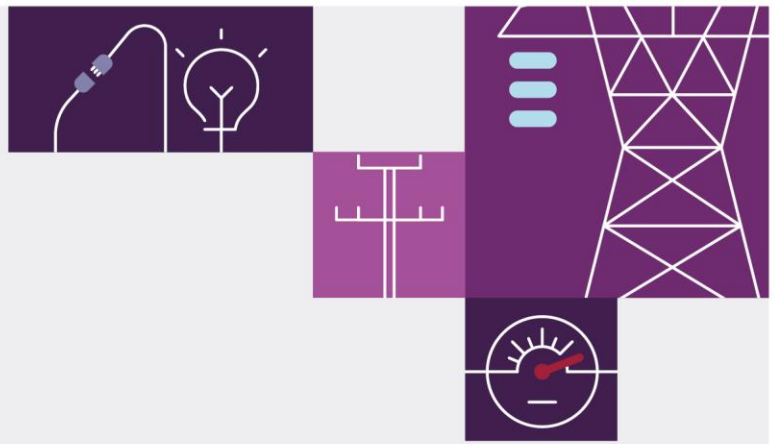


# Summary of Submissions

March 2024

WEM Procedure: Frequency Co-  
Optimised Essential System Services  
Accreditation





# Important notice

## Purpose

AEMO must publish, together with a final WEM Procedure, a summary of submissions received and the response of AEMO to issues raised in those submissions, with respect to amendments to Procedures required to be developed under:

- For clause 1.36.7(b) – Wholesale Electricity Market Amendment (Tranche 1 Amendments) Rules 2020.
- For clause 1.43.7(b) – Wholesale Electricity Market Amendment (Tranche 2 and 3 Amendments) Rules 2020.
- For clause 1.43A.6 – Wholesale Electricity Market Amendment (Tranche 5 Amendments) Rules 2021.
- For clause 1.43B.1 – Wholesale Electricity Market Amendment (Tranche 6 Amendments) Rules 2022 and (Tranche 6A Amendments) Rules 2023.

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# Submissions and AEMO's Response

The following written submissions were received as part of AEMO's stakeholder consultation.

Relevant Procedure Paragraph(s)	Submission	AEMO's Response
<b>Definition: Amendment Process</b>	Stakeholder suggested deleting "of varying the Facility's Frequency Co-Optimised Essential System Service Accreditation Parameters" from paragraph (a) and (b) of the Amendment Process definition for ease of reading.	AEMO deleted "for Frequency Co-Optimised Essential System Service, of varying" from paragraphs (a) and (b) of the Amendment Process definition to assist with ease of reading.
<b>Definition: Block Response</b>		Post consultation, AEMO identified the definition for Block Response was inadvertently deleted from the WEM Procedure. AEMO has re-instated the definition in the WEM Procedure to ensure clarity is provided regarding the use of the term throughout the WEM Procedure.
<b>Definition: Protection System</b> and <b>Definition: Total Fault Clearance Time</b>	Stakeholder suggested both definitions should be worded as follows: "as described in the Technical Rules"	AEMO has not made the change suggested. AEMO has intentionally referred to the WEM Rules to prevent inconsistencies should the WEM Rules or Technical Rules be amended.
<b>3.2.3</b>	Stakeholder suggested the paragraph be amended to make it clear that a Facility can be made up of smaller-than-5MW loads that are aggregated to reach the 5MW minimum. Stakeholder also suggested that loads can be aggregated across TNIs, which will allow load aggregators to bring more FCESS to the market and provide additional competition. Stakeholder also noted that in the NEM, FCAS resources can be aggregated across TNIs, so long as they are in the one state.	AEMO believes the wording under paragraph 3.2.3 does not prevent an aggregated load of at least 5 MW from providing Contingency Reserve Raise or Contingency Reserve Lower. Clause 2.29.1B(c) of the WEM Rules provides for these Facilities.
<b>3.2.7</b> and <b>3.2.9</b>	Stakeholder suggested paragraphs 3.2.7 and 3.2.9 should be amended to include standing exemptions for Facilities providing Block Response.	AEMO has retained an exemption process for Facilities, including for those providing Block Response. AEMO currently does not see why it would not grant an exemption, however, retains the requirement should circumstances arise where AEMO would not grant an exemption to maintain Power System Security and Power System Reliability. AEMO may consider standing exemptions for Facilities providing Block Response in future revisions of this WEM Procedure.
<b>3.5.1</b>	Stakeholder suggested paragraph 3.5.1 should be amended to include a standing exemption for Facilities providing Block Response.	AEMO amended the paragraph to include an exemption for Facilities providing Block Response.
<b>4.1.4</b>	Stakeholder requested AEMO include a notification process where AEMO have re-determined the Maximum Contingency Reserve Block Size and the re-determination impacts a Market Participant.	The Maximum Contingency Reserve Block Size may be amended where AEMO considers there may be impacts to Power System Security or Power System Reliability. Where AEMO amends the Maximum Contingency Reserve Block Size and the amendment impacts a Market Participant,

Relevant Procedure Paragraph(s)	Submission	AEMO's Response
		<p>AEMO will notify the Market Participant in accordance with paragraph 4.1.5.</p> <p>AEMO identified that publication of the re-determination was missing from the WEM Procedure. AEMO have amended paragraph 4.1.4 to clarify that where the Maximum Contingency Reserve Block Size is amended, AEMO will publish the amended Maximum Contingency Reserve Block Size on the WEM Website.</p>
6.1	<p>Stakeholder sought clarification as to whether the accreditation of Speed Factor for Facilities providing Block Response is measured for an event that triggers the under-/over-frequency response and the response in MWs provided in the first 4 seconds from the frequency crossing the threshold is measured and compared to the reference curves.</p> <p>Stakeholder also sought clarification whether compliance would be similarly measured.</p>	<p>This is how AEMO intends to approach accreditation for Facilities providing Block Response based on an event, however, AEMO's approach will assess MWs provided at the greater of 4 seconds or nadir time.</p> <p>As drafted, the WEM Procedure does not currently take this approach when the Speed Factor determination for Block Response is based on testing. Amendments to the process for Speed Factor determination for Block Response based on testing were not considered as part of this WEM Procedure change and as such, would be considered outside of the scope at this stage of the WEM Procedure amendment process. AEMO appreciates the clarification and feedback provided and will take this into consideration as part of further changes to the WEM Procedure.</p> <p>Further, the use of the 4 second measure is only for the purposes of accreditation and Facility Speed Factor determination. Compliance would be based on the performance of the aggregated load against the frequency threshold and the delay (on which the Block Response is accredited) in real events.</p> <p>In reviewing the stakeholder's feedback and assessing testing and accreditation relevant to Speed Factor determination, AEMO identified a typographical error in paragraph 6.2.8 which incorrectly identified the determination would be at the lesser of 4 seconds and the Nadir, where it should be the greater. AEMO has aligned this with Version 1.0 of the WEM Procedure, which correctly identified the requirement.</p>
6.2	Stakeholder requested clarification as to whether it is to be interpreted that load response would be determined to have zero inertia.	Inertia for Loads may be a non-zero value. However, Block Loads will always have a zero Inertia value.
7.3.3	Stakeholder suggested there be a process following AEMO notifying a Market Participant that their accredited Facility Frequency Co-optimised Essential System Service has been revoked, where the two parties discuss the requirements of the Amendment Process. This	Discussions with a Market Participant impacted by AEMO requiring an amendment to the relevant Frequency Co-optimised Essential System Service Accreditation Parameters would take place prior to revocation or during the Amendment Process. The intent of the revocation process is to ensure where a Market Participant fails to

Relevant Procedure Paragraph(s)	Submission	AEMO's Response
	would provide AEMO and the Market Participant with the opportunity to discuss the specific issues.	undergo the Amendment Process, AEMO has an avenue to revoke accreditation to maintain Power System Security and Power System Reliability.
7.3.4	Stakeholder clarified whether the requirement under paragraph 7.3.4 should instead be a "may apply". If the accreditation is revoked, the Market Participant may not want to reapply for certification depending on the reason why accreditation was revoked.	AEMO has amended the paragraph to specify that a Market Participant only needs to seek accreditation if they wish to provide the Frequency Co-optimised Essential System Service after the Frequency Co-optimised Essential System Service has been revoked by AEMO.
8.2	<p>Stakeholder proposed that a frequency injection test to demonstrate Block Response by loads be managed by providing two pieces of evidence to AEMO:</p> <ul style="list-style-type: none"> <li>• A lab test of a frequency injection test demonstrating that the metering and control device under- or over-frequency relay triggers when the frequency setpoint is crossed; and</li> <li>• A field test that shows the level of response through high-speed recorder device information when the relay is tripped.</li> </ul> <p>Stakeholder advised that due to the nature of their Facility, this becomes a cost- and time-effective manner to demonstrate the required response.</p>	This level of detail is something that would be captured in AEMO's Frequency Co-Optimised Essential System Services Testing Guideline. AEMO has noted this feedback and will take this into consideration as part of the update to the Frequency Co-Optimised Essential System Services Testing Guideline.
9	Stakeholder advised that for Load aggregators, it may be difficult to obtain manufacturer information from customers or submit data required due to lack of relevant protection settings. As a result, the stakeholder proposed the information required to accredit a Facility's RoCoF Ride-Through Capability be changed to instead be managed through a compliance regime in which the risk sits with the aggregator to deliver regardless of the RoCoF	AEMO would consider that where this information is not available to a Rule Participant, real event data and engineering studies, including testing and manufacturers information would be required to be provided to sufficiently demonstrate the capability.
9.1.3	Stakeholder queried whether paragraph 9.1.3 should instead be a "may submit" obligation instead, as the Market Participant could be willing to accept the safe limit.	The requirement in this paragraph is to ensure Standing Data is up to date to reflect the Rule Participant's RoCoF Ride-Through Capability, in accordance with the requirements under the WEM Rules. AEMO have retained the 'must' obligation and have amended the paragraph to provide additional clarity surrounding the purpose of the requirement. Whilst reviewing the stakeholder's feedback, AEMO identified the paragraph reference at the end of paragraph 9.1.3 was incorrect. AEMO has rectified this.
9.2.12	Stakeholder suggested that paragraph 9.2.12, regarding information AEMO consider when determining if a Market Participant is required to undergo testing or re-testing of RoCoF Sensitive Equipment should be amended to a 'may' instead of 'will'	AEMO made the change as suggested.