



WHOLESALE ELECTRICITY MARKET

PROCEDURE CHANGE REPORT: PC_2017_01

MARKET PROCEDURE: DETERMINATION OF EXPECTED DSM
DISPATCH QUANTITY AND DSM ACTIVATION PRICE

Published: **June 2017**





© 2017 Australian Energy Market Operator Limited. The material in this publication may be used in accordance with the [copyright permissions on AEMO's website](#).



EXECUTIVE SUMMARY

Purpose

The publication of this Procedure Change Report, and the accompanying Market Procedure, completes the Procedure Change Process conducted by AEMO to consider a new Market Procedure: Determination of Expected DSM Dispatch Quantity and DSM Activation Price under the Wholesale Electricity Market Rules (WEM Rules).

Proposed amendments

The proposed new Market Procedure: Determination of Expected DSM Dispatch Quantity and DSM Activation Price has been developed in accordance with clause 4.5.14B of the WEM Rules, which commenced on 1 June 2016 and requires AEMO to develop a Market Procedure to document the process to calculate the Expected DSM Dispatch Quantity and the DSM Activation Price.

Consultation

Before the Procedure Change Process started, there was uncertainty as to how the Market Advisory Committee (MAC) would perform its advisory function with respect to Market Procedures¹. Consequently, AEMO invited MAC members to the Western Australia (WA) Market Reform Program – Reserve Capacity Mechanism Forum (WAMRP-RCM) on 22 February 2017. Member feedback from the forum was incorporated into the draft Market Procedure before the Procedure Change Process started.

AEMO published the Procedure Change Proposal (PC_2017_01) and issued a notice calling for submissions on 23 March 2017. The submission period closed on 24 April 2017 with submissions received from Synergy and Alinta Energy. Both respondents:

- (a) Supported the proposed drafting and agreed with AEMO that the Market Procedure meets the rule requirements and the WEM Objectives.
- (b) Indicated the need for Market Participants to comment on AEMO's assessment of the need for a Value of Customer Reliability (VCR) Study as the costs would be funded by Market Participants.
- (c) Identified various other matters that AEMO should consider for a VCR study.

Synergy also proposed including a requirement for consultation on a draft version of the VCR study, requested information, and provided suggestions to improve clarity. AEMO has responded in this report to matters identified. AEMO agrees that Market Participants should have an opportunity to comment on AEMO's assessment of the need for a VCR Study and on a draft VCR Study. As the consensus from Market Participants in submissions and at stakeholder workshops is that there is no pressing need for a VCR Study, AEMO has developed factors that it proposes to consider when determining whether to conduct a VCR Study.

AEMO's decision

AEMO's decision is to accept the Market Procedure as amended following the consultation period. AEMO considers that the new Market Procedure is consistent with the Wholesale Market Objectives and WEM Rules.

¹ The Rule Change Panel had yet to formally commence its functions at this time, which include convening the MAC.



Next steps

The new Market Procedure: Determination of Expected DSM Dispatch Quantity and DSM Activation Price will commence at 8.00 am Australian Western Standard Time (AWST) on 8 June 2017.



CONTENTS

EXECUTIVE SUMMARY	1
Purpose	1
Proposed amendments	1
Consultation	1
AEMO's decision	1
Next steps	2
1. BACKGROUND	4
1.1 Regulatory requirements	4
1.2 Context	4
1.3 Procedure Change Process and Timetable	4
2. PROPOSED PROCEDURE CHANGE	5
2.1 Detail of the proposed procedure change	5
2.2 Proposed drafting	5
3. CONSULTATION PROCESS	6
3.1 Market Advisory Committee or Working Group	6
3.2 Public Workshop	6
3.3 Submissions received during consultation period	6
4. AEMO'S ASSESSMENT	9
4.1 Further changes to the Market Procedure	9
4.2 Consistency with WEM Rules, Electricity Industry Act and WEM Regulations	9
4.3 Consistency with Wholesale Market Objectives	9
4.4 Implementation of the Market Procedure	9
4.5 AEMO's decision and commencement	9



1. BACKGROUND

1.1 Regulatory requirements

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

1.2 Context

On 31 May 2016, the Minister for Energy gazetted amendments to the WEM Rules related to the Reserve Capacity Mechanism (RCM).² These amendments changed how the capacity price and capacity volumes are determined for Demand Side Management (DSM) providers.

Clause 4.5.14B of the WEM Rules, which commenced on 1 June 2016, provides that:

AEMO must, on or before 31 December 2016, document the procedure it follows in calculating:

- a) the Expected DSM Dispatch Quantity; and*
- b) the DSM Activation Price,*

and Rule Participants, including AEMO, must follow that documented Market Procedure.

The proposed Market Procedure is the first version of this procedure. This Market Procedure did not commence in accordance with the rule requirement outlined in clause 4.5.14B of the WEM Rules. This has been documented for compliance and market audit purposes, though AEMO notes that this delay has had no operational impact on the market. AEMO proposes to commence the new procedure on 8 June 2017 in time for publication of the Statement of Opportunities Report in mid-June.

1.3 Procedure Change Process and Timetable

On 23 March 2017, AEMO published a Procedure Change Proposal (PC_2017_01) for the Market Procedure: Determination of Expected DSM Dispatch Quantity and DSM Activation Price and issued a call for submissions, which are available at:

http://www.aemo.com.au/Stakeholder-Consultation/Consultations/PC_2017_01.

The proposal was progressed using the Procedure Change Process described in clause 2.10 of the WEM Rules with submissions required by 24 April 2017.

² See Government Gazette No.89 dated 31 May 2016, *Electricity Industry (Commencement of Electricity Industry (Wholesale Electricity Market) Amendment Regulations) Order 2016*.



2. PROPOSED PROCEDURE CHANGE

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

2.1 Detail of the proposed procedure change

The new Market Procedure describes how the input variables for calculating the DSM Reserve Capacity Price are determined. The two main input variables are the Expected DSM Dispatch Quantity and the DSM Activation Price.

Expected DSM Dispatch Quantity

The Expected DSM Dispatch Quantity (**EDDQ**) is a forecast, expressed in terms of MWh per DSM Capacity Credit, based on the quantity of Unserved Energy which might be expected to be avoided in a Capacity Year through the dispatch of all Facilities which have been assigned DSM Capacity Credits for 200 hours.

To inform the EDDQ calculations, AEMO may use its information request functions in clause 4.5.3 of the WEM Rules, where it may request information for each year of the Long Term Projected Assessment of System Adequacy (PASA) Study Horizon from Rule Participants by no later than 1 April of Year 1 of the relevant Reserve Capacity Cycle.

DSM Activation Price

The DSM Activation Price represents an estimate of the VCR for a Capacity Year in dollars per MWh and is used to determine the DSM Reserve Capacity Price. The VCR reflects the value derived through reduction of unserved energy by DSPs.

AEMO will annually assess the need to conduct a VCR study and will publish the outcome of its assessment in the Request for Expressions of Interest by 5:00 PM on or before 31 January of Year 1 of a Reserve Capacity Cycle in accordance with clause 4.1.4. The assessment must consider the cost and the expected duration of the study. In the absence of a VCR study, AEMO will determine the DSM Activation Price to be \$33,460MWh, which is the value provided in clause 4.5.14F of the WEM Rules.

2.2 Proposed drafting

AEMO published a draft of the proposed Market Procedure: Determination of Expected DSM Dispatch Quantity and DSM Activation Price for consultation. The procedure as drafted is available at:

http://www.aemo.com.au/Stakeholder-Consultation/Consultations/PC_2017_01. AEMO did not provide a marked-up version of the Market Procedure as it is new.



3. CONSULTATION PROCESS

3.1 Market Advisory Committee or Working Group

Before commencing the Procedure Change Process, there was uncertainty as to how the Market Advisory Committee (MAC) would perform its advisory function in respect of Market Procedures³. Consequently, AEMO invited MAC members to the WA Market Reform Program – Reserve Capacity Mechanism Forum (WAMRP-RCM) meeting held on 22 February 2017.

A draft version of the Market Procedure was presented at the forum. Details of the forum are available at:

<http://aemo.com.au/Stakeholder-Consultation/Industry-forums-and-working-groups/WA-Forums/WAMRP-Reserve-Capacity-Mechanism-Forum>.

Stakeholders recommended minor changes to improve clarity around publication of data, timeframes and the definition of customer groups and peak intervals for VCR studies. These minor changes were incorporated into the draft Market Procedure before the Procedure Change Process started.

3.2 Public Workshop

No public workshops were held in relation to this Procedure Change Proposal.

3.3 Submissions received during consultation period

AEMO commenced the Procedure Change Proposal (PC_2017_01) and issued a notice calling for submissions on 23 March 2017. The submission period closed on 24 April 2017 with submissions received from Synergy and Alinta Energy.

Both respondents:

- a) Supported the proposed drafting and agreed with AEMO that the Market Procedure meets the rule requirements and the WEM Objectives.
- b) Indicated the need for Market Participants to provide comment on AEMO's assessment on the need for a VCR Study as the costs will be funded by Market Participants.
- c) Identified various other matters that AEMO should consider for a VCR Study.

Synergy also proposed including a requirement for consultation on a draft version of the VCR Study, requested information and provided a number of suggestions to improve clarity.

AEMO has responded to the individual matters identified. AEMO agrees that Market Participants should have an opportunity to comment on AEMO's assessment of the need for a VCR Study and also on a draft VCR Study. As the consensus from Market Participants in submissions and at stakeholder workshops is that there is no pressing need for a VCR Study, AEMO has developed factors that it proposes to consider when determining whether to conduct a VCR Study.

Copies of submissions received during the submission period are available at:

http://www.aemo.com.au/Stakeholder-Consultation/Consultations/PC_2017_01.

3.3.1 Specific comments

AEMO's assessment on the need for a VCR Study and factors to consider

Synergy and Alinta Energy commented on step 3.2.2.

³ The Rule Change Panel had yet to formally commence its functions at this time, which include convening the MAC.

Both Synergy and Alinta Energy considered that Market Participants should have an opportunity to provide comments on AEMO's assessment of the need for a VCR Study as the costs will be funded by Market Participants. Alinta noted that the cost and time commitment required to conduct a VCR Study is likely to be substantial. As such, Alinta considered that the study should only be undertaken where there is clear and absolute evidence that an updated study is required.

Given the likelihood that such a study would be funded by Market Participants, Alinta also considered that step 3.2.2 should outline the factors that AEMO will take into account in its annual assessment to determine the need for the study.

AEMO's Response

AEMO agrees that Market Participants should be able to comment on the need for a VCR Study. Given the expected cost commitment required for the study, AEMO notes that it would specifically include this cost in its Allowable Revenue proposal. Rather than conduct a specific consultation process on this matter, AEMO considers that the consultation conducted by the Economic Regulation Authority with respect to an Allowable Revenue proposal provides opportunity for Market Participants to comment on the study proposal's merit.

Given this, AEMO has amended the procedure to include the following factors that it must take into account when determining whether to conduct a VCR Study:

- a) Whether an allowance for a study has been made in AEMO's Allowable Revenue determination.
- b) Any relevant studies brought to the attention of AEMO.
- c) The views of the MAC and other stakeholders.

Draft VCR report

Synergy commented on step 3.2.12.

Synergy considered that, consistent with other WEM Rule processes, AEMO should publish a draft report and undertake consultation prior to finalising the VCR Study, and proposed drafting amendments to steps 3.2.12 and 3.2.13 accordingly.

AEMO's Response

AEMO agrees that Market Participants should have an opportunity to comment on the VCR Study. As such, AEMO has amended the procedure to include a draft report consultation process that follows the consultation for the Benchmark Reserve Capacity Price.

VCR study cost recovery

Synergy commented on step 3.2.2, requesting further information on AEMO's cost recovery intentions.

AEMO's Response

AEMO advises that as the WEM Rules do not provide for a treatment of these costs, the costs of the VCR Study will be recouped via Market Fees.

Expected DSM Dispatch Quantity

Synergy commented on step 2.1.1(d).

Synergy indicated that this step is not in accordance with clause 4.5.13(h) of the WEM Rules, which sets the Expected DSM Dispatch Quantity (EDDQ) in the Statement of Opportunities published in June prior to the start of the Capacity Year. In comparison, this step indicates EDDQ is calculated at the start of the Capacity Year in question. Synergy considered that, as EDDQ is an input into the calculation of the DSM



Reserve Capacity Price, it should be set at the same time and Synergy proposed amendments to this step accordingly.

AEMO's Response

AEMO notes that step 2.1.1 of the Market Procedure replicates clause 4.5.14C of the WEM Rules. Step 2.1.1(d) indicates that the calculations published in the Statement of Opportunities in June will be based on Capacity Credit assignments in the relevant Capacity Year, which has yet to commence. As such, AEMO has not amended this step of the Market Procedure.

Expected Unserved Energy

Synergy commented on step 2.2.4.

Synergy asked for further information about the approach for determining $EUE_{t,0}$ and $EUE_{t,200}$. Synergy proposed that the procedure for Long Term PASA be amended to include a process and methodology for how these values will be determined, and step 2.2.4 amended accordingly.

AEMO's Response

AEMO accepts the benefits of providing further information on the approach to determine Expected Unserved Energy. However, it is not appropriate for that information to be provided in this procedure, and AEMO has yet to determine the appropriate document for publishing this information. As such, AEMO has not amended the Market Procedure.

DSP locational assessment

Synergy commented on step 2.2.5(f).

Synergy asked for clarification on whether the location of a DSP is assessed in terms of its impacts on network constraints. Synergy noted that this assessment should be undertaken during certification (under clause 4.10.1(g) of the WEM Rules), however the individual loads that make up each DSP may not be known at that time. Synergy proposed a reassessment closer to the start of the capacity year via step 2.2.5(f).

AEMO's Response

AEMO advises that the location of a DSP and any relevant network constraints are considered in the assignment of Certified Reserve Capacity (to the extent known at the time), and can confirm that constraints have limited the assignment of Certified Reserve Capacity to DSM capacity in the past. AEMO confirms that the Long Term PASA Study (which includes calculation of the EDDQ) is performed using the most up-to-date information available at the time. As such, AEMO has not amended the Market Procedure.

General

Synergy commented on various steps, noting various typographical issues and suggested amendments to promote clarity.

AEMO's Response

AEMO accepts Synergy's proposed changes to the definitions of Expected Unserved Energy, Value of Customer Reliability, and the footnotes for steps 2.2.2(e) and 2.2.4. AEMO has amended the procedure accordingly.



4. AEMO'S ASSESSMENT

4.1 Further changes to the Market Procedure

In accordance with the submissions, AEMO has made the following revisions to the Market Procedure:

- a) Included factors that AEMO must consider in making a determination on whether to perform a VCR Study. These factors include whether an allowance for a study has been made in AEMO's Allowable Revenue determination, any relevant studies brought to the attention of AEMO and the views of the MAC and other stakeholders.
- b) Included a consultation process on a draft version of the VCR Study in line with the process for the Benchmark Reserve Capacity Price.
- c) Minor amendments to improve clarity in response to comments received.

4.2 Consistency with WEM Rules, Electricity Industry Act and WEM Regulations

The proposed new WEM Market Procedure has been reviewed as a whole by AEMO to ensure compliance with the relevant provisions in the:

- Electricity Industry Act.
- WEM Regulations.
- WEM Rules.

4.3 Consistency with Wholesale Market Objectives

The steps outlined in this new Market Procedure describe the process AEMO has to follow to determine the DSM Reserve Capacity Price as the price that will be paid per DSM Capacity Credit for a Capacity Year.

AEMO considers that the steps are drafted in a way that does not change the objectives of the WEM Rules. As a result, AEMO considers that the new Procedure, as a whole, is consistent with the Wholesale Market Objectives.

4.4 Implementation of the Market Procedure

The new Market Procedure: Determination of Expected DSM Dispatch Quantity and DSM Activation Price was developed in accordance with clause 4.5.14B of the WEM Rules, which commenced on 1 June 2016.

This Market Procedure does not require system changes by AEMO.

The Market Procedure will not require Rule Participants to implement any procedural or system amendments before the procedure can commence.

Consequently, AEMO considers that the commencement at 8.00 am Australian Western Standard Time (AWST) on 8 June 2017 will allow Rule Participants sufficient time from the date of publication of this Procedure Change Report to ensure compliance with the amended Procedure.

4.5 AEMO's decision and commencement

AEMO's decision is to accept the Market Procedure as amended following the consultation period. The new Market Procedure: Determination of Expected DSM Dispatch Quantity and DSM Activation Price will commence at 8.00 am AWST on 8 June 2017.

AEMO has made this decision on the basis that the new Market Procedure:



- Is consistent with the Wholesale Market Objectives.
- Is consistent with the WEM Rules, Electricity Industry Act and WEM Regulations.
- Has the general support of submissions received during the consultation period.

Additional detail outlining the analysis behind AEMO's decision is outlined in section 3 of this Procedure Change Report.

The new Market Procedure: Determination of Expected DSM Dispatch Quantity and DSM Activation Price is available at:

http://www.aemo.com.au/Stakeholder-Consultation/Consultations/PC_2017_01.