

Review of the Wholesale Demand Response Mechanism (EPR0099)
Australian Energy Market Commission

Submitted via AEMC submissions web-portal

14 August 2025

Dear Harrison,

RE: Review of the Wholesale Demand Response Mechanism -draft report

Thank you for the opportunity to provide feedback on the Australian Energy Market Commission (Commission) Review of the Wholesale Demand Response Mechanism -Draft Report.

Enel X operates Australia's largest dispatchable virtual power plant. We work with commercial and industrial (C&I) energy users to activate demand-side flexibility and offer it into the National Electricity Market's (NEM's) energy and ancillary services markets, the Wholesale Demand Response Mechanism (WDRM), the Reliability and Emergency Reserve Trader (RERT) mechanism, and to network businesses. Enel X is the first Demand Response Service Provider (DRSP) registered for wholesale demand response.

Enel X is deeply committed to promoting a vibrant market for flexible demand and have invested considerable resources in building a portfolio to support reliability and security in the NEM. Enel X's leading role in deploying flexible demand resources using WDRM has been endorsed through award of NSW Government's Firming Capacity LTSEA contracts (95MW) and the ARENA Commercial Refrigeration Flexible Demand Project grant.

Demand flexibility plays a crucial role in a successful transition to a net zero grid. The ability to shift, shape or shed electricity demand to match an increasingly variable energy supply from renewables can enhance the reliability of the grid and reduce the need for building new supply, storage and network assets.

The current energy system design has been almost totally concerned with ensuring the efficient supply of energy and does not make the most of demand-side opportunities to reduce cost and emissions.

WDRM is a unique mechanism that is complementary to other demand-side measures. It cements the role of aggregator or technology-provider in bringing competition and innovation to the market. WDRM is in the early stage of maturing and the recommendations of the Draft Report if adopted will build confidence and support rapid growth. We are only starting to see the benefits of WDRM now and will soon expand our 144MW portfolio registered with AEMO to over 200MW.

Enel X view WDRM as part of an ensemble of tools enabling demand-side participation in the NEM. WDRM and Integrating Price Responsive Resources (IPRR) Voluntary Scheduled Resources (VSR) directly address the need to integrate price elastic load into NEM dispatch process to maintain market efficiency, security and reliability. IPRR and Flexible Trading Arrangements (FTA) are not a substitute for WDRM.

Draft Recommendation – the WDRM should continue operating

Enel X acknowledge the Commission's commitment to strengthening demand-side participation in the NEM. We support the Commission's analysis that the WDRM facilitates wholesale market participation for a subset of large loads. The WDRM is a valuable tool for bringing benefits of flexible industrial demand to central dispatch, for example the contribution to the NSW Government's Firming Capacity programme would be difficult to achieve in any other way.

Enel X agree with the Justice and Equity Centre (JEC) that defining the WDRM benefits in terms of dispatch efficiency is too narrow and hope the Commission remain mindful of those benefits in the final recommendation and potential follow-on actions.

Enel X are confident that the capacity in the WDRM will continue to grow with modest investments by AEMO in WDRM eligibility and settlement processes, and further refinement of the National Electricity Rules (NER) to support multiple connection points. Enel X support the Commission's view that data centre loads are well suited to the baseline process, but more needs to be done to accommodate the multiple connection point arrangements typical with high reliability loads such as data centres.

Draft Recommendation – the pending Expanding eligibility under the WDRM rule change request be initiated

Enel X support the Commission's draft recommendation to initiate the pending Rule change request to fully consider the cost and benefits of allowing sites with multiple connection points to participate in the WDRM.

Our 'Expanding eligibility under the WDRM - Rule change request' conservatively estimated 300MW of flexible demand from various loads and technologies served via multiple connection points and currently restricted from WDRM participation. Subsequent committed developments and projected growth of data centre loads is likely to see this potential resource expand by 100's of MW¹. Data centres are typically connected to the grid via multiple connection points to access adequate connection capacity and address supply reliability requirements.

As improving market engagement with the demand-side has become an important piece of the energy transition policy landscape, Enel X would be happy to engage further with the Commission on refining the proposed Rule change.

To expand the eligibility to sites with multiple connection points while maintaining market integrity we anticipate all the load's connection points would participate in the WDRM – that is, the entire electrically-interconnected load is classified as a single WDRU, and by the same DRSP; and each of those connection points served by the same Market Customer (Retailer/Financial Responsible Market Participant).

To ensure market integrity the load would participate in the WDRM on an aggregate basis, that is for eligibility, compliance and settlement purposes the power flows at each connection point would all be represented in AEMO processes to represent a whole of facility basis.

The structure of our Rule change request remains relevant for the WDRM role envisaged in the Draft Report. Given the significant amount of work proposed in the Commission's 2026 work program, Enel X see merit in engaging with AEMO following the release of the Commission's finalised review to ensure the least cost / simplest pathway to implementing settlements calculations is put forward in stakeholder consultations on the proposed Rule change.

AEMO work programme

Enel X acknowledge the Commission's draft views on the work best considered through AEMO's existing consultation processes. AEMO's engagement with demand-side resources is catching up with the growing importance of flexible demand-side resources in the renewable energy transition. Through AEMO's Demand Activation and Wholesale Demand Response Roundtable members of AEMO's leadership team, the Commission, Enel X, and a broad cross-section of valued stakeholders

¹ Data Centre Energy Demand, Final Report July 2025, Oxford Economics Australia, AEMO IASR 2025 consultation

contributing to the energy and market transition have shared perspectives to inform AEMO's future work.

Relevant to the WDRM a work programme has been endorsed to:

- Further review the DNSP endorsement process
- Review the WDR Guidelines following the Commission's final report
- Progress the implementation of the updated baseline methods approved by AEMO earlier this year
- Examine other concepts raised through AEMO's consultation work including simplifying the process for proposing, accepting, and introducing new baselines, exclusion day policies, and better accommodation of bimodal loads.

Activating 'in-market' Residential demand-side response

The potential of mass market residential and Small-Medium Enterprise (SME) flexible demand to accelerate efficient market risk management should not be underestimated. There is much work to do, as right now many of these resources are locked out of the opportunity to contribute to the nation's energy productivity.

This responsibility should not all fall to the Retailer where energy risk management function is often viewed as a profit centre, particularly within the dominant market players. Voluntarily Scheduled Resources and Flexible Trading Arrangements do little to challenge existing Retailer engagement with flexible demand resources of smaller customers.

Enel X appreciated the Commission's limited bandwidth during this period of rapid market transition, but we hope the Commission can look favourably on proposals that support new business models targeting greater diversity of market participants and fair value to consumers for activating mass market residential and SME flexible demand. Enel X remain agnostic on the appropriate market mechanisms.

WDRRR methodology is appropriate

Enel X agrees the average demand-weighted spot price during peak demand periods provides a simple, transparent and objective reference point to approximate the wholesale cost component of the average retail tariff. Whilst refinements may bring incremental improvements in accuracy, greater market benefits are likely to be found through expanding the volume of qualifying WDRM resources.

WDRM 'turn-up' two-way demand response

Enel X have reviewed the Commission's analysis of a WDRM 'turn-up' mechanism to encourage customers to increase load in response to negative prices. We believe the process would not require significant changes to implement. With current pricing, we don't disagree with the Commission's analysis.

Stronger time of use price signals in Retail and Network Tariffs, and a separate 'solar soaker' WDRRR could shift the break-even price for load participation into a more frequently experienced negative price range.

Given the potential to implement the proposed mechanism quickly, Enel X recommend the Commission keep this mechanism in mind if negative pricing is distorting the market and other proposed mechanisms for addressing Minimum System Load conditions are found to be unsuitable.

NEM Review

Enel X support the Commission's openness to consider the NEM Review's recommendations on how to best shape the future of the NEM.

Enel X acknowledge the support for demand-side participation in the recommendations of the NEM Review's National Electricity Market wholesale market settings review – Draft Report. Enel X support the NEM Review's proposed working position that price responsive resources should be able to choose the most suitable pathway given its characteristics; with suit pathways for large loads including WDRM, IPRR or scheduled load frameworks.

Enel X share the NEM Review's view both IPRR/VSR dispatch mode and the WDRM could evolve to support targeted participation requirements that will support a fairer, more efficient market.

We would be happy to further discuss any of our comments with the Commission. If you have any questions or would like to discuss this submission further, please do not hesitate to contact me.

Kind Regards,

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