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Australian Energy Market Operator

NEM Reform Program

Email submission to NEMReform@aemo.com.au

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Development of the Voluntarily Scheduled Resource Guidelines – Consultation Paper

AGL Energy (**AGL**) welcomes the opportunity to provide responses to the questions posed by the Australian Energy Market Operator (**AEMO**) in response to the abovementioned Consultation Paper.

AGL is making a significant investment in flexibility and has been making strong progress against our grid-scale battery and distributed energy resources (DER) targets. As of FY24 AGL had 1.25 GW of decentralised assets under orchestration, with a FY27 target of 1.6 GW. Most of these assets are installed behind the connection point, and include residential batteries and solar, as well as flexible loads and backup generation systems at commercial and industrial customer sites. AGL is also a market leader in the development of innovative products and services that enable our customers to make informed decision on how and when to use their consumer energy resource (CER) assets to optimise their energy load profile and better manage their energy costs.

AGL supports the intent of the Integrating Price Responsive Resource (IPRR) Rule and welcomes AEMO's open consultation process to date. As noted in AGL's submission to the Australian Energy Market Commission's draft Rule, it will be important to design dispatch mode with flexibility at its core to promote voluntary participation. Without this flexibility, there is a risk of not realising the intended benefits of the Rule. AGL has sought to respond to AEMO's consultation questions where possible but notes that we have not been able to form a position on many of these matters without access to the technical specifications. AGL strongly encourages AEMO to bring forward the delivery of these specifications ahead of the commencement of the Voluntary Incentive Mechanism.

While the IPRR Rule is technology agnostic, AGL would welcome AEMO's guidance on whether there is a class of unscheduled price-responsive resources that would ideally be captured in the initial years of dispatch mode. AGL would then welcome the opportunity to discuss our experience managing different asset classes, and to explore whether certain requirements can be feasibly met by these technologies in the short-term. AEMO's guidance could also benefit from worked examples and diagrams, which could be used to further illustrate how some of the requirements would work in practice. [redacted].

AGL also notes the complex interactions between network limits and dispatch mode. While AEMO's guidelines have a strong focus on information from Voluntary Scheduled Resources (VSRs) to distribution network service providers (DNSPs), there is still a lack of clarity on how VSR participants (VSRPs) will receive information on network limits from DNSPs in a standardised and effective manner. VSRPs will need to consider how to manage their VSRs within these limits, and in many instances will need to account for multiple DNSPs within a single VSR zone. This challenge is in addition to other features of the existing regulatory framework, such as different connection processes, requirements, and network tariffs across DNSPs which add complexity to the orchestration of DER. At a minimum, VSRPs should not be held accountable for non-conformance under

circumstances where the market participant could not reasonably foresee the impact of this change to its operations, such as where a DNSP changes a network limit with short notice or where the DNSP overrides the VSRPs' instructions without prior knowledge from the VSRP.

We look forward to continuing to engage with AEMO on the implementation of this Rule. Appendix A includes responses to select consultation questions. If you have any queries about this submission, please contact Andrea Espinosa on 0422 165 705 or aespinosa2@agl.com.au.

Yours sincerely,

Kyle Auret

Senior Manager Policy and Market Regulation

Appendix A – Response to consultation questions

Question	Answer
1. What should be the effective date of the VSR Guidelines?	AGL supports the guideline's effective date and, and more broadly, AEMO's intent to publish the guidelines in the second half of 2025 to provide prospective participants time for development and testing. However, AGL notes that the technical specifications are crucial to determine which assets will be suitable for participation in dispatch mode. AGL encourages AEMO to bring forward the development of technical specifications ahead of the commencement of the Voluntary Incentive Mechanism.
2. Do the proposals in this consultation paper strike the right balance between ease of participation for VSRs in central dispatch and the need to maintain a secure and reliable NEM power system?	AGL will need to review the technical specifications to fully determine this.
3. How appropriate is AEMO's proposed structure for the new VSR Guidelines?	AGL supports the proposed structure of the VSR Guidelines.
4. To what extent do you agree with all VSRs, independent of zone, being allocated a loss factor of one?	AGL agrees with VSRs being allocated a loss factor of 1.
6. What are the key factors to consider when setting VSR zones now and in the future as the industry gains more experience with and information on dispatch mode?	For CER fleets (as distinct from broader DER), AEMO should factor in a VSRP's capabilities to schedule and deploy VSRs based on their geographical location and share value back with customers. - If a VSR zone is comprised of customers from different DNSPs or different states, this introduces complexity because customers in a single DNSP or state will need to be treated differently within a portfolio based on their VSR zone. - Currently, retailer offers tend to be coupled to a state or distribution area. In this way, two customers in the same area signed up to the same offer will have access to comparable benefits. - For retailers to share the benefits of VSR participation back with participating customers fairly within a larger zone, they would need a retail product to be de-coupled from the DNSP or state. - To do this, a VSRP would need the ability to map individual assets in an aggregated fleet to the VSR zones for the purposes of dispatch. This would likely require new system builds in retailer platforms.
7. How should VSR zones be set to balance cost and ease of participation for VSR with AEMO's need to manage power system security and reliability? a. What are your views on the potential use of NEM regions as VSR zones in the early years	In all circumstances, VSRPs will need to consider the impact of different network limits across multiple DNSPs and the potential for these limits to change inadvertently if dynamic operating envelopes are implemented. As outlined in question 6, for CER portfolios retailers will also need to consider the system build required to de-couple assets from a DNSP or state where these do not match the VSR zone. Moving to smaller zones (e.g., congestion modelling zones) may be more accurate and easier to integrate into AEMO systems but would lead to further complexity as these do not match distribution areas.

of dispatch mode when VSRs are expected to be small with a transition to VSR zones that better support system security as VSRs grow? In this scenario, what would the transition impacts be? b. What are the existing or potential issues with having an inconsistent approach to zonal classifications between VSRs and WDRUs? c. What impact/s do DNSPs see from the proposal to use congestion zones as the basis for VSR zones rather than distribution network boundaries?	
8. Does the selection of VSR zones impact your existing VPP portfolio?	
9. Do you currently have a VPP portfolio that operates across the NEM regions and/or distribution networks?	We have a VPP portfolio that operates across NSW, SA, Victoria and Queensland. As of FY24 AGL had 1.25 GW of decentralised assets under orchestration, with a FY27 target of 1.6 GW. Most of these assets are installed behind the connection point, and include residential batteries and solar, as well as flexible loads and backup generation systems at commercial and industrial customer sites. As noted in our cover letter, AGL would welcome the opportunity to discuss with AEMO if there are specific technology types it is targeting for participation in early years. AGL would be open to discuss our experience to date, where we have identified technical challenges, and how these fit in with prospective participation requirements. This discussion would need to occur at the level of detail of the technical specifications.

Confidential information has been omitted for the purposes of section 24 of the Australia Energy Commission Establishment Act 2004 (SA) and sections 31 and 48 of the National Electricity Law

10. To what extent do you agree with the requirements, conditions and processes for VSRPs forming VSR aggregations within the proposed zones?	AGL would need to review the technical specifications to comment.
11. Do you agree with AEMO's minimum lead time of six months for a change in zones?	Due to the impact on product offerings and systems, AGL's view is that zone changes should occur as infrequently as possible. AGL supports AEMO's proposal to maintain zones consistent for the first three years of the program and would support similar timeframes for future changes and subject to industry consultation.
12. What other factors should be considered in setting the minimum VSR nameplate rating threshold and why?	AGL would need to review the technical specifications to comment. For residential NMIs, there must be either a static or dynamic baseline referenced, at the assets or the point of connection.
13. What are your views on an initial lower VSR nameplate rating threshold that adapts as dispatch mode capability and capacity grows?	AGL supports AEMO's proposal to set a minimum threshold of 5 MW.
14. What are the options for aggregations of > 1 MW to participate in dispatch mode, given the 1 MW bidding threshold?	AGL supports the 1 MW bidding threshold.
15. Do you have any feedback you would like to provide on the nomination process for a VSR?	AGL would need to review the technical specifications to comment.
17. Do you see any issues with AEMO's circumstances where it may request VSRPs that have aggregated qualifying resources to declare individual qualifying resource availability and operating status? What other factors should be considered?	Large VSRPs nominating aggregated fleets of CER (including price-responsive flexible loads) may have tens of thousands of individual NMIs aggregated into a single nominated resource. FRMP churn levels on an aggregated fleet of that scale will be significant, daily and on average predictable. AEMO is already notified of FRMP churn automatically. If the process for removing NMIs from a VSR aggregation and notifying AEMO is not entirely automatic, it will make it operationally impossible for VSRPs to nominate and manage large fleets of aggregated assets as a nominated resource.
18. What are your views on the processes and settings AEMO should establish to deal with cases of NMI churn resulting in a VSR dropping below the minimum threshold?	AGL's understanding is that AEMO is considering changes to the PMS to streamline VSRP's applications. We welcome these changes, as AGL's view is that this system is simply not suitable for dispatch mode in its current state. However, AGL cautions that any new software build needs to be well built and highly fit-for-purpose, or it will increase the complexity of participation in dispatch mode.
19. Are there any other matters AEMO should consider in relation to the proposed telemetry requirements?	AGL is unclear whether the telemetry requirements enable smart meters to be considered as the source of telemetry data for a qualifying resource, or if additional metering would be required for individual resources, and how this feeds in with the requirements at a DIUD level. AGL's view is that prescribing metering at a device level could limit the participation of flexible loads. AEMO could also consider presenting telemetry requirements in a diagram, and creating a few

	examples for hypothetical VSRs comprised of different types of resources to aid discussion and feedback from prospective VSRPs.
20. To what extent does the proposed approach to telemetry appropriately balance between minimising barriers to VSR development and system security considerations?	[redacted] Confidential information has been omitted for the purposes of section 24 of the Australia Energy Commission Establishment Act 2004 (SA) and sections 31 and 48 of the National Electricity Law
21. To what extent do you agree with AEMO's proposed approach to the: a. Initial capability assessment? b. Periodic capability assessments, including any views you have on the triggers and frequency of such assessments? c. Operational requirements for telemetry and communications equipment for VSR?	AGL will need to review the technical specifications to fully determine our position. However, any additional layer of interaction / communication between a VSR and AEMO systems poses additional implementation challenges. For CER, VSRPs will need to account for the implications of potential mass market churn impacts. [redacted] Confidential information has been omitted for the purposes of section 24 of the Australia Energy Commission Establishment Act 2004 (SA) and sections 31 and 48 of the National Electricity Law
22. Do you agree with AEMO's notice periods for switching between VSR participation modes? a. Are you able to provide examples of how the proposed notice periods may impact your participation in IPRR? b. Are there any other considerations AEMO should include in setting its notice periods and information requirements?	AGL would need to review the technical specifications to comment.
23. Do you agree that VSR can only switch between modes on a per day basis, rather than per time intervals within the day?	AGL would need to review the technical specifications to comment.
24. Do you agree with the notice information requirements that AEMO proposes?	AGL would need to review the technical specifications to comment.
25. Do you have any suggestions on AEMO's plans to incorporate VSR bidding into its existing BDU bidding processes,	AGL would need to review the technical specifications to comment.

or any other comments on AEMO's proposals for bid validation	
26. What information do you think it would be useful for AEMO to include in the Guidelines on NEMDE processes to support prospective VSRPs?	AGL would need to review the technical specifications to comment.
27. Do you have any suggestions for how AEMO should update its processes to allow VSR to submit dispatch bids and receive dispatch instructions?	AGL would need to review the technical specifications to comment.
28. To what extent does AEMO's proposed approach to dispatch conformance appropriately balance ease of participation with the secure operation of the power system?	AGL would need to review the technical specifications to comment.
29. What other factors should AEMO consider in setting dispatch conformance requirements and parameters? a. Do you have any views on what would be a reasonable error trigger to use in the context of the size of VSRs, or in how AEMO should approach setting this trigger?	AGL would need to review the technical specifications to comment. We agree this is a critical question to enable participation of different asset classes, and welcome the opportunity to discuss our experience and the impact of prospective requirements and parameters.
30. What are your views on the metering requirements proposed by AEMO for qualifying resources in a VSR?	AGL would need to review the technical specifications and other unpublished guidelines / requirements to comment.
31. Is AEMO's explanation of the settlement and NECR arrangements for VSR across the participation modes useful information to be included in the VSR Guidelines?	AGL agrees this would be useful information.
32. Do you have any recommendations on the content or processes by which AEMO will adjust its prudential assessments for VSRPs and their VSR?	AGL's view is that prudentials should account for reasonable market risk associated with more bi-directional assets.
36. What confidentiality concerns do you have regarding the disclosure of data from VSRPs or AEMO with DNSPs and TNSPs (as applicable)?	AGL notes the dissemination and use of this information should be tightly controlled to avoid DNSPs leveraging their advantages as regulated monopolies in the delivery of ring-fenced activities.

Are there any other matters AEMO should consider as part of the development of the VSR Guidelines?	As noted in our cover letter, AGL strongly encourages AEMO to: - Bring forward the delivery of technical specifications ahead of the commencement of the Voluntary Incentive Mechanism. - Provide guidance on whether there is a class of unscheduled price-responsive resources that would ideally be captured in the initial years of dispatch mode to enable more fulsome industry feedback - Specify that VSRPs are not to be held accountable for non-conformance under circumstances where the market participant could not reasonably foresee the impact of network limits on its operations.