

Reliability standard and settings review 2018

Publication of draft report

The Reliability Panel has published a draft report that proposes to leave the reliability standard and reliability settings for the national electricity market (NEM) unchanged for the period 1 July 2020 – 1 July 2024.

The Panel considers this appropriate as:

- The existing standard and settings are, in its view, still achieving their purpose and are likely to continue to do so out to 2023/24.
- Providing regulatory stability through no changes will benefit consumers and market participants, given the current impact of policy uncertainty on investor confidence, the rapid technological change underway in the NEM, and the absence of sufficient evidence in support of a change to the price settings.
- Matters relevant to other components of the broader market and regulatory frameworks for reliability in the NEM are being considered through other proposals and reviews being progressed by the market bodies.

Stakeholders are invited to comment on the draft report through to 22 December 2017.

Mechanisms for reliability in the NEM

The framework for delivering reliability in the NEM is primarily market-based. This market approach facilitates the investment and operational outcomes needed to deliver a reliable supply of energy for consumers.

The framework has been brought into focus, given significant load shedding events earlier this year, the Finkel recommendations and various government interventions in energy markets.

This review of the market settings – the reliability standard, the market price cap, the cumulative price threshold, the administered price cap and the market floor price – examines one component of the reliability framework. The review must be conducted every four years under the National Electricity Rules.

The Energy Security Board's proposal of a National Energy Guarantee and the AEMC's Reliability Frameworks Review are two pieces of work targeting the broader reliability framework, the former also addressing the policy uncertainty in the sector that has been impacting on investor confidence.

The Panel's draft recommendations

The Panel is proposing to leave the current reliability standard and reliability settings unchanged for the period from 1 July 2020 to 1 July 2024. This draft recommendation has taken into account stakeholders' submissions to the review's issues paper, Panel members' analysis and judgment, and the results of wholesale market modelling, assessed against set assessment criteria.

The Panel will consider other policy developments that may be relevant to the Panel's findings and recommendations, including the status of the AEMC's rule on five-minute settlement and the National Energy Guarantee, before the Panel's final report is published (by 30 April 2017).

For interested stakeholders, the Panel has also published the draft modelling report for this review by consultant Ernst & Young (EY).

Component and purpose	Current level (2017/18)	Recommended level from 1 July 2020
Reliability standard <ul style="list-style-type: none"> Expresses the level of reliability sought from the NEM's generation and transmission inter-connector assets. 	A maximum expected unserved energy in a region of 0.002 per cent of the total energy demanded in that region for a given financial year.	A maximum expected unserved energy in a region of 0.002 per cent of the total energy demanded in that region for a given financial year.
Market price cap <ul style="list-style-type: none"> Limits market participants' exposure to temporary high prices, being the maximum bid (and therefore settlement) price that can apply in the wholesale spot market. It should be set at a level such that prices over the long term incentivise enough new investment in generation so the reliability standard is expected to be met. 	\$14,200/MWh	\$14,200/MWh (\$2017)
Cumulative price threshold <ul style="list-style-type: none"> Limits participants' financial exposure to prolonged high prices, by capping the total market price that can occur over seven consecutive days. It should be set at a level such that prices over the long term incentivise enough new investment in generation so the reliability standard is expected to be met. 	\$212,800	\$212,800 (\$2017)
Administered price cap <ul style="list-style-type: none"> Limits participants' financial exposure to prolonged high prices, being the price 'cap' that applies when the cumulative price threshold is exceeded. 	\$300/MWh	\$300/MWh
Market floor price <ul style="list-style-type: none"> Prevents market instability, by imposing a negative limit on the total potential volatility of market prices in any half hour trading interval. 	-\$1,000/MWh	-\$1,000/MWh

The role of the market settings

The reliability standard and settings focus on the future performance of the NEM. Their purpose is to:

- Establish the level of reliability consumers can expect from key aspects of the physical system (generators and interconnectors), by setting the reliability standard.
- Maintain the overall integrity of the market, by protecting market participants and consumers from excessively high prices.
- Allow for sufficient investment to provide electricity to the agreed reliability standard.

The Panel is required to review these market settings every four years to examine whether they remain appropriate for expected market conditions. The Panel can recommend changes to these market settings, where it considers this will be in the long term interests of consumers.

The importance of stability

The Panel recognises the impact that rapid technological change and policy uncertainty is having on consumers, market participants and the broader investment community. Policy uncertainty, in particular regarding the integration of emissions reduction and energy policy, is potentially raising risk premiums and constraining the investment environment, and ultimately increasing costs to consumers. The Panel does not wish to unnecessarily exacerbate uncertainty in the market. The Panel therefore weighted its draft decisions in the review in favour of supporting certainty and stability in the NEM.

Reasons for the draft recommendations

The reliability standard

The reliability standard is not automatically reassessed every review cycle. This is to provide stability and certainty to the market. The Panel must apply a materiality test to determine if the reliability standard should be reassessed.

Under its review guidelines, having considered whether the Australian Energy Market Operator (AEMO) has changed its value of customer reliability measure, changes in the way consumers use electricity, and the benefits of predictability and stability, the Panel considers that there would be no material benefit in reassessing the level of the reliability standard at this time.

The Panel also assessed the following additional matters as permitted by the guidelines:

- The potential for upcoming changes in the value of customer reliability due to the growth in the uptake of new technologies and heightened public interest in system reliability following recent system security events.
- Potential changes in the costs of necessary new generation since the 2014 review.

While there is clearly potential for some of these matters to impact on the reliability standard, the Panel did not consider there would be a material benefit at this time in reassessing the level of the standard. This is particularly so given there are a number of changes and potential changes to market and regulatory frameworks that could be relevant to investment decisions and therefore could impact the effect of any revised reliability standard for the near term.

Market price cap

The Panel's draft view is that the current market price cap of \$14,200 (\$2017, indexed annually to increases in CPI) should apply from 1 July 2020, for three reasons:

- **The current level of the market price cap appears to be serving its purpose effectively** – The level of the current market price cap is protecting market participants from high prices so as to maintain market integrity, and appears to be allowing price signals to incentivise sufficient generation to meet the reliability standard without use of AEMO's intervention powers, and is likely to continue to do so through the review period.
- **Modelling outcomes** – The Panel examined the level of projected unserved energy with the current market settings unchanged, and tested the level of market price cap that would be needed to allow for sufficient investment under several alternate scenarios. The Panel considers the current market price cap is likely to be sufficiently low to maintain market integrity and sufficiently high to allow investment in enough generation so that the level of any unserved energy is consistent with the reliability standard.
- **Benefits of maintaining policy stability, where warranted** – The Panel has assessed changes in the market for impacts on the required level of the market price cap and on balance, holds the view that providing stable and predictable policy outcomes is appropriate.

The Panel's draft recommendation is for no changes to the reliability standard and reliability settings from 1 July 2020 to the next review.

Cumulative price threshold

The Panel's draft recommendation is that a cumulative price threshold of \$212,800 (\$2017, indexed annually to CPI) should apply from 1 July 2020.

The Panel notes EY's view that, if the reliability settings were to be revised, a moderate increase of 15 per cent to both the market price cap and cumulative price settings would be recommended. EY also recommends maintaining near to the current ratio of fifteen between the cumulative price threshold and the market price cap, as it delivers a fair balance between limiting exposure to price risk and allowing for sufficient new investment.

As the Panel proposes to leave the market price cap unchanged from its current level in real terms, and given the current 15:1 ratio between the two market settings, the Panel also recommends no change to the current level of cumulative price threshold.

Administered price cap

The administered price cap is the price that applies while the cumulative price threshold is exceeded. The Panel considers in the current market context retaining a \$300/MWh administered price cap reflects an appropriate trade-off between: limiting market participants' exposure to prolonged high prices; incentivising generators to keep supplying electricity while the cap is in effect (by reflecting the short run marginal cost of generators); and limiting the risk of the need for compensation.

The Panel's draft recommendation is based on the following reasons:

- **No increase in short run marginal cost** – There does not appear to be strong evidence of a substantial, permanent increase since 2008 in the short run marginal costs of low utilisation generators.
- **Minimise costs to consumers** – When the administered price cap is in effect, consumers' exposure is limited to that price, to the extent it is reflected in their retailers' pricing. On the other hand, if a dispatched generator's short run marginal cost is above the administered price cap, they can recover losses through a compensation mechanism. Rather than exposing all consumers to prices close to the highest short run marginal cost of generators, the Panel has set the level low enough so some generators may have to apply for compensation.
- **Address fuel price volatility through compensation** – Similarly, the Panel considers that generators should use the compensation mechanism to recover losses where their short run costs are above the administered price cap due to temporary factors, such as short term increases in fuel prices.
- **Promote predictability and stability** – Leaving the administered price cap unchanged provides predictability and stability to the national electricity market, supporting efficient investment.

Market floor price

The market floor price is not automatically reassessed every review cycle and the Panel applies a materiality test to determine if it should be reassessed. The Panel's draft recommendation is that the market floor price should not be subject to reassessment in this review (i.e. it should remain at -\$1,000/MWh).

The Panel considers that market floor price events, and low price events more generally, related to excess generation occur infrequently in the market. This suggests the current level of the market floor price is serving its purpose of allowing generators to differentiate themselves through negative bids to remain dispatched and avoid paying cycling costs (i.e. costs associated with stopping generation or operating at inefficient levels in response to low demand).

Additionally, the Panel has found no evidence that changes in the generation fleet are causing a significant change in the range of generator cycling costs. This indicates that the current level of the market floor price remains sufficient to support efficient operational decisions by generators. The Panel will maintain a watching brief on the effect of the market floor price on the viability of storage technologies.

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