Anna Collyer

Australian Energy Market Commission

Submission made online at www.aemc.gov.au

24 April 2025

Dear Ms Collyer,

Subject: EPR099 Consultation Paper – Review of the Wholesale Demand Response Mechanism

SA Power Networks welcomes the opportunity to provide feedback on the AEMC's Consultation Paper on the *Review of the Wholesale Demand Response Mechanism* (WDRM).

As the operator of a distribution network with very a high penetration of consumer energy resources (CER), we are strong supporters of increased demand-side participation in the NEM and consider that the future energy system will be largely supported by distributed CER. We note that whilst the WDRM was one of the first steps toward enabling equal participation from the demand-side, recent reforms have furthered this aim, such as the *Unlocking CER benefits through flexible trading* (FTA) and *Integrating Price Responsive Resources into the NEM* (IPRR) rule changes.

Our feedback focuses on our experience in implementing and maintaining network connection processes for WDRM participants, as well as our views on whether subsequent reforms, primarily IPRR, could serve as a viable replacement for the WDRM.

Costs of implementing and facilitating the WDRM

The Consultation Paper notes that the final cost estimate for the implementation of the WDRM was $23-33M, covering required changes for AEMO, retailers and demand response service providers (DSRPs). We would note that further costs were incurred to other market participants, including to distribution network service providers (DNSPs) to enable resources to participate in the WDRM whilst ensuring network integrity could be maintained.

Under the WDRM, DSRPs seeking to aggregate more than 5MW of demand response capacity aggregated under a single transmission connection point are required to seek a connections assessment from the relevant DNSP, regardless of whether the loads being aggregated were already connected to the network. The primary objective of these assessments is to determine whether the step change in load occurring when demand response is activated would cause network voltage to breach acceptable bounds.

Facilitating these assessments required changes to DNSP systems and processes, including engineering assessment processes, customer connection offer letters and online connections portals. These changes were made in preparation for a potential influx of engineering assessment requests from WDRM participants. Since the implementation of the WDRM, however, only a small number of enquiries have been received by our connections team regarding WDRM participation, with no actual engineering assessments performed.

In assessing the potential costs of any changes to the WDRM throughout the Review, we encourage the AEMC to consider the costs incurred to ourselves and other DNSPs to further uplift our network connections systems and processes to support WDRM participants.

IPRR as a replacement for the WDRM

The AEMC's Final Determination on the WDRM describes it as a temporary mechanism, noting that *"if the move to a two-sided market is made, this reform should replace the wholesale demand response mechanism."*

As outlined in the Consultation Paper, the IPRR and FTA reforms pose a potential path to a two-sided market, although we note that these reforms are yet to be demonstrated in practice. We consider that the implementation of IPRR will largely cover the functionality of the WDRM, with the exception that voluntarily scheduled resource providers (VSRPs) are required to be the financially responsible market participant (FRMP) for any resource being aggregated within a voluntarily scheduled resource (VSR).

We understand that allowing DSRPs to aggregate loads for WDRM participation *without* being the FRMP was a key design element of the WDRM, allowing for parties other than energy retailers to aggregate demand response. However, this functionality of the WDRM with respect to large customers, which we understand to be the mechanism's current focus, could largely be replicated by way of a large customer electing a party other than their current FRMP to be the FRMP for the flexible portion of their load, nominated as a secondary settlement point (SSP).

This could replicate current arrangements where DSRPs enact demand response on a portion of the load covered by a FRMP at a given connection point, but instead with a VSRP managing load on a SSP. The VSRP would provide load bids for the SSP, with no need to forecast the inflexible portion of a site's load, equivalent to the demand reduction bids currently submitted under the WDRM.

We consider that this model would still provide an equal basis for competition between a customer's current retailer and providers of demand response, but through the unified framework introduced via FTA and IPRR with lower barriers to entry, noting the removal of baselining requirement. Should the AEMC seek to remove the WDRM, our view is that current WDRM participants could transfer to market participation via IPRR and FTA, and in-turn access the additional incentives introduced for IPRR participants.

Network impacts of IPRR participation

A significant change in the demand of a given resource could potentially impact a DNSPs ability to securely operate the network. For this reason, engineering assessments are required for all new large resources connecting to the network, or for already connected resources seeking to participate in the WDRM, as previously outlined. Should the WDRM be phased out in favour of market participation via IPRR, however, we consider that the requirements for WDRM participants to seek engineering assessments from DNSPs may need to be carried over into the implementation of IPRR.

Whilst the IPRR determination requires that any resource aggregated within a VSR to be operating under a dynamic operating envelope (DOE) provided by the DNSP, DOEs generated for large customers connected to the high-voltage network will likely only account for the account for the thermal limits of the network, at least for the initial implementation of IPRR. DNSP systems are not yet at a state where real-time assessments of voltage impact caused by a step-change in load could be performed based on VSR bids, although we note that this is a capability being actively worked towards. Until such a capability is achieved, engineering assessments will still be required to determine the voltage impact of a new or existing load entering a demand response or scheduling arrangement.

These requirements could potentially mirror that of the WDRM, where any VSRP seeking to aggregate more than 5MW of resources into a VSR within a single transmission connection point is required to seek an engineering assessment from the relevant DNSP. We recommend that the AEMC consider the need for AEMO to engage with DNSPs on these requirements, should the WDRM be phased out in favour of IPRR.

We look forward to continuing to engage constructively with the AEMC to accelerate the transition to a consumer-led energy system. Should you have questions on any aspect of our submission, please contact Liam Mallamo, Industry Development Lead, at liam.mallamo@sapowernetworks.com.au.

James Brown

Senior Manger Enterprise Innovation