17 July 2025

Reliability Panel

Submitted online: www.aemc.gov.au

2026 Reliability Standard and Settings Review – Issues Paper

Origin Energy Limited (Origin) welcomes the opportunity to provide comments on the Reliability Panel's proposed approach to the 2026 Reliability Standard and Settings Review (RSSR).

The National Electricity Market (NEM) is undergoing a period of significant change. Ensuring the reliability standard and associated settings can continue to support efficient market outcomes that align with consumer expectations through this period is crucial. In this context, we generally support the Panel's proposed assessment approach but suggest there does not appear to be a clear case for pursuing any material changes at this time. Revisions to the market price cap (MPC) and cumulative price threshold (CPT) based on recommendations in the 2022 RSSR are yet to fully take effect. The Panel has also recently reviewed the form of the reliability standard and administered price cap (APC) and found they remain fit for purpose.

There is significant uncertainty regarding the expected market conditions over the period being reviewed by the Panel (FY2028-2032). This is partly because the outcomes and impacts of key policy and regulatory changes are unknown at this stage. In particular, the NEM Wholesale Market Settings Review is expected to recommend reforms to complement the existing framework (e.g. strengthen long term investment signals for dispatchable capacity). Market conditions are also expected to be impacted by the end of the Renewable Energy Target framework and efforts to achieve the 2030 targets of 43% emissions reduction and 82% renewable electricity. Providing regulatory stability / certainty around the reliability standard and settings will therefore be important for this period, including for consumers navigating the many changes already underway.

Further comments on these matters, and aspects of the RSSR Issues Paper, are provided below.

1. The Panel's emphasis on predictability and stability is important

Origin generally supports the proposed approach for assessing whether changes to the standard or settings are required, which relies on demonstrating a clear case for change that would deliver material benefits under a broad range of scenarios. This includes considering the range of technologies available as well as risks / uncertainties associated with the transition. We welcome the Panel's recognition that predictability is important for market participants, with investors and participants grappling with rapid technological, market and regulatory change. The clear, consistent narrative provided around the role of the reliability standard and market settings is also appreciated, including clarification that changes to the MPC do not directly equate to changes in consumer costs.

As the Panel acknowledges, rapid technological, market and regulatory change is impacting investment and operational decisions in the NEM for consumers, generators, and storage providers. There is now a more diverse range of resources participating in the wholesale and associated ancillary services markets to support reliability and security of supply. As the market moves towards higher penetration of variable renewable energy (VRE), traditional baseload and peak energy services are transitioning into bulk energy, intraday shaping and firming services. Notwithstanding this, ensuring reliability of supply at

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least cost as the market transitions will inherently still be contingent on ensuring sufficient investment in longer-duration firming capacity, including gas power generation (GPG).

This capacity provides critical support for system operation when bulk renewable generation and shorter duration intraday shaping capacity are depleted. The Panel's assessment of whether market settings are sufficient to support investment in, and operation of, the marginal plant required to ensure reliability should be limited to technologies that can provide this critical support. Similarly, it would not be appropriate to prioritise government policies in the Targets Statement over other limbs of the National Electricity Objective (NEO), particularly price and reliability. The Panel is only required to consider the emissions component alongside these other limbs and should note energy ministers have prioritised ensuring reliability in national and bilateral agreements which set the pace and scale of the transition,[1] as well as the orderly exit management framework.

The potential impact of households and businesses investing in behind the meter resources, including Consumer Energy Resources (CER), on market dynamics and reliability should be considered. But it is important to recognise many consumers have invested in these resources to reduce energy costs and so will likely prioritise reducing exposure to high market prices over retaining capacity to support reliability. These consumers will therefore still expect reliable grid supply to meet their needs. Research also suggests most consumers are seeking to minimise the time and energy required to achieve an affordable 'energy experience', rather than greater engagement in the market.[2] This may explain limited engagement with demand response and aggregation programs, such as no certificates being registered for participation in virtual power plants despite consumers in New South Wales registering 10.5 million certificates for installing batteries under the peak demand reduction scheme (PDRS).[3]

2. The reliability standard must support the long-term interests of consumers

Origin supports the Panel's proposal to focus this review on whether a change to the level of the reliability standard would materially benefit the long-term interest of consumers. Reviewing the form of the standard is not required as it has performed well as a measure of reliability. It is simple, economically efficient, and generally captures the value that customers place on reliability. The Panel's recent modelling / analysis demonstrated this is likely to remain the case, as the unserved energy metric (USE) metric can adequately capture the changing nature of reliability risks as the NEM transitions.[4]

The Panel should continue to use its discretion in considering the Australian Energy Regulator's (AER) updated Value of Customer Reliability (VCR). Households and businesses are changing the way they use energy in response to social and technological change, but they are also facing cost pressures which may mean the updated values reflect their ability, not willingness, to pay. The standard should only be revised if there are enduring changes in consumer preferences to avoid sacrificing the cost and quality of energy services for future consumers on the basis of short-term or transient changes. A tighter reliability standard could lock in higher costs for decades as investment in energy infrastructure is generally quite lumpy and funded through energy bills. Consumers unable to invest in behind the meter resources also face a greater portion of costs recovered through consumption-based tariffs.

3. Material changes to market settings may not be warranted at this point

Origin notes the market is still transitioning to the settings recommended by the Panel's last review and it may not serve the long-term interest of consumers to make further changes at this stage. The Panel

[1] National Energy Transformation Partnership (NETP), Renewable Energy Transition Agreements (RETA)
[2] EY, 'Consumers want clean energy: How do we close the gap between interest and action', 2024
[3] Based on IPART's The Energy Security Safeguard Application (TESSA) registry as available on 14 July 2025.
[4] AEMC Reliability Panel, 'Review of the form of the reliability standard and administered price cap – Final Report', 27 June 2024, pg. ii.

has reported reductions in the Australian Energy Market Operator's (AEMO)[5] interventions in the market to address reliability concerns and there are limits to how much the remaining issues affecting reliability can be managed through the market settings alone. In recognition of this, the Issue Paper emphasises the need for predictability and stability to support participants to have the confidence to invest in the scale of generation, storage and demand response technologies required to deliver the transition. Further comments that support this position are provided below.

Market price cap (MPC) / cumulative price threshold (CPT)

The MPC and CPT are key market settings that support new investment, with the CPT helping to signal the expected duration that reliability services may be required. While a higher MPC and CPT could notionally increase revenue potential for market participants and encourage more hedging by retailers, there are trade-offs and limitations associated with this approach. A substantial uplift in market settings would be required with the last RSSR indicating the MPC would need to be in the order of $29,000/MWh and $35,000/MWh to support investment in GPG and 4-hour storage in Victoria respectively.[6] While not explicitly modelled, the Panel also previously indicated a significantly higher CPT and MPC would likely be needed for longer duration storage.[7]

A combination of scarcity price signals through these settings and contracting also provides strong incentives for generators, storage and demand side participants to be available when most needed, including in response to both ramping and high demand events. Specifically, generators, storage and demand response are incentivised to generate or reduce load (respectively) to support their contracted position when prices are high, with uncontracted plant also motivated to supply into the market during these periods. As storage begins to play a greater role in the NEM, these settings will also signal the need for energy-limited resources to reserve capacity for low-probability events.

The MPC and CPT typically inform the maximum exposure that a retailer or market customer could face under extreme market conditions, with higher settings incentivising a more prudent approach to hedging. Consequently, these parameters have been crucial in facilitating the development of a robust financial contracts market that assists retailers with efficiently managing price risk on behalf of customers. A material increase in these settings would significantly increase the risk profile for retailers / market customers exposed to paying those higher prices if not adequately hedged and likely be unacceptable for governments and policy makers, noting the MPC has historically been held well below the AER's estimated VCR.

The fundamental issues that make investment in dispatchable capacity challenging are also likely to remain if these settings were increased. Higher settings will not address uncertainty regarding the timing, duration and frequency that the marginal plant will operate to support reliability and expected returns during these periods. Prospective investors in resources such as long duration firming would still be unsure of capturing sufficient high price periods to recover fixed costs given uncertainty around the duration and frequency of price spikes.

It may not be prudent to pursue further changes to these settings at this time considering the above, that recent changes to the MPC and CPT are yet to fully take effect, and that the NEM Review is considering complementary measures to strengthen investment signals (including for new long duration firming capacity). Although, the Panel could more explicitly monitor when (and for how long)[8] reliability

[5] The FY2024 NEM Reliability and Security Report reported a decline in reliability directions (albeit alongside increasing security directions) which suggests the revised settings may be supporting operational decisions for reliability.
[6] AEMC Reliability Panel, '2022 Review of the Reliability Standard and Settings – Final Report', 1 September 2022, pgs. 74 and 83.
[7] Ibid.
[8] Our analysis of gas generation in South Australia suggested on average 9 hours of support was required to support VRE and shorter duration capacity in South Australia between 2022 and 2024. The maximum requirement was 52 hours in 2022.

services are required, as well as changing participation in wholesale and frequency markets through its annual NEM Reliability and Security Report. This could enable a more detailed assessment of the appropriate form of the CPT for the next RSSR in 2030, noting analysis of alternative approaches will also need to consider the ability of AEMO to implement these options in its systems (e.g. NEMDE).

Market floor price (MFP)

The market is clearing within the existing settings and MFP events continue to decline with only three events in FY24, compared to 25 in FY23 and a peak of 263 in FY21.[9] Renewable generators are competing to be dispatched when there is more energy than consumers value and this creates arbitrage opportunities which support investment in storage (particularly batteries), as well as efforts to develop demand flexibility. It would also not be appropriate to use the reliability settings to indirectly address the minimum system load (MSL) load issue – this requires a targeted system security solution. The introduction of another regulatory instrument in form of a negative CPT is also not warranted at this stage, particularly given the scale of reform already underway.

Administered price cap (APC)

Origin generally supports the existing form and level of the APC, consistent with the outcomes of the Panel's recent review. However, it may be prudent to review the form for this standard once the policy and regulatory reforms currently underway have been finalised. This will ensure the APC continues to be set at a level that incentivises sufficient supply during an administered pricing period (APP) and, by extension, minimises the need for the AEMO to direct participants. This analysis should be undertaken between broader reviews to inform the next RSSR, similar to the Panel's review of the form of standard.

A review of the form could consider whether expected market conditions have materially changed, including technological changes impacting identifications of the marginal generator(s) and short run marginal cost. We would also support analysis of alternative approaches to address factors that may limit participation by different technologies in different situations when the APC might apply, such as the opportunity cost for storage and fuel costs for GPG. But the form will still need to be sufficiently consistent and predictable to inform operational decisions, as well as help insulate market customers from extreme and prolonged periods of volatility.

4. Collaboration with the NEM Review will be important

Origin appreciates the Panel's recognition of interactions between the RSSR and the NEM Review that are being conducted in parallel. The NEM Review will be focused on incentivising investment across the market which should complement the Panel's focus on investment and operational decisions to support reliability. We are encouraged that the Panel has proactively communicated how it plans to collaborate with the NEM Review, as well as undertake (and consult on) necessary modelling.

If you wish to discuss any aspect of this submission further, please contact Clare Stark at clare.stark@originenergy.com.au or on 0458 286 194.

Yours Sincerely,

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[9] Reliability Panel, FY24 NEM Reliability and Security Report (RASR), 26 June 2025