/Industry-forums-and-working-groups/WA-Forums>.

⁴ The responsible party reference month is the reference period used to allocate a meter's IRCR charges to a Market Customer. That is, the Market Customer(s) to which the meter is registered in the Meter Registry during the responsible party reference month will incur the IRCR charges for that meter.

⁵ This will allow Market Participants to perform actions (and be deemed compliant) under both the old Capacity Credit Allocation Process, and the new Capacity Credit Allocation process during May 2019. This transition is required to allow the necessary obligations to be met by all Rule Participants prior to the beginning of the June Trading Month from which the new process will apply.



3. PROPOSED PROCEDURE CHANGE

3.1. Detail of the proposed procedure change

The following sections provide an overview of the key changes that were made to each of the affected procedures.

3.1.3. Market Procedure: Individual Reserve Capacity Requirements

This procedure is proposed to be amended to remove the concept of an initial IRCR in October, with an updated IRCR in every other Trading Month and replace it with, for each Trading Month:

- the Indicative IRCR, calculated prior to the Trading Month;
- the IRCR, calculated prior to the initial Non-STEM Settlement Statement; and
- three adjustments to the IRCR, calculated as part of settlement adjustments.

AEMO proposes to commence the proposed amended Market Procedure on 1 June 2019 in line with the associated WEM Rules to be effective for the June 2019 Trading Month.

3.1.4. Market Procedure: Capacity Credit Allocation

This procedure is proposed to be amended twice.

The first proposed amended procedure (version 3.0) will introduce transitional arrangements that will allow Rule Participants to perform any actions under the proposed new amended procedure prior to the procedure being effective, and they will be deemed to be compliant where appropriate. This procedure will be effective from 1 May 2019 through to 1 June 2019.

The second proposed amended procedure (version 4.0) will reflect the new Capacity Credit Allocation process in the WEM Rules, effective from 1 June 2019. The new procedure provides information on the following processes:

- the new ability for Market Generators to make multiple Capacity Credit Allocations to multiple Market Customers in any Trading Month;
- reversing a Capacity Credit Allocation; and
- the methodology for AEMO to assess the Trading Margin of a:
 - a. Market Generator when approving or rejecting a Capacity Credit Allocation Submission or Capacity Credit Allocation Acceptance; and
 - b. Market Customer when reversing a Capacity Credit Allocation.

Version 4.0 of the procedure will replace version 3.0 and will commence on 1 June 2019 in line with the associated WEM Rules to introduce the new procedure that will be effective from the June 2019 Trading Month onwards.

3.1.5. Market Procedure: Prudential Requirements

The procedure is proposed to be amended to:

- change the calculation of the Outstanding Amount to more accurately reflect a Market Participant's Capacity Credit Allocations, rather than projecting forward their Capacity Credit Allocations from the last issued Non-STEM Settlement Statement; and
- reflect AEMO's templates and process for Market Participants to provide Credit Support under a Security Deposit deed or corresponding Security Deposit direction.



An example of the change in the calculation of a Market Participant's Outstanding Amount is provided as follows:

Determine the estimated exposure for a Market Participant on 2 November 2019 based on the following information:

- Market Participant does not participate in STEM.
- Market Participant paid AEMO \$300,000 (incl. GST) in the August 2019 Non-STEM Settlement Statement
- Market Participant's Capacity Credit Allocations are detailed in the table below.

Trading Month	CCA Received	CCA Made	Monthly RCP
August 2019	10	0	\$10,000
September 2019	10	0	\$10,000
October 2019	5	0	\$12,000
November 2019	1	0	\$12,000

$$\begin{aligned}
 EE &= \frac{Days_{STEMexp}}{Days_{STEMinv}} \times STEM_{Inv} \\
 &+ \frac{Days_{NSTEMexp}}{Days_{NSTEMinv}} \times [NSTEM_{Inv} + (CCA_{rec, Inv} - CCA_{made, Inv}) \times 1.1 \times MRCP_{Inv}] \\
 &- \sum_{d \in D} [(CCA_{rec, d} - CCA_{made, d}) \times 1.1 \times RCP_d]
 \end{aligned}$$

$$\begin{aligned}
 EE &= \$0 \\
 &+ \frac{30 + 31 + 1}{31} \times [\$300k + (10 - 0) \times 1.1 \times \$10k] \\
 &- 30 \times \left[(10 - 0) \times 1.1 \times \frac{\$10k}{30} \right] \\
 &- 31 \times \left[(5 - 0) \times 1.1 \times \frac{\$12k}{31} \right] \\
 &- 1 \times \left[(1 - 0) \times 1.1 \times \frac{\$12k}{30} \right] \\
 &= \$0k + \$820k - \$110k - \$66k - \$0.44k = \$643.56k
 \end{aligned}$$

AEMO proposes to commence the proposed amended Market Procedure on 27 June 2019 to change the Outstanding Amount calculation after the closure of the Capacity Credit Allocation Submissions for the June 2019 Trading Month.

3.2. Proposed drafting

AEMO has published a draft of the proposed amended Market Procedures for IRCR, Capacity Credit Allocation (versions 3.0 and 4.0) and Prudential Requirements incorporating the changes AEMO proposes for consultation with stakeholders.

Clean and change-marked versions (for all procedures except version 4.0 of Market Procedure: Capacity Credit Allocation which did not merit a change-marked version but instead contains consultation notes to assist stakeholders) are available at:

http://www.aemo.com.au/StakeholderConsultation/Consultations/AEPC_2019_03.

AEMO has also updated the IRCR and Capacity Credit Allocation procedures to use its current document template. Associated formatting changes have not been change-marked.



3.3. Wholesale Market Objective assessment

The steps outlined in the proposed amended Market Procedures describe how Rule Participants will implement their obligations under the WEM Rules in relation to the calculation of IRCR, the Capacity Credit Allocation process, and meeting the prudential requirements in the WEM.

AEMO considers that the steps are drafted in a way that does not change the objectives of the WEM Rules. Moreover, they provide critical information about how each Rule Participant may meet its obligations under the WEM Rules, thereby increasing procedural transparency and certainty.

As a result, AEMO considers that the Market Procedures, as proposed to be amended, are consistent with the Wholesale Market Objectives as follows:

Market Procedure	Objectives met	Reason
Individual Reserve Capacity Requirements	Better meets (a) and (d) Consistent with all other objectives	The proposed amendments facilitate the reduction of: <ul style="list-style-type: none"> credit risk in the WEM, which in turn reduces risk premium borne by consumers; and the cross-subsidy, which in turn increases confidence in the effectiveness of the prudential regime, which could otherwise discourage participation in the market.
Capacity Credit Allocation (version 3.0)	Consistent with all objectives	The proposed amendments allow Market Participants to perform actions in relation to the old Capacity Credit Allocation process under the Pre-Amending Rules as well as the new process under the Post-Amending Rules per the Final Rule Change Report. This will allow the commencement of the new arrangements earlier than otherwise, and improve efficiency.
Capacity Credit Allocation (version 4.0)	Better meets (a) and (d) Consistent with all other objectives	The proposed amendments reduce the prudential risk and correctly account for the reduced risk in the prudential requirements through the changes proposed to the Capacity Credit Allocation process. This promotes economic efficiency and assists in minimising the long term cost of electricity supplied to consumers.
Prudential Requirements	Better meets (a), (b) and (d) Consistent with all other objectives	The proposed amendments ensure the adequate procurement of Credit Support which would otherwise: <ul style="list-style-type: none"> encourage business practices or structures for net Market Customers that are inefficient and unduly risky; and potentially result in a substantial Default Levy that would need to be paid by other Market Participants, and that would eventually be passed onto consumers, without unduly tying up an excessive amount of capital in Credit Support.



4. SUMMARY OF MATTERS FOR CONSULTATION

AEMO invites stakeholders to suggest alternative options or drafting where they consider these would improve the procedure or better meet the Wholesale Market Objectives.

Stakeholders are invited to submit written responses on the proposed amended Market Procedures by 5:00 PM (Australian Western Standard Time) on 15 April 2019, in accordance with the call for submissions published with this paper.

Stakeholders with questions in relation to the proposed amended Market Procedures or this Procedure Change Proposal can contact AEMO via email to wa@aemo.com.au.

All correspondence in relation to this Procedure Change Proposal must be entitled "AEPC_2019_03 Reduction of the prudential exposure in the Reserve Capacity Mechanism - [Name of the submitting company or individual]".