



Ms Anna Collyer
Australian Energy Market Commission
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Dear Ms Collyer

Re: Rule change request – Extension of time and scope Reliability Panel’s 2022 Reliability Standard and Settings Review.

Please find attached a rule change request proposing a one-off amendment to the scope and date of the current Reliability standard and settings review. These amendments will allow the Panel to consider the standards while the ESB considers a holistic capacity mechanism design, which includes the necessary settings for the market.

These amendments are proposed as transitional arrangements that would only apply to the current 2022 Reliability Standard and Settings Review, and would not apply to subsequent Reliability Panel reviews of the standard and settings.

Yours sincerely

Kerry Schott AO
Chair, Energy Security Board

1. Name and address of rule change proponent

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2. Relevant background

ESB processes – post 2025 electricity market design advice

In 2019, the Energy Security Board (ESB) was asked by the former COAG Energy Council ('the Energy Council') to consider and advise on a long-term reform, fit for purpose market design for the national electricity market (NEM) that could apply from the mid-2020s. This advice is known as post 2025 national electricity market design project.

In July 2021, the ESB provided its final advice on a post 2025 market design to Energy National Cabinet Reform Committee¹. Energy Ministers released the ESB's final advice on 26 August 2021.²

In its final advice, the ESB provided recommendations to deliver a reform pathway that ensures sufficient dispatchable resources and storage capacity are in place prior to anticipated plant closures, and that generator exits do not cause significant price or reliability shocks to consumers. Specifically, the ESB recommended a range of short and longer term measures to support resource adequacy in the NEM and support the timely entry and orderly exit of resource for 2025 and beyond. This included a recommendation that Ministers consider a capacity mechanism to ensure the competitive provision of the right generation mix as the market transitions towards net zero emissions. The ESB noted that capacity mechanism was one that should complement the existing markets and work alongside the market settings.

On 1 October 2021, National Cabinet endorsed the final package of reforms for the post-2025 market design work, as agreed by the Energy National Cabinet Reform Committee. Further work on the capacity mechanism was requested to be conducted over the next year.

Given the timing of the National Cabinet's endorsement, and the current process for the Reliability Panel's Reliability Standards and Settings Review, the ESB is submitting this rule change to better align the Panel's review and the design of the capacity mechanism. The rule change request is a one off amendment to the scope and date of the current Reliability Standards and Settings Review. The Rule Change will not impact future Reliability Standard and Settings Reviews.

The ESB has consulted with the Reliability Panel with regards to this rule change. The Panel acknowledges the issues what this rule change request is addressing and understands the approach the ESB is taking. As noted below, these amendments are proposed as transitional arrangements that would only apply to the current Reliability Standards and Settings Review, and would not apply to subsequent reviews.

Further detail on the reliability standards and settings review and its link to the capacity mechanism work is outlined below.

Reliability standard and settings review

Under the National Electricity Rules (NER), the Reliability Panel (Panel) is required to conduct a review of the reliability standard (standard) and reliability settings (settings) every four years.

¹ The former "Energy Council". <https://energyministers.gov.au/>.

² <https://esb-post2025-market-design.aemc.gov.au/final-advice-july-2021>

The next Reliability Standard and Settings Review must be completed by 30 April 2022³ and is to consider the standard and settings that will apply for the period 1 July 2024 to 30 June 2028.

The standard and settings are key components of the NEM's reliability framework. They aim to encourage sufficient investment in generation or demand response capacity to meet consumer demand for energy, while protecting market participants from potential substantial risks that threaten the overall stability and integrity of the market. The NER sets out the standard and settings.

The standard is expressed as the maximum expected unserved energy (USE) in a region.⁴ It is a measure of the extent to which the electricity generation and transmission system can meet consumer demand. Setting the standard involves balancing the value that consumers place on the supply of electricity with the investment costs required to deliver this level of reliability. There is also an interim reliability measure in the NER.

The settings are price mechanisms that are designed to incentivise investment in sufficient generation capacity and demand-side response to deliver the reliability standard, while providing limits that protect market participants from periods of very high or very low prices, both temporary and on a sustained basis. The settings consist of the:

- Market Price Cap (MPC), which places an upper limit on high dispatch prices in the wholesale market.⁵
- Market Floor Price, which places a lower limit on low dispatch prices in the wholesale market.⁶
- Cumulative Price Threshold, which is the limit of aggregate dispatch prices over the previous seven days (336 30 minute trading intervals) that, when surpassed, triggers an administered price period,⁷ and
- Administered Price Cap, which is the prevailing dispatch price that applies during an administered price period after a set of sustained high dispatch prices exceed the cumulative price threshold.⁸

Panel requirements under the NER

In undertaking the Reliability Standards and Settings Review, the NER mandates that the Panel must comply with NER and reliability standard and settings guidelines⁹. These guidelines were recently updated by the Panel and set out the principles and assessment approach that the Panel must use in conducting the Reliability Standards and Settings Review.¹⁰

The Panel also must set out its conclusions and recommendations as part of its final report. It must submit to the AEMC any rule change proposal that results from a review as soon as practicable after the Reliability Standards and Settings Review is completed.¹¹

Any change to the form and level of the standard and settings would then be made through an AEMC rule change process. The Panel must also submit its final report to the AEMC as soon as practicable after the completion of each Reliability Standards and Settings Review.

The Review every four years allows the Panel to assess and consider whether the current form and level of the standard and settings remain suitable for expected and evolving market conditions.

³ NER clause 3.9.3A(d)

⁴ NER clause 3.9.3C(a)

⁵ NER clause 3.9.4.

⁶ NER clause 3.9.6.

⁷ NER clause 3.14.1.

⁸ NER clause 3.14.1.

⁹ Reliability Panel, *Review of the reliability standard and settings guidelines* July, 2021, Sydney.

¹⁰ NER cl 3.9.3A(e)(1).

¹¹ NER clause 3.9.3A(i).

Or, whether the Panel recommends that changes should be made to ensure these mechanisms continue to meet their intended purpose as well as the requirements of the market, market participants and consumers. The post 2025 market design is important and relevant in this context.

Interim reliability measures

In November 2019, Energy Ministers requested that the ESB provide advice on the implementation of interim measures to preserve reliability during the transition to the post-2025 market design. This included reviewing the reliability standard to maintain community confidence in the NEM and support the energy transition.

From its review, and based on modelling done by ACIL Allen, the ESB found that moving to either a standard of 0.001% or 0.0005% expected Unserved Energy (USE) would have net positive benefits overall. However, the ESB found that the case for a 0.0006% standard best met the expectation that reliability be maintained through a one in ten year summer, as outlined in the terms of reference for the review.¹² The ESB made a number of recommendations on amended and existing mechanisms that would be required to support the tighter standard.

From this, Energy Ministers agreed to:

- the establishment of an out of market capacity reserve, to be triggered to keep unserved energy to no more than 0.0006% in any region in any year that would apply for the 2020-2021 summer and beyond
- amending the triggering arrangements for the Retail Reliability Obligation to improve incentives on retailers to contract and support reliability.¹³

The National Electricity Amendment (Interim Reliability Measure) Rule 2020 was introduced in August 2020 to support the measures agreed to by Energy Ministers. This included a change to clause 3.9.3C of the Rules to establish a new interim reliability measure that seeks to ensure that maximum expected USE is no more than 0.0006% in any region in any financial year as forecast in the Electricity Statement of Opportunities (ESOO) report or ESOO update. The changes also included a requirement that the AEMC conduct a review of the interim reliability measure and the procurement of the interim reliability reserve by 1 July 2023.

The new rules also introduced an Interim Reliability Reserve. AEMO is responsible for procuring the Interim Reliability Reserve following consultation with and approval from the relevant Energy Council Minister of directly impacted states and/or territories. The reserve temporarily replaces long notice Reliability and Emergency Reserve Trader (RERT) (with the short and medium notice RERT to remain in place).

Under the current rules, the Reliability Panel is not able to make recommendations on the interim reliability measure. The review must be done by the AEMC. However, the interim reliability measure will form an important consideration for the Panel when making a recommendation for the reliability standard to be in place between 1 July 2024 and 20 June 2028. The timing of the current review will allow the Panel to consider the interim measure and provide any necessary information to the AEMC for its review.

3. Statement of Issue

There are fundamental interdependencies and interactions between the ESB's recommendation for a capacity mechanism to manage resource adequacy and the standard and settings, and interim reliability measure.

For example, any reform proposals in the context of resource adequacy - such as incentives to achieve right mix of resources - and retiring thermal generators could affect the optimal level of the reliability standard, and therefore the value (or level) of the reliability settings, in particular the

¹² ESB, *Reliability Standard Review* – March 2020, page 5-6.

¹³ ESB – Interim Reliability Reserve – Recommendation for National Electricity Amendment (Interim Reliability Measure) Rule 2020 – Decision Paper – July 202 – page 5

Market Price Cap (MPC). Further, any new markets for essential system services may affect the revenue streams earned by generators, which in turn could again affect the optimal value (or level) of the settings.

How resource adequacy is currently managed in the NEM: price signals to deliver the quantity of capacity

The reliability standard currently defines the level of reliability which balances the cost of achieving that standard with consumers' willingness to pay for avoiding being without power - representing the trade-off between the dual objectives of reliability and affordability.

The reliability standard is accompanied by regulated price settings. One of these regulated price settings is the Market Price Cap (MPC). It aims to provide an upper price limit high enough to drive the necessary investment while protecting market participants and customers from extreme prices. These settings are reviewed every four years by the Reliability Panel.

The level of - and how often prices are expected to reach - the MPC affects the attractiveness of investing in the NEM. Using the MPC and other settings is an indirect approach to achieving the required reliability standard. Absent perfect foresight, the selected MPC may not drive the level of investment needed to retain all the resources required to meet the reliability standard exactly.

Under the current market arrangements, the NEM has a high MPC in comparison to other international markets given it is an energy-only market. The MPC is set at a level needed to recover the costs of investment in the resources needed to meet the reliability standard. The impact of a higher MPC is twofold:

- It creates price risk in the market. This incentivises generators and retailers to provide generation and contract with each other to a greater degree to reduce the greater potential price volatility. The amount of capacity that is contracted is decided by the retailer, based on what they think will be the demand for energy from their customers. Generators that have sold those contracts to retailers then make sure that their plant is available to the contracted amount when high prices occur.
- It is the combination of price risk and the contracting incentives derived from this risk that drives investment in the NEM. These long-term investment decisions include decisions to invest in new capacity, to provide demand-side solutions and to retire capacity, determining the quantity of how much capacity is invested in the NEM, aside from government-led investment.

Source: ESB, Post-2024 Market Design Final Advice to Energy Ministers – Part B

The ESB's expected timeframe for the post 2025 market design work overlaps with the period the Panel is currently considering for the standards and settings – between 1 July 2024 and 30 June 2028.

Under clause 3.9.3A(d) of the NER, the Panel must conduct the next Reliability Standards and Settings Review and publish a report, which recommends the standard and settings that should apply on and from 1 July 2024, by 30 April 2022.

As noted, the Reliability Standards and Settings Review must be completed by 30 April 2022. The ESB recommendation for a capacity mechanism for a post 2025 market design will impact the scope and the assessment of the Panel's standard and settings that should be in place from 1 July 2024 to 30 June 2028. Further, any work on agreed reforms for the post 2025 market design will occur over the same period as the Panel's Reliability Standards and Settings Review. As noted, any agreed reform proposals for a post 2025 market design both short and medium term will impact the optimal reliability framework required for the transitioning power system. Given this, it is important that the two process are aligned.

4. Description of the proposed rule

The ESB proposes that the NER requirements for the current Reliability Standards and Settings Review are amended to:

1. allow it to be completed and a report published under clause 3.9.3A(d) of the NER by 30 June 2022, rather than 30 April 2022; and
2. allow the Panel to only review and report on the standard (and not the settings) that it recommends should apply on and from 1 July 2024 to 30 June 2028. This will allow for the ESB to consider the settings as part of the design of the capacity mechanism.

These amendments are proposed as transitional arrangements that would only apply to the current Reliability Standards and Settings Review, and would not apply to subsequent Reviews.

5. Non-controversial rule change Request

The ESB considers that this proposal satisfies the non-controversial test under section 87 of the NEL, which defines a non-controversial Rule as “a Rule that is unlikely to have a significant effect on the national electricity market”.

This Rule change proposal is for a one-off amendment to the scope and date of the current Reliability Standards and Settings Review. These amendments will allow the Panel to consider the standards while the ESB considers a holistic capacity mechanism design, which includes the necessary settings for the market. As part of this work, the ESB will consider:

1. what settings should be in place with any recommended capacity mechanism
2. what settings should be in place in the event National Cabinet does not consider that a capacity mechanism is required
3. if National Cabinet agrees to the implementation of a proposed capacity mechanism, what the settings, if any should be in place for the interim period taking into account the impact of the timing of any changes on the contract market, and the potential to place a freeze on the settings before the mechanism is implemented.

The proposed approach would avoid the Panel potentially making recommendations on the settings that are inconsistent with any future market design. The Rule change proposal would not impact future Reliability Standard and Settings Reviews.

It is imperative that the reliability framework is designed holistically so that the different aspects of the framework work together. Where there is inconsistency or misalignment this could affect investment and certainty in the market and hence reliability of the power system, and costs to consumers.

The rule change would allow a clearer and streamlined process for stakeholders while delivering the necessary recommendation for the standards and settings.

6. How the proposed changes will address the issue

The Rule change proposal will allow consideration of the reliability standard in a timely manner. Further, it will provide for the reliability settings to be reviewed and addressed in a coordinated and holistic way with the proposed work on the capacity market given the significance of interactions. As noted above, the proposed changes are only required for the upcoming Reliability Standard and Settings Review and not for any future Reliability Standard and Settings Reviews.

The proposed changes will also allow the Panel to provide information to the AEMC in time for it to conduct its review on the interim reliability measure by 1 July 2023.

7. How the proposed rule will or is likely to contribute to the achievement of the national electricity objective

The National Electricity Objective (NEO), as set out in section 7 of the National Electricity Law, is:

to promote efficient investment in, and efficient operation and use of, electricity services for the long-term interests of consumers of electricity with respect to:

- *price, quality, safety and reliability and security of supply of electricity*
- *the reliability, safety, and security of the national electricity system.*

The ESB considers that the proposed transitional amendments will contribute to the NEO by promoting efficient investment in, efficient operation and use of, electricity services for the long term interests of consumers, in particular with respect to the reliability of the national electricity system, by:

- allowing for any risks of reform proposals that impact on the standard and settings to be effectively managed and considered. Any inconsistency for the market design could impact both investment in, and reliability of the power system.
- providing greater transparency, confidence, and predictable outcomes for market participants. The extension of time for the final report for the reliability standard review is likely to provide transparency and greater predictability for market participants on the Reliability Standards and Settings Review and how the post 2025 market reforms may be considered.

8. Expected costs, benefit and impacts of the proposed rule

The ESB does not consider there are any direct costs from the proposed transitional amendments to the NER as they are a one-off change to the current Reliability Standard and Settings Review process. It is also unlikely that there will be any direct costs to market participants and consumers from the proposed change.

It is expected that the proposed rule will benefit and reduce uncertainty for market participants as the proposed rule seeks to amend the timing of the Panel's Review so that the impacts of the post 2025 market design that intersect or impact on the reliability framework.