28 April 2025

Harrison Gibbs
Australian Energy Market Commission
Level 15, 60 Castlereagh St
Sydney NSW 2600

RE: Review of the Wholesale Demand Response Mechanism

Shell Energy welcomes the opportunity to provide a response to the Australian Energy Market Commission's Review of the Wholesale Demand Response Mechanism (WDRM).

About Shell Energy in Australia

Shell Energy is Shell's renewables and energy solutions business in Australia, helping its customers to decarbonise and reduce their environmental footprint.

Shell Energy delivers business energy solutions and innovation across a portfolio of electricity, gas, environmental products and energy productivity for commercial and industrial customers, while our residential energy retailing business Powershop, acquired in 2022, serves households and small business customers in Australia.

As the second largest electricity provider to commercial and industrial businesses in Australia[1], Shell Energy offers integrated solutions and market-leading[2] customer satisfaction, built on industry expertise and personalised relationships. The company's generation assets include 662 megawatts of gas-fired peaking power stations in Western Australia and Queensland, supporting the transition to renewables, and the 120-megawatt Gangarri solar energy development in Queensland. Shell Energy also operates the 60MW Riverina Storage System 1 in NSW, as well as the 200MW Rangebank Storage System and 185MW Koorangie Storage System both located in Victoria.

Shell Energy Australia Pty Ltd and its subsidiaries trade as Shell Energy, while Powershop Australia Pty Ltd trades as Powershop. Further information about Shell Energy and our operations can be found on our website here.

General comments

Shell Energy is interested in the future development of the WDRM and recognises that this review comes at a time of significant reform for demand-side resources. The AEMC's recent decisions to implement the Integrating Price Responsive Resources (IPRR) and Unlocking CER through flexible trading arrangement (FTA) rule changes may have a significant impact on the way demand-side resources can participate in the National Electricity Market (NEM). Further, the overarching Review of the NEM may provide a more fundamental shift in the role of demand response in the market given the Panel, chaired by Tim Nelson, is explicitly asking about consumer interaction with the wholesale market.

Subject to the implementation of any recommendations from the NEM Review Panel, Shell Energy does not consider that at this stage there is a case to remove the WDRM. In our view, there is a role for the WDRM to

[1] By load, based on Shell Energy analysis of publicly available data.
[2] Utility Market Intelligence (UMI) survey of large commercial and industrial electricity customers of major electricity retailers, including ERM Power (now known as Shell Energy) by independent research company NTF Group in 2011-2021.

play in delivering scheduled demand reductions into the NEM in a way that the IPRR and FTA mechanisms will not. Principally, this is because of the interaction between the customer, its retailer and how funds then flow through the system.

Under IPRR, the Voluntarily Scheduled Resource Provider (VSRP) which may be the customer's Financially Responsible Market Participant (FRMP), would bid in for both its demand as well as possible supply of its own customers. Reductions in demand would result in lower payments in the spot market, or in the case of increased supply, increased payments from the spot market.[3]

The FTA rule chance may allow a customer to split its load between different FRMPs leaving a third party to manage the spot market exposure, which may include participating as a VSRP. Crucially, in both these examples, it is effectively the customer's FRMP that is responsible for bidding and dispatching the demand.

Outside of these two mechanisms, a retailer can enter into demand response arrangements with their own customers without needing to bid or be dispatched by AEMO. A customer could also have a spot price pass through arrangement with its retailer and respond to spot prices on its own accord.

In contrast, the design of the WDRM means that a third party, with the Demand Response Service Provider (DRSP), bids into the NEM and if dispatched, is paid for reductions in demand relative to a baseline. The WDRM is the only model where the customer bids into the market and is effectively paid for reducing its demand, compared to the IPRR and FTA which operate by lowering the costs of total spot price exposure. Demand response arrangements agreed between a retailer and its customer may operate on a similar basis as the WDRM but is not bid into the market and scheduled for dispatch.

Shell Energy notes the limited participation in the WDRM at this stage, but we do not consider this to be a flaw or a result of lack of interest in the mechanism. Instead, we argue that this is the result of a model that is still in its infancy, with limited options for both aggregation and baselining creating barriers to further participation. AEMO recently assessed the introduction of new baselines for the WDRM and will introduce additional methodologies.[4] We believe this represents an opportunity to increase participation in the mechanism. Shell Energy considers the development of additional baseline methodologies that better reflect the nature of temperature sensitive loads would allow for more load to participate in the mechanism.

We also consider that FTA presents an opportunity to increase WDRM uptake in that a consumer could separate their controllable load from their unpredictable load, including splitting out behind the meter generation. This would create an opportunity for more possible loads to participate in the WDRM.

Shell Energy has also identified that the rules of the WDRM act as a barrier against aggregation. Each individual site within an aggregated Wholesale Demand Response Unit (WDRU) must be baseline compliant. The challenge with this approach is that it limits the potential response that can be provided. A series of sites may individually not meet the WDRM predictability of load requirements, but together, the combine demand may meet the requirements. We do not see a benefit in excluding portfolios of demand response from the WDRM where, collectively, they meet the requirements applied to individual units. In fact, allowing portfolios of demand response could increase the total volumes available in the market. We note that EnelX's proposed rule change[5] to expand WDRM eligibility remains pending almost three years after being submitted to the AEMC. The AEMC has not progressed to consulting on the rule change request.

We recognise that there are benefits in mechanisms that don't rely on baselines to quantify the amount of demand response delivered. Baselines introduce an inherent level of inaccuracy to settlements. Yet, short of

[3] In the interest of simplicity, this example ignores the possible ramifications of negative spot prices.

[4] AEMO, WDR Baseline Methodology consultation – EnelX proposals

[5] AEMC, Expanding eligibility under the WDRM

being substantially exposed to spot prices, baselines are a necessary element of providing demand response. In essence, we see that removing the WDRM would place all the baseline risk on retailers and their customers, to arrange between themselves how to reward demand response. While the WDRM effectively places the risks of baseline accuracy on market customers. Given the small volumes of WDRM at this stage, the risk is minimal. Even with significant growth in levels of WDRM, we consider that the risks would remain low.

Finally, relying purely on participation through the IPRR may not deliver an equivalent level of demand response transparently in the market. Shell Energy considers there is significant uncertainty as to whether the IPRR reforms will deliver meaningful levels of demand participation in the market. The AEMC's final determination on the WDRM indicated that "A two-sided market is the enduring solution". Shell Energy is cautious around whether a fully two-sided market is the optimal approach to better integrate demand response into the market. Based on our experience, we doubt many customers would be willing to participate flexibly at all times, and instead prefer the optionality of approaches like the WDRM that allow for trading off operational requirements with returns from engaging in demand response.

WDR Reimbursement Rate

The AEMC asks whether the wholesale demand response reimbursement rate (WDRRR) accurately reflects the wholesale cost component of an average large customer's retail tariff. The level of the WDRRR has been a challenge since the inception of the WDRM. From Shell Energy's perspective, we see that the WDRRR needs to be generally right (i.e. it is a rough approximation of the wholesale price a large customer pays) but because of the bespoke nature of large customer contracts, the WDRRR is highly unlikely to completely match the wholesale costs any large customer actually pays. As such, the rate doesn't need to be right, as much as it needs to be the least wrong.

The market has continued to evolve since the beginning of the WDRM. In 2024 the ASX began consulting on changing the peak load definition (7am-10pm AEST, business days) owing to increased solar generation which had impacted on the "effectiveness and usefulness of the Peak Load Contract as a hedging tool for energy Market Participants"[6] In September 2024, the ASX announced it had decided to list separate morning (6-9am AEST) and evening (4-9pm AEST) peak load products.[7]

The existing peak load definition is therefore less relevant than it once was. But it is uncertain whether the new peak load definition, or even an average price over the morning and evening hours will be a true reflection of the average wholesale price customers pay. Yet, it could well be a better reflection of the cost a retailer incurs in contracting to manage the spot price risks of the customer's load.

Given WDR tends to be dispatched at times of high prices, retailers would also have entered into contracts to manage the risks of high demand at these times. Moving ahead, it may be appropriate to consider average costs over the morning and evening peak time periods.

For any other questions relating to this response, please contact Regulatory Strategy Lead, Ben Pryor at ben.pryor@shellenergy.com.au.

Yours sincerely,

[signed]

Libby Hawker
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[6] Consultation on ASX Australian Peak Load Electricity Futures Contract Specifications | ASX Energy

[7] ASX, ASX Australian Peak Load Electricity Futures Contract Changes – Response to consultation, September 2024.