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8 July 2024

Ms Dora Guzeleva Director, Wholesale Markets Energy Policy WA Email: energymarkets@dmirs.wa.gov.au

Dear Ms Guzeleva,

Exposure Draft – Miscellaneous Amendments No. 3 (Misc 3)

The Australian Energy Market Operator (AEMO) welcomes the opportunity to provide a submission on the proposed Misc 3 Amending Wholesale Electricity Market (WEM) Rules.

AEMO supports the policy outcomes being implemented under Misc 3 and acknowledges the significant work undertaken by Energy Policy WA (EPWA) in developing and consulting on the Exposure Draft. AEMO broadly supports the changes scheduled to commence on Gazettal, particularly those aimed at improving the effectiveness of market processes.

AEMO also notes its support for the transitional amendments to extend the date by which AEMO is required to submit its next Allowable Revenue and Forecast Capital Expenditure Proposal to the Economic Regulation Authority (ERA). This delay will be crucial to enable the progression of a Rule Change Proposal to amend the regulatory framework for oversight of AEMO's Allowable Revenue and Forecast Capital Expenditure. As recognised by the ERA in its final determination on AEMO's second in-period submission, significant changes are required to ensure the framework accounts for AEMO's role in the energy transition and ongoing WEM reform.

Attachment 1 outlines the key matters AEMO considers should be addressed in Parts 1, 2 and 3 before the rules are finalised and commenced. AEMO's detailed comments on the Exposure Draft and proposed alternative drafting have been provided separately to EPWA.

Importantly, AEMO considers that further work is required before finalising the changes under Part 2 aimed at removing barriers to the participation of Demand Side Programme's (DSPs) in the Reserve Capacity Mechanism.

AEMO supports this policy objective but has identified some key considerations which will determine the approach to implementation of the proposed changes. These are outlined in detail in Attachment 1 and include:

issues related to the operational dispatch of these DSPs;



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- considerations for determining the DSP Injection Cap ahead of the relevant Reserve Capacity Cycle; and
- revisions required for the application of the settlement calculations throughout Part B.

• AEMO has also provided feedback on the removal of barriers to Virtual Power Plants, noting that this is outside of the scope for Misc 3, but an important upcoming consideration for future work programs.

AEMO notes that the full suite of changes under Misc 3 will require substantial modifications to AEMO's systems, operational processes, and the development of eight new or amended WEM Procedures. As this will have significant implications for resourcing, identifying the priority of initiatives will be necessary to avoid bottlenecks with other reform work.

AEMO would welcome the opportunity to work with EPWA to ensure the timing and commencement of the changes is considered within the scope of AEMO's forward work program. To assist with this process, AEMO has highlighted in Attachment 1 where the amendments are likely to involve implementation effort for AEMO and other Rule Participants.

AEMO looks forward to continuing to work with EPWA on addressing the matters outlined in this submission and refining the proposed Amending Rules.

If you would like to discuss any matters raised in this submission, please contact Mena Gilchrist, Manager Regulator Affairs at mena.gilchrist@aemo.com.au.

Yours sincerely,

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Kate Ryan

Executive General Manager – Western Australia & Strategy

Attachment 1: AEMO's main feedback on the Misc 3 Exposure Draft



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Misc 3 Policy Change	WEM Rules ref	AEMO comments and proposed changes
PART 1 – Commence on Gazettal		
New AEMO Obligation Require AEMO to inform the Coordinator of Energy (Coordinator) and the Economic Regulation Authority (ERA) of any issues that are likely to adversely affect the effectiveness of the WEM or achievement of the Wholesale Market Objectives	cl. 2.16.3A to 2.16.3E	AEMO supports the new obligation but proposes implementing the following changes to minimise the administrative burden and resourcing implications for AEMO:
		• Clause 2.16.3A : Under the current drafting even minor issues with an adverse effect could be captured, resulting in increased monitoring and reporting with subsequent cost impacts. AEMO requests that a threshold for materiality is introduced such that reporting is only required where there are significant or material adverse effects.
		• Clause 2.16.3B, 2.16.3C : The ability to request further information from AEMO has the potential to require significant resources, especially requests for analysis. Given the associated cost impacts and potential for diversion of resources from other important functions, AEMO requests there be stronger wording to ensure consultation with AEMO on the implications of the request is taken into account. Clause 2.16.3B should also be amended to include the need to specify the time and date in the request, which AEMO proposes should be further limited by reasonableness.
		• Clause 2.16.3D: AEMO recommends this clause is amended to allow the possibility for an extension (with the agreement of the requesting party) if the information or analysis is taking longer than anticipated. Without this change, AEMO may be required to breach the WEM Rules, even where an extension would otherwise be granted.
		• Clause 2.16.3E: There is a potential conflict between this clause and Chapter 10, especially if the relevant information is to be considered Market Information. A potential solution may be to introduce an amendment to Chapter 10 such that it does not apply where information is required to be exchanged under other sections of the WEM Rules. AEMO would appreciate the opportunity to work through the implications with Energy Policy WA (EPWA).

Misc 3 Policy Change	WEM Rules ref	AEMO comments and proposed changes
		AEMO has provided proposed drafting at an officer level to address the above points. Resourcing
		Depending on the volume and nature of requests, AEMO may require additional resources to undertake these new obligations. Should this eventuate, AEMO's ability to meet these requirements may be limited while resources are sought.
New AEMO Obligation	cl. 3.8B.1 to 3.8B.7	AEMO strongly supports expanding the requirements on AEMO to report on significant incidents in the SWIS and acknowledges the benefits this would provide to stakeholders and the market.
Require AEMO to investigate and report on significant incidents in the South West Interconnected System (SWIS)	(0 0.0D.)	However, the proposed drafting is quite broad and duplicates many of the provisions already outlined under section 3.8. The result is that many significant events could trigger both section 3.8B and section 3.8 and it is not clear what the changes are intended to capture. AEMO therefore proposes the following changes to achieve the policy intent and provide clarity:
		• Remove new section 3.8B and integrate the proposed changes within existing section 3.8.
		 This would require amendments to clause 3.8.1 to expand on the current obligations and ensure it is not limited to equipment on the SWIS.
		 Require AEMO to develop a new WEM Procedure, to provide further clarity around the types of significant events that will be investigated. AEMO notes:
		 this could include defining a process for assigning events a priority level, which would have associated timing and resourcing implications; and
		 the Procedure Change Process would effectively facilitate industry consultation on the types of events they consider AEMO should be reporting on.
		AEMO has provided proposed drafting at an officer level to address the above points. In doing so, AEMO considered the equivalent framework in the National Electricity Market which specifies these events in greater detail.
		Resourcing AEMO is not currently resourced for these new obligations which are intended to commence on Gazettal. AEMO will require time to properly consider the resourcing implications, including systems, processes and people.

Misc 3 Policy Change	WEM Rules ref	AEMO comments and proposed changes
Market Information Allow AEMO to proactively share information with EPWA and the ERA without requiring a formal request	cl. 10.4.4A	AEMO supports the proposed amendment and suggests that EPWA consider expanding its scope.
		As identified at a recent Power System Security and Reliability Standards Working Group, there are additional exchanges of information not captured by the current drafting. AEMO suggests adding a new clause which allows for the proactive exchange of information or data between all relevant parties (i.e. AEMO, the Coordinator, the ERA and a Network Operator).
		AEMO has provided proposed drafting to implement this change at an officer level.
<u>Creation of Separate Facilities</u> Define a Facility by its Metering Point,	Sections 2.27, 2.29, 2.30, 2.31, 2.34,	AEMO supports the intent of the changes, but has identified the following amendments that may be needed to address any gaps and inconsistencies in the drafting:
rather than its connection point, to		 Amendments to ensure the changes can apply to existing Facilities.
allow for registration of multiple Facilities behind a single connection		 Amendments to enable the de-registration of existing Separate Facilities that wish to register as a single Facility or Aggregated Facility.
point following approval from AEMO		 New clauses to account for the treatment of existing Facilities, including processes for transferring Capacity Credits, that become Separate Facilities mid-way through the capacity cycle.
		• Amendments to oblige Market Participants with Separate Facilities to notify AEMO of changes (or intended changes) to the Facility that impact on the conditions of AEMOs approval under new clause 2.31.2B. AEMO should have the ability to accept, require rectification, or require Facility aggregation where rectification is not possible or desired.
		AEMO has provided proposed drafting to address the above and minor clarifications at an officer level.
		The changes to allow for Separate Facilities will also have implications for Chapter 3A and Appendix 12, which outline the process and standards for the connection of new generation Facilities. Further work is required to understand the implications before potential drafting solutions can be recommended.
		Resourcing
		As changes to AEMO's registration systems will be required to implement these rule amendments, timing should be considered alongside AEMO's broader reform agenda. Further work is required to

Misc 3 Policy Change	WEM Rules ref	AEMO comments and proposed changes
		understand the implications for generator performance standards and monitoring, which may also result in system changes and have resourcing implications.
New or amended WEM Procedures		AEMO notes there are new and amended WEM Procedures provided for under Part A that would be required to be published when the Amending Rules are gazetted. AEMO is prevented from commencing the Procedure Change Process until the rules are gazetted, AEMO will automatically be in breach of the rules. AEMO therefore recommends the following changes are implemented:
		 A new transitional clause allowing AEMO additional time to complete the new and amended WEM Procedures required under Misc 3.
		 A new clause allowing the Procedure Change Process to be commenced while the proposed Amending Rules are still being consulted on. There is a equivalent provision in the National Electricity Market that enables this to occur.
		AEMO has provided proposed drafting at an officer level.
PART 2 – Commencement to be conf	irmed	
Demand Side Programme (DSP) Changes Introduction of requirement for AEMO to publish DSP Injection Cap at each Transmission Node Identifier (TNI) as well as a TNI List of locations where relevant DSPs cannot register	cl. 2.29.5AC 4.15.16A 4.3.1	AEMO supports the changes but notes the requirement to publish a DSP Injection Cap at a TNI does not necessarily address the potential power system risks that could be posed by a DSP at that location. It is the expected change in energy at a TNI location, not only injection, that should be considered when setting the relevant TNI caps.
		AEMO therefore proposes the following drafting changes for consideration:
		 the DSP Injection Cap concept should be changed to an overall "TNI Cap" which accounts for DSP activation (injection and withdrawal);
		 AEMO should be given the flexibility to specify a cap for a group of TNI's if needed (this will become more important as DSP capacity increases over time); and
		 the rules should clarify how AEMO is to allocate capacity if multiple DSPs were to register at a TNI and in aggregate exceed the relevant TNI Cap.

Misc 3 Policy Change	WEM Rules ref	AEMO comments and proposed changes
		AEMO supports the requirement to specify the process for developing the TNI List in a WEM Procedure. While AEMO has identified some preliminary options for this process, further time will be required to assign resourcing and develop the appropriate method.
		AEMO notes that the TNI List will likely be developed and published based on the results of determining the relevant TNI Caps. The TNI list should therefore also consider what combinations of DSPs or TNIs that could pose a security risk.
		AEMO has provided detailed drafting comments at an officer level.
		Resourcing AEMO will have to develop the resource capability to implement the new requirements, including the new WEM Procedure and conducting engineering studies. We also note the timing for publication of the report each year would require a specialised resource working over the peak demand period.
DSP Changes	DSP Changes cl. 7.8A.3	For the purposes of estimating Relevant Demand under clause 7.8A.3, AEMO notes that the use of meter data from the Event Day does not work as an input, given the data is required 14 days before
Requiring use of meter data in the	Step 5.1(b) Appx 10	the Event Day occurs.
calculation of Relevant Demand	APPX 10	AEMO would welcome the opportunity to work with EPWA to identify potential solutions, which are likely to involve the use of historical data. Some relevant considerations include:
		 the need to clarify in Appendix 10 whether Relevant Demand is calculated every day;
		• the source of the historical data (e.g., from a fixed number of days in the past); and
		 participant expectations of a Relevant Demand determined at dispatch that is different to the calculation at settlement.
DSP Changes	cl. 2.29.5AD	AEMO notes that the current drafting does not specify the process for adjusting the Reserve Capacity
Impact on the Reserve Capacity		Security for DSPs that are required to separately register behind each TNI. AEMO would consequently be required to return the security taken for the aggregated DSP under clause 4.10.1B
Security requirements for registered DSPs	and then take new security for a potentially large number of newly registered DSPs. This is a manual process and would be resource intensive.	

Misc 3 Policy Change	WEM Rules ref	AEMO comments and proposed changes
		AEMO suggests that amendments are made to allow AEMO to hold Reserve Capacity Security at the Market Participant level for the impacted DSPs instead of the Facility level.
		AEMO also requests that a similar clause to 4.20.16 be drafted to require the Market Participant to advise AEMO of the Capacity Credits to be allocated between the DSPs registered under clause 2.29.5AD.
		AEMO has provided detailed comments and will provide proposed drafting at an officer level.
DSP Changes Requirement to register each DSP behind a TNI 3 months in advance of the relevant Reserve Capacity Year	cl. 2.29.5AD	AEMO has conducted preliminary analysis on the impact of this requirement on the operational dispatch of DSPs. As drafted, the changes are likely to require the following changes to AEMO's systems and processes:
		• Registration : Changes to enable the registration of each DSP with a TNI and enable loads located at that TNI to be associated with the applicable DSP. AEMO must also be provided with sufficient information on the assets or DER Equipment being managed at each Associated Load to enable AEMO to assess the impact on the TNI cap and consequential power system security risks.
		• Dispatch : The expected quantity of DSPs under these new arrangements would be unmanageable for the control room to dispatch under the current system build. AEMO is currently investigating potential options, which are likely to have subsequent impacts to systems and processes for AEMO and Market Participants.
		• Metering System : Western Power owns the TNI list and does not provide AEMO with this data. AEMO currently only stores the Transmission Loss Factors as part of its Metering Standing Data and would therefore require new rules and processes to receive and utilise appropriate TNI information. This information will also be required for the development of the TNI List and TNI Caps.
		• Constraints : As AEMO's constraints are our representation of the transmission network system, changes would be required to map the Western Power TNI data to AEMO's constraints.

Misc 3 Policy Change	WEM Rules ref	AEMO comments and proposed changes
		 Short Term Projected Assessment of System Adequacy (ST PASA): AEMO would need to include DSP capacity in the ST PASA forecast to adequately consider the constraints at the relevant TNIs.
		• Real-Time Market (RTM) Systems : Market Participants would need to provide forecast information in a timely manner and format suitable for consumption by WEMDE, which is likely to involve implementation effort for the relevant Market Participants.
		Resourcing
		These are substantial system and process changes with subsequent cost impacts. AEMO would welcome the opportunity to work with EPWA on potential options to minimise these impacts, or alternatively to prioritise the changes within the scope of AEMO's forward work program. AEMO notes that some of the required changes will also be required to enable DER Roadmap actions.
DSP Changes Requirement for DSPs to provide more dynamic Minimum Consumption data	cl. XX.XX. cl. YY.YY	Noting that Minimum Consumption data is no longer required for use in settlement, AEMO proposes a review of the process and benefits for continuing to provide this information under the WEM Rules.
		If the requirement for dynamic Minimum Consumption data is retained, AEMO proposes that it should be implemented using the RTM Submission process. These clauses should consequently be re-located into Chapter 7, with the data provided under clause 7.4A.13 as part of the inputs for a DSP Withdrawal Profile.
		AEMO has provided proposed drafting at an officer level.
Settlement Calculations	Section 4.26	AEMO has reviewed the relevant changes to settlement calculations throughout the Exposure Draft
Changes to the Relevant Demand calculations in Appendix 10 and calculations for Reserve Capacity refunds under section 4.26	Appendix	and has highlighted several issues that require clarification. AEMO provided initial comments to EPWA earlier in the consultation period and looks forward to working with EPWA to resolve these and refine the drafting.

Misc 3 Policy Change	WEM Rules ref	AEMO comments and proposed changes
Non-Co-Optimised Essential System Services (NCESS) and Long Term Projected Assessment of System Adequacy (LT PASA)	cl. 3.11B.15 cl. 4.5.12	AEMO supports these changes but has identified minor drafting clarifications that have been provided at an officer level.
Clarify publication requirements associated with NCESS contracts		
Provide clarity around the Availability Duration Gap determination for all years in the LT PASA horizon		
PART 3 – Commencement to be confi	rmed	
Contingency Reserve Raise Rules Refine the cost allocation methodology	cl. 7.13.1EA Appendix	AEMO supports the overall intent of the changes but has identified the following concerns around the new definition for Secondary CR Facility and its application under Appendix 2A:
for Contingency Reserve Raise	2Å	 AEMO does not consider the Contingency Reserve Raise cost recovery mechanism to be appropriate for managing sympathetic trips, as it creates a potential pathway for Market Participants to accept the additional costs and delay the investigation and resolution of the core issue.
		 AEMO would also need to build the capability of its systems and processes to be able to determine primary and secondary risks, which has resource implications and associated costs.
		AEMO therefore recommends that the Secondary CR Facility concept is removed from Misc 3 and that EPWA investigate possible alternatives, which may include:
		 monitoring the occurrence of sympathetic trips once the rules are in place, to determine their frequency and materiality and assess whether a change to the WEM Rules is required; or
		 amending the WEM Rules to simplify the implementation effort and enable the additional costs to be shared equally amongst participants (note this option would also require additional resourcing and implementation costs for AEMO).

Future enabling actions for VPPs

Future DER/VPPs

Further considerations and factors that are required to remove barriers to participation of Virtual Power Plants (VPPs) and Distributed Energy Resources (DER) in the WEM, to be progressed as further reforms under the DER Roadmap.

AEMO comments

AEMO notes that the changes proposed in Part 2 of this rule change package are an interim step towards effective integration of DER and VPPs in the WEM. While these matters are outside of the scope of this Misc 3 Exposure Draft, AEMO proposes that the next tranche of DER work being scoped by EPWA should consider addressing the following barriers:¹

- Visibility of DSP telemetry arrangements to AEMO which creates a significant barrier to AEMO identifying whether a TNI Cap (or TNI Injection Cap) has been exceeded by the DSP and its impact to power system security.
- Assessment of the appropriateness of the baseline measurement methods, including alternatives where standardised protocols are in place for telemetry (i.e., CSIP-AUS, telemetry aggregation requirements) and integrations are established to enable real-time monitoring of VPPs when services are delivered.
- Registration of VPPs requires a high degree of flexibility across time and location, and there are
 opportunities for AEMO to reduce costs and barriers to entry through well-designed registration
 solutions.

Many of these are documented as key findings from Project Symphony's extensive effort to pilot a VPP in the WEM and the subsequent testing in the pilot.

¹ Available on the ARENA knowledge bank: <u>https://arena.gov.au/knowledge-bank/project-symphony-der-participation-framework-work-package-7-report/</u>