Appendix A. # Response template

This template is provided to assist stakeholders in giving feedback to the consultation paper for the development of the VSR Guidelines.

It is optional to use this template.

Stakeholders are invited to submit written responses on this consultation paper are invited to NEMReform@aemo.com.au by **5:00pm (Melbourne time) on 20 March 2025**.

Participant name	Red and Lumo Energy
Submission Date	20/3/2025

Section	Question	Participant comments
3.2	1. What should be the effective date of the VSR Guidelines?	On 23 May 2027, when dispatch mode is introduced.
3.3	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?	No. AEMO is required to facilitate the ease of participation in central dispatch by VSRs and only apply restrictions on them to the extent 'reasonably necessary' for it to manage power system security. With AEMO's 2024 Integrated System Plan forecasting an increase in rooftop PV and other distributed solar from 21 GW to 86 GW by 2050, VSRs are predicted to become a significant part of the NEM's generation supply. As a result, they will play a major role in maintaining a secure and reliable NEM power system.

Section	Question	Participant comments
		This means VSRs must to some extent be treated like scheduled generators to ensure the secure and reliable NEM power system. For AEMO's consideration, below we have suggested an approach that strikes the right balance between ease of participation for VSRs in central dispatch and the need to maintain a secure and reliable NEM power system. To achieve this, we consider; 1. The Error Trigger threshold applied to VSRs must be equal to 20% of the VSRs nameplate rating where a VSRP has a combined portfolio of VSRs that does not exceed 30MWs. Under our proposal, if a VSR was required to respond to a dispatch instruction of 5MWs (which is incidentally AEMO's preference for a minimum name plate rating) but produced 4MWs, it would be non-compliant. If a VSRP had a portfolio of VSRs that exceeded 30MWs then the default error threshold that applies to scheduled generators would be applied when it was dispatched above 30MWs. 2. Under our proposal, AEMO would be required to declare VSRs as non-conforming when a trigger threshold applied to the VSR nameplate rating is breached in 3 consecutive dispatch intervals. In our view, this position appropriately balances ease of participation with the requirement to maintain power system security. This is in contrast to AEMO that says it would not declare a VSR as non - conforming where a VSR consistently breached the trigger threshold that is applied to its nameplate rating. In fact, AEMO argues that it would only act in this regard if there were continuous repeated incidences of dispatch non-conformance and a tangible threat to the security of supply. While this approach facilitates the ease of participation in central dispatch by VSRs, it fails to put the reasonable restrictions that are required on VSRs to manage power system security.

Section	Question	Participant comments
3.5	3. How appropriate is AEMO's proposed structure for the new VSR Guidelines?	Red and Lumo is satisfied with AEMO's proposed structure for the new VSR Guidelines.
3.5.1	4. To what extent do you agree with all VSRs, independent of zone, being allocated a loss factor of one?	Red and Lumo do not agree that a loss factor of one should be allocated to VSRs. This is inconsistent with arrangements for scheduled and semi-scheduled generators, who are subject to marginal loss factors. Loss factors are needed to account for energy lost when the marginal unit of energy is transmitted to the node. The fact that VSRPs may themselves make adjustments to account for energy losses from units, or that settlement occurs at the NMI level, does not change the need for this requirement. Allocating a loss factor of one would unfairly privilege VSRs over other types of generation.
	5. Other than the NEM zonal classifications presented, what other zonal classifications could be appropriate to use as the basis of VSR zones? What are these and why would they be suitable?	Red and Lumo do not agree that AEMO should use zonal classifications that are external to the NEM to determine the VSR zones.
	6. What are the key factors to consider when setting VSR zones now and in the future as the industry gains more	See below Q7

Section	Question	Participant comments
	experience with and information on dispatch mode?	
	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 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?	a. Red and Lumo support AEMO adopting the current NEM regions as VSR zones. The large regional zones that are currently in place in the NEM will result in the aggregation of more NMIs compared to other smaller zones supporting the development of VSRs. However, we do not support a transition to other VSR zones like AEMO's congestion modelling zones in the future. A change to the VSR zones could be highly disruptive to VSRs operations and could hinder their development. Of course, if AEMO wants to adopt the congestion modelling zones as VSR zones in the future, it could lodge a rule change with the AEMC to determine if this would be in the long term interests of consumers. AEMO may choose to take this action when the development of the market for VSRs has matured.

Section	Question	Participant comments
	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?	
	d. Does the selection of VSR zones impact your existing VPP portfolio?	
	8. Do you currently have a VPP portfolio that operates across the NEM regions and/or distribution networks?	
	9. To what extent do you agree with the requirements, conditions and processes for VSRPs forming VSR aggregations within the proposed zones?	
	10. Do you agree with AEMO's minimum lead time of six months for a change in zones?	

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3.5.2	11. What other factors should be considered in setting the minimum VSR nameplate rating threshold and why?	On the whole, AEMO has given due consideration to the range of factors that it should have to determine the minimum VSR nameplate rating. However, before deciding on the minimum VSR name plate rating for VSRs, AEMO must not lose sight of the fact that VSRs will become a significant source of generation in the future. Given this, it could make sense to ensure VSRs have a larger nameplate rating. Throughout the consultation paper, AEMO's focus appears to be on ensuring smaller aggregators are able to participate in central dispatch when determining the minimum VSR nameplate rating. Based on our observations, there appears to be less focus on setting a nameplate rating that is proportional to the forecast size of this generation in the future. So we prefer that AEMO adopt a larger minimum VSR nameplate rating threshold. Of course, AEMO has recommended a 5 MW name plate rating. This represents a good start. However, as discussed, we would support a larger name plate rating that is proportional to the forecast size of this generation in the future. While we acknowledge that the smaller the VSR nameplate rating the easier it is to form a VSR and participate in dispatch mode, adopting a nameplate rating of 1 MW would create significant administrative problems for AEMO. These problems would arise due to the fact that AEMO would be required to handle many smaller VSRs in its control room.

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	12. What are your views on an initial lower VSR nameplate rating threshold that adapts as dispatch mode capability and capacity grows?	Red and Lumo do not support implementing an initial lower VSR rating threshold and then increasing it as dispatch mode capability grows. Our view is AEMO should adopt a larger minimum VSR nameplate rating threshold from the introduction of dispatch mode. A larger minimum VSR nameplate rating would be a much better fit given the volume of generation that is forecast from VSRs in the future. Also, implementing an initial lower VSR rating threshold and then increasing it as dispatch mode capability grows has the potential to be disruptive to the development of VSRs and should be avoided.
	13. What are the options for aggregations of > 1 MW to participate in dispatch mode, given the 1 MW bidding threshold?	Red and Lumo recommends that VSRs should be able to bid in aggregations of at least 1 MW consistent with the 1 MW bidding threshold.
	14. Do you have any feedback you would like to provide on the nomination process for a VSR?	
	15. What issues do you see with AEMO's requirements for qualifying resources within a VSR or for a VSR?	Overall, Red and Lumo are satisfied with AEMO requirements for qualifying resources within a VSR.

Section	Question	Participant comments
3.5.3	16. 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?	While VSRPs will have a broad idea of the capacity of the qualifying resources within one of its VSRs, it won't know their export limits to the grid. This is because they are not privy to the details of the connection contract between the DNSP and the qualifying resource. Without this information, VSRPs won't be able to accurately declare the availability of their qualifying resources.
	17. 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?	
3.5.4	18. Are there any other matters AEMO should consider in relation to the proposed telemetry requirements?	
	19. To what extent does the proposed approach to telemetry appropriately balance between minimising barriers to VSR	

Section	Question	Participant comments
	development and system security considerations?	
	20. 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?	Red and Lumo support AEMO's: 1. initial capability assessment on VSRPs to ensure their capability to operate VSRs 2. proposed 'periodic capability assessments' 3. operational requirements for telemetry and communications equipment for VSR.
3.5.5	21. Do you agree with AEMO's notice periods for switching between VSR participation modes? ● Are you able to provide examples of how the proposed notice	Red and Lumo support the seven-day notice period that will apply to VSRPs for deactivation, hibernation and resumption requests.

Section	Question	Participant comments
	periods may impact your participation in IPRR? a. Are there any other considerations AEMO should include in setting its notice periods and information requirements?	
	22. Do you agree that VSR can only switch between modes on a per day basis, rather than per time intervals within the day?	Red and Lumo suggest that at this early stage of development, switching between modes on a per day basis is appropriate. However, if the amount of VSRs continues to grow in the future and the market wants this feature introduced, a market participant could propose a rule change to initiate this change.
	23. Do you agree with the notice information requirements that AEMO proposes?	
3.5.6	24. Do you have any suggestions on AEMO's plans to incorporate VSR bidding into its existing BDU bidding processes, or any other comments on AEMO's proposals for bid validation?	
3.5.7	25. What information do you think it would be useful for AEMO to	

Section	Question	Participant comments
	include in the Guidelines on NEMDE processes to support prospective VSRPs?	
3.5.8	26. Do you have any suggestions for how AEMO should update its processes to allow VSR to submit dispatch bids and receive dispatch instructions?	
3.5.9	27. To what extent does AEMO's proposed approach to dispatch conformance appropriately balance ease of participation with the secure operation of the power system?	See Q3.3
	28. 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	See Q3.3

Section	Question	Participant comments
	approach setting this trigger?	
3.5.10	29. What are your views on the metering requirements proposed by AEMO for qualifying resources in a VSR?	
3.5.11	30. 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?	
3.5.12	31. Do you have any recommendations on the content or processes by which AEMO will adjust its prudential assessments for VSRPs and their VSR?	
3.5.13	32. What data do DNSPs, and where relevant TNSPs, reasonably believe they will	

Section	Question	Participant comments
	require from VSRPs or AEMO and for what purpose/s?	
	33. Do DNSPs/TNSPs have a preference for which AEMO system or process they receive data from, or are there alternative ways this data could be provided?	
	34. From the prospective VSRP perspective, are there any privacy concerns related to the sharing of NMIs within a VSR with DNSPs and where relevant TNSPs?	
	35. What confidentiality concerns do you have regarding the disclosure of data from VSRPs or AEMO with DNSPs and TNSPs (as applicable)?	
	36. Do you see any issues with the other processes for the disclosure of data collected by	

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	AEMO from VSRPs to DNSPs and TNSPs (as applicable)?	
3.6	Are there any other matters AEMO should consider as part of the development of the VSR Guidelines?	