

Review of the form of the reliability standard and APC — Final Report

The Reliability Panel's final recommendation is to maintain the current form of the reliability standard

Based on the extensive modelling completed for this Review and stakeholder feedback on the Draft Report, the Panel considers that the existing form of the reliability standard continues to be fit for purpose and can adequately capture the changing risk profile as the national electricity market (NEM) transitions.

While the changing risk profile brings new challenges, the current form remains fit for purpose

While the Panel's modelling has shown that reliability risk is likely to change in the future, the current reliability standard still adequately captures the vast majority of unserved energy (USE) events that will likely arise in the NEM. Therefore, it remains an effective way to measure reliability risk and weigh it against the costs of increased reliability. The majority of stakeholder feedback on the Draft Report supported the Panel's assessment.

Using the reliability standard to prevent extremely rare USE events would likely result in an excessive cost burden on consumers

While there is a small proportion of rare USE events, which may not be adequately captured by the existing reliability standard, their probability and likelihood of occurrence are very rare, approaching 1 in 100 or more years.

The Panel considers that the risk of such large, low-probability USE events cannot be adequately addressed by any form of reliability standard, and would need to be addressed in other ways. This is because the reliability standard, as a tool, is not intended to achieve perfect reliability. Instead, it is designed to enable a trade-off between reliability and affordability to achieve a level of reliability based on consumers' willingness to pay.

Using the reliability standard to address a small proportion of very rare USE events will likely result in an excessive cost burden on consumers, regardless of which form it takes.

The Panel recommends process improvements to enhance the operation and implementation of the reliability standard

As part of its final recommendations, the Panel has identified possible process improvements to enhance the operation and implementation of the reliability standard. These include:

- AEMO's continued work on enhancing its reliability modelling to take into account a larger range of weather conditions
- improving the modelling of future demand traces for reliability forecasting
- enhancing how the Panel applies the VCR in its next review of the level of the reliability standard.

There are other ways to support reliability outcomes during the transition

The Panel recognises that as the market transitions to net zero, factors outside of the market frameworks can increasingly impact reliability in the short term.

While not forming part of the recommendations, the Panel has identified some possible pathways and factors outside the market frameworks to support reliability outcomes for

consideration by other policymakers. These include addressing non-market barriers to the delivery of the ISP, such as supply chain, workforce and transmission constraints, planning and environmental approvals and social license issues.

There are also support mechanisms that policymakers could consider exploring further to increase reliability, but these come at a cost either to consumers or taxpayers. Examples of these mechanisms include strategic reserves, capital grants to lower the funding needs for the project, swaption style arrangements, cap contracts or contracts for difference, reserve payments and government build-to-own or joint venture projects.

The Panel has carried out rigorous modelling and evidence-based analysis to inform the final recommendations

Since the publication of the Directions Paper, the Panel has undertaken further modelling work based on stakeholder feedback.

The purpose of this further work was to improve an understanding of the changing reliability risk profile and to enable assessment on whether the current form of the standard remains fit for purpose.

Consistent with the approach taken for the Directions Paper, the Panel's modelling was based on a simulation of a virtual future power system that is deliberately constructed to create insights about its unserved energy profile.

However, several changes and additions were made based on stakeholder feedback to further improve confidence in the Panel's modelling results. These include implementing an alternative approach to removing capacity, validating insights using a full capacity model, using a much larger set of weather reference years and generating synthetic weather data to understand the likelihood of dark doldrums.

The results from the Panel's modelling have informed the Panel's final recommendations.

The Panel recommends maintaining the current form of the APC

The Panel's final recommendation on the form of the administered price cap (APC) is to maintain its current form and regularly review its level through its four yearly review of the reliability standards and settings.

The Panel considers that the current form of the APC continues to be fit for its intended purpose of protecting market participants from extended periods of high prices.

In making its recommendation, the Panel has considered indexing the APC to the consumer price index (CPI) but found that this was not necessary, provided the level of the APC is high enough to cover the short-run marginal costs of the marginal generator.

However, the Panel acknowledges stakeholder feedback on the Draft Report, which highlighted the importance of carefully monitoring the level of the APC given the events in June 2022 and the misalignment between the electricity APC and fuel prices. That is why the Panel intends to review the level of the APC in each reliability standards and settings review and make any necessary changes.

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