12 September 2025

NEM Review
Expert Panel
C/o –
Department of Climate Change, Energy, the Environment and Water

Submitted online via portal at: www.consult.dcceew.gov.au

Dear Panel

Re: Stanwell response to the National Electricity Market Wholesale Market Settings Review Draft Report and Draft Recommendations

Short-Term: Reforms to support the continued efficient operation of the spot market

Stanwell Corporation Limited (Stanwell) welcomes the opportunity to respond to the Expert Panel's consultation on the National Electricity Market Wholesale Market Settings (NEM Review).

Stanwell is Queensland's leading provider of electricity and energy solutions to the National Electricity Market (NEM), and large energy users along the eastern seaboard of Australia. With over 40 years of continuous operations, Stanwell's experience in working with communities to build, operate and maintain reliable energy generation assets is also being applied to the rollout of renewable energy.

Stanwell is developing a pipeline of renewable energy and storage projects throughout Queensland, whilst maintaining a reliable supply of baseload power from two of the most efficient and reliable coal-fired power stations in Australia – the Tarong power stations near Kingaroy and Stanwell Power Station near Rockhampton.

This response contains the views of Stanwell only and should not be construed as indicative or representative of the views or policy of the Queensland Government.

Stanwell appreciates the enormity of the task faced by the NEM Review Expert Panel, in trying to reform a complex and highly regulated market that provides a service relied upon by households, industry and our economy. We recognise the hard work of the NEM Review Expert Panel to develop the Draft Report and its accompanying Recommendations on this very important issue.

We are also very appreciative of the inclusive and extensive approach to stakeholder consultation the Panel has conducted over the course of the year.

Introduction

Stanwell broadly supports the 5 Recommendations relating to short-term arrangements in the NEM.

Recommendations 1-3 center around incremental changes to increase participation in the market while ruling out expensive, complex reform proposals with uncertain or marginal potential benefits. We recommend one complementary reform which would simply and transparently incentivise participation from resources that are currently invisible to the market operator.

We support mechanisms that can facilitate the participation of both consumer and distributed energy resources in the NEM wholesale market, noting there will need to be an established and sound framework to ensure risk is managed and consumer benefits can be gained. We believe this should be facilitated by aggregators or variable scheduled resource providers who would, in large part, provide participation incentives for, and improved orchestration of, behind-the-meter resources.

Recommendation 4 appears to contain sensible future work packages around governance of algorithmic bidding and evaluating whether recent and committed upcoming reforms are effective in supporting reliability.

We have some caution regarding the proposed work around the interaction of transmission outages and spot market impacts as this is a subject which has been investigated multiple times throughout the life of the NEM, without resolution.

Recommendation 5 we also broadly support, although we are cautious around the value of long-term indicative guidance as it relates to billion-dollar investments.

Recommendations 1, 2 and 3

We agree that at an operational level the spot market remains functional and broadly effective, as noted in Recommendations 1, 2 and 3:

"At an operational level the spot market remains functional and broadly effective. Its core mechanisms continue to provide efficient dispatch and price discovery, even as the underlying sources of generation in the system change." [1]

"One of the most pressing concerns in the operation of the spot market is the emergence of a growing class of non-scheduled resources that are responding to wholesale prices ('hidden participants') whose behaviour and impact on the system are not directly visible to the Australian Energy Market Operator (AEMO) and market participants in real time… The rise of these hidden participants risks undermining the operational integrity of the system if not properly integrated" [1]; and

"The costs, risks and complexity of adopting alternatives are likely to outweigh the potential benefits." [1]

However, in addition we would recommend:

A market-led real time reserves market

The current structure of price signals does not incentivise availability, it instead incentivises dispatch – noting that plant that is available but not dispatched does not receive spot revenue.

In the event the plant was unavailable, then the Australian Energy Market Operator (AEMO) would require load shedding in order to restore reserves. As such, the market design requires plant to be available but not delivering energy, for which there is currently no tangible value assigned.

Unsurprisingly, a market design requiring investment in an asset essential to reliability but that does not receive any revenue, effectively removes a large incentive for these resources to come into the market.

A real-time reserves market could simply and rapidly support increased participation. For this to occur we suggest that:

- Payment should be made available to participants who assist AEMO to support efficient price formation, and maintain the continuous, reliable and secure operation of the power system. As AEMO have existing obligations to maintain the system in satisfactory and secure operating states, these appear to form a reasonable basis for the reserves service (i.e. able to respond within 30 minutes).

[1] Nelson,T, et al, "*National Electricity Market wholesale market settings review*", Draft Report, August 2025, pp 9, 19, 20, 64, 99, and 111.

- This could include, for example, scheduled (and potentially semi-scheduled) resources, and 'active' mode (i.e. visible and available for dispatch) voluntary scheduled resources (VSR) participating in the dispatch mode framework.

- 'Inactive' VSR (i.e. visible but unavailable for dispatch), wholesale demand response mechanism (WDRM), or non-scheduled resources should not be included. Excluding these assets would incentivise them to transfer into scheduled or VSR.

- This would likely assist in reducing the market price cap (MPC) (as per the discussion of revenue adequacy in Recommendation 5), as well as reduce the level of support required to establish a structured framework that encourages price-responsive resources to participate in the Integrating Price-responsive resources (IPRR) framework proposed in Recommendation 2C.[1]

- We anticipate the implementation cost should be relatively minor as almost no new information or processes would be required. For example:

    - Bids currently include availability, ramp rates, fast-start inflexibility profiles

    - AEMO calculates dispatch and pre-dispatch volumes, available reserves, and minimum reserve levels. The minimum reserve level could form the basis of the service payment (value = MPC * MRL or similar)

    - All eligible (and dispatched) volumes would receive a single clearing price per region being the value above divided by the eligible reserves (not the spot price for dispatched assets). We note further work may be needed to manage the attribution of value to reserves provided from neighboring regions or interconnector capability, although these are included in the current reserve calculations.

- We acknowledge that *prima facie*, this proposal appears to contradict Recommendation 1B, however we believe that the implementation cost and complexity of this proposal is miniscule compared to the other models covered under Recommendation 1B, while the benefit is likely to be material.

Aggregation of Voluntary Scheduled Resources

Stanwell agrees that increased participation of VSR in price formation will be to the benefit of all consumers, and we support VSR participation in dispatch as outlined in Recommendation 2B, subject to:

- A requirement that aggregated and Variable Scheduled Resource Providers (VSRP) loads must be visible to AEMO and participate in the NEM dispatch process. This is most likely to occur once the IPRR Rule's voluntary component commences in May 2027.

- A requirement that participation for end-use supply-side customers in price formation must be voluntary and via an aggregator or VSRP, who in turn would provide sufficient participation incentives, including "opt out" options.

- A requirement that the creation of incentive and cost recovery frameworks to encourage VSR participation should not overcompensate i.e. provide excessive subsidies for owners of VSR, or simultaneously penalise i.e. recover the costs associated with VSR NEM wholesale market participation (e.g. risks associated with price volatility, unexpected costs, and lost revenue), from consumers who do not have VSR.

- The establishment of an Australian Energy Regulator (AER) and AEMO monitoring and reporting framework (while the IPRR rules and technology remain untested), as this is likely to provide the evidence and flexibility the AEMC will need when determining whether to introduce structural

changes to demand forecasting, or introduce a "visibility market" in the NEM.[2]

Predefined aggregated participation and bidding thresholds

- A pre-defined threshold must be set for aggregated resources to bid and be dispatched. We understand that bid variations down to 1MW increments have the ability to influence spot price. For this reason, Stanwell proposes a minimum bid threshold of 1 MW at which point it must also be visible to the market. Should AEMO update their dispatch system to enable lower bid increments to influence spot price, then a lower participation threshold would be appropriate at that time, however we expect this would be an expensive change.

- Aggregators and VSRPs with capacities of 1 MW or more must be registered NEM participants and be required to meet the same regulatory and legislative obligations as other NEM participants.

- Registered aggregators and VSRP at or above 1 MW should have an obligation to make aggregated resources visible at a lower level. Aggregated resources must be visible at 100 kw but would not necessarily have to be active in dispatch. The 100 kw threshold would include a hibernated resource.[3] Hibernated resources should still be visible to the market in a manner equivalent to an unavailable scheduled generator.

- All aggregated price responsive resources above 1 MW must be scheduled including Battery Energy Storage Systems (BESS). In addition to being scheduled, BESS that choose to participate as an aggregated VSR should provide visibility of their state of charge.

- Aggregated parcels of less than 1 MW should not be eligible to participate in scheduling and dispatch as they are likely to unnecessarily increase complexity in the bidding process and in the NEM, relative to perceived benefits. For example, as noted by AEMO *"…[f]or dispatchability mode, a minimum aggregated portfolio threshold may be required to support participation of aggregated portfolios in the scheduling and dispatch process; for example, a minimum threshold may help to avoid a large number of DUIDs overwhelming the NEM Dispatch Engine (NEMDE)."* [4]

- The ability to exempt a registration above or below the 1 MW threshold should be retained by AEMO in line with the *National Electricity Rules* [5] and AEMO accreditation and registration processes.

- Retailers should have a right to visibility of their customers' participation in a VSR (for example a 'tick box' disclosure) to support mandatory metering and information sharing to help retailers manage their retail load, hedging position, and work to limit costs to their customers.

- Visibility of various price responsive resources and their intention at different price points in real time will facilitate grid stability, improved efficiencies in the supply demand balance, help moderate the spot price, and ultimately reduce the amount of Frequency Control Ancillary Services (FCAS) and Reliability and Emergency Reserve Trader (RERT) recovered from consumers.

Demand side participation

Demand side participation is the other part of the NEM that needs to be considered including that:

- For demand side resources that choose to be visible and/or participate in dispatch via aggregators and VSRPs, the aggregators and VSRPs should be obligated to make those resources visible at a 100 kw minimum threshold, and scheduled (whether in active or inactive mode) at a 1 MW threshold.

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[2] Australian Energy Market Commission: Rule Determination, "*National Electricity Amendment (Integrating price-responsive resources into the NEM), Rule 2024* ", p 28.

[3] The IPRR Rule currently allows the VSRP to put certain resources into hibernation (i.e. full opt out of dispatch mode without deregistration subject to AEMO approval).

[4] Australian Energy Marekt Operator '*Minimum aggregated portfolio threshold for Dispatchability Model*', Schedule Lite: Draft High Level Design, June 2024, p 24.

[5] See for example the *National Electricity Rules* version 235 at Chapter 2.

- Obligations under the price responsive framework applicable to price responsive loads should be placed on the aggregator / VSRP, rather than the end consumer / owner of the resource.

- Demand side participation obligations, including AEMO load approvals, and other requirements associated with being visible and dispatchable, should be placed on the aggregator or VSRP, including whether the VSRP has the technical capability to properly dispatch the resource load.

- There is also value having both demand and generation visible to the market so that shortfalls in demand response and generation can be accurately and efficiently managed to minimise costly interventions.

Recommendation 5

Stanwell agrees with the Panel's view that "*The market price settings, including the market price cap (MPC), market price floor (MPF), cumulative price threshold (CPT) and administered price cap (APC), should remain linked to the value of customer reliability (VCR) and to revenue adequacy for bulk energy, shaping and firming services.*" [1]

However, we do have reservations about the Panel's statement that:

"… given the significant changes expected in the market and the intention of recommendations in other chapters to extend price discovery, the Reliability Panel should consider whether to adjust the form of the market price settings and provide a longer-term outlook (up to 15 years) on their intended form to support long-term contracting." [1]

Indicative or non-binding guidance on future market conditions has, to date, not been overly helpful [6] given the market design needs the ability to respond to emerging information in a timely manner. Previous attempts to improve the helpfulness of indicative guidance revolve around making the market price settings binding – which in turn makes them inflexible.

We also note that:

- A longer-term outlook may not provide sufficient certainty or flexibility to make a project bankable and manage exposure.

- The recent changes to each of MPC and APC do not appear to have been reasonably forecastable 15 years ahead.

- Ideally, the Reliability Panel should develop a proposal in response to Recommendation 5 for broader stakeholder consultation.

- Further guidance is needed to understand how the Review Panel considers the price ceiling and floor would apply to the bulk energy, shaping, and firming derivatives, [1] and the Electricity Services Entry mechanism (ESEM) as proposed in the Draft Report.[1]

Conclusion

As the NEM Review Panel has correctly identified, any changes to the NEM will come with a cost. Retaining the current spot market design with incremental improvements will be vital to help ensure that costs are minimised for consumers.

Stanwell supports the addition of a market-led, real-time reserves market to simply and rapidly incentivise participation and support increased investment in assets essential to reliability.

[6] Examples of well-intentioned but ultimately unhelpful indicative guidance include Small-scale Technology Percentage under the Renewable Energy Target, or AEMC retail price forecasts.

Participation of currently non-scheduled resources should ultimately be facilitated and incentivised by aggregators and VSRPs to better coordinate and ultimately support and encourage CER and DER visibility in the market, and provide benefits to consumers.

Stanwell welcomes the opportunity to further discuss with the NEM Review Panel any of the issues raised in this submission. Please direct any enquiries to Lya McTaggart via email at lya.mctaggart@stanwell.com.

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