
Iberdrola Australia submission to the 2022 Review of the Reliability Standard and Settings Draft Report¹

Submitted to the AEMC by website

7th July 2022

1 Overview

Iberdrola Australia welcomes the opportunity to make a submission. Iberdrola Australia delivers reliable energy to customers through a portfolio of wind capacity across New South Wales, South Australia, Victoria, and Western Australia, including both vertically integrated assets and PPAs. Iberdrola Australia also owns and operates a portfolio of firming capacity including open cycle gas turbines, dual fuel peaking capacity, and large-scale battery storage. Our development pipeline has projects at differing stages of development covering wind, solar and batteries. This broad portfolio of assets has allowed us to retail electricity to over 400 metered sites to some of Australia's most iconic large energy users.

Iberdrola Australia is part of the global Iberdrola group. With more than 120 years of history, Iberdrola is a global energy leader, the world's number-one producer of wind power, an operator of large-scale transmission and distribution assets in three continents making it one of the world's biggest electricity utilities by market capitalisation. The group supplies energy to almost 100 million people in dozens of countries, has a workforce of more than 37,000 employees and operates energy assets worth more than €123 billion.

We thank the AEMC for the opportunity to engage in the review of the Reliability Standard and settings being undertaken by the Reliability Panel. The key points we raise in this submission are:

- We agree the current level of the reliability standard at 0.002% remains appropriate for the target period (2025-2028); however,
- We support the introduction of a complementary reliability standard that is able to account for a wider range of expectations, in particular a tail risk metric.

¹ <https://www.aemc.gov.au/sites/default/files/2022-06/2022%20RSS%20Review%20Draft%20Report%20-%20FINAL%20for%20publication%20%281%29.PDF>

- We support an increase to the Market Price Cap (MPC) and Cumulative Price Threshold (CPT), within the efficient range identified by the Panel, and towards the lower end of the MPC and the higher range of the CPT.
- We consider that the Administered Price Cap (APC) should not be raised, but that there should be a mechanism introduced by which the APC can be temporarily increased during times of extreme commodity pricing, to prevent the market price being capped below the short run marginal cost of a large portion of the generation fleet.

2 Level of the Reliability Standard

Based on the modelling provided, Iberdrola Australia agrees with the Panel that there does not seem to be a compelling argument to tighten the reliability standard in its existing form. The current reliability standard of 0.002% unserved energy (USE) appears to be in line with the base-case Values of Customer Reliability (VCR) which we consider remains the most appropriate metric.

However, (see section 3) we support considering a complementary metric to address tail risk that can capture societal expectations around managing high impact/low probability events.

We note the tightened 0.0006% reliability standard proposed by AEMO is based on a high VCR scenario. While the high VCR scenario might act as a proxy for managing tail risks, we consider that accounting for potential future changes in the market and generation is better achieved through changes to the form of the reliability standard, rather than tightening beyond what is the most efficient reliability level. We agree that any change to the form of the reliability standard will require consideration of the impact on the level of the reliability standard and how it relates to the VCR.

3 Form of the Reliability Standard

Iberdrola Australia supports investigating a form of reliability standard that can account for a more complex reliability risk profile, in particular to account for tail risk. The form of the reliability standard should drive market settings that will encourage investment to mitigate “worst case” outcomes. In a market that is transitioning to high levels of variable renewable energy generation there are new risks emerging meaning that the traditional form of expected USE may no longer be the most appropriate metric. The ‘straw person’ option including some weighting of both average and tail probabilistic measures seems like a good approach to incorporating tail risk without distorting the current standard.

A given distribution target should be informed by analysis on what distribution of outages is acceptable, and the relative weighting of both the depth and duration of outage. This could involve further survey/analysis by the AER, or direct engagement

with jurisdictions. We note that Iberdrola Australia’s Operating Reserves rule change² submitted in July 2020 provides an opportunity for additional reserves to be procured, which could provide an alternative “lever” for actioning a tail risk standard (as well as managing high impact events, such as unexpected coal closures). Currently in the market, AEMO has regularly intervened through procuring RERT. While this was a prudent response to market conditions, RERT is intended as an emergency service and should not be required on a regular basis; we consider an explicit Operating Reserves service alongside enhanced market standards and settings to be more appropriate.

If the Panel does not recommend a tail risk standard in this review but supports it for a further review, the Panel should still consider changes to the market settings consistent with addressing tail risks.

4 Reliability Settings

4.1 Market Price Cap and Cumulative Price Threshold

Given the modelling provided by the Panel, Iberdrola Australia supports an increase in the MPC and the CPT to ensure reliability can be maintained and that investment in both short- and long-duration firming is delivered.

We consider that the CPT (in hours of MPC) should be towards the upper limit identified, in order to increase the market signal for longer-duration firming in the market. As per the assessment principles of the reliability settings, the CPT should not be set at a level that impedes the ability of the market to determine price signals for efficient investment. As thermal plant retires, longer duration firming will become more important to ensure supply and hence a higher CPT relative to MPC will help encourage a more efficient firming duration mix. The Reliability Panel should include a carbon price in the analysis when determining efficient price settings, in order to account for any increase in emissions that may be caused by a differing generation mix incentivised. If the CPT (in hours of MPC) is increased, the MPC should be set towards the lower limit identified, consistent with the efficient threshold identified in the paper.

This increase is consistent with recent modelling of a 100% renewable system, where an increase in CPT was required to manage the risk of extended periods of high demand or low VRE production³.

We consider that increasing the MPC and CPT will lead to improved reliability, as participants such as ourselves will take a more risk-adverse approach to operations in real time. For example, slow ramping plant will be more likely to keep capacity online

² <https://www.aemc.gov.au/rule-changes/operating-reserve-market>

³ <https://www.energy.gov.au/sites/default/files/2022-02/Iberdrola%20Australia%20Response%20to%20Capacity%20Mechanism%20Project%20Initiation%20Paper%20-%20Attachment%201.pdf>

during marginal periods, as the cost/benefit of being available for a scarcity pricing event will improve. This change will also provide a long-term investment signal (e.g., being more conservative about reserve capacity).

A higher MPC and CPT flows directly into investment cases for new firming technologies and is a key input for investors in the future grid such as Iberdrola Australia.

The Panel should increase the settings progressively over the period 2025-2028. We consider that this will be sufficient time for contract and investment markets to respond. Conversely, we note that it is likely that AEMO's Step Change scenario will still underestimate the pace of change, and increases should not be deferred to beyond this review period.

4.2 Administered Price Cap

In light of the new mode of failure highlighted by the recent market suspension, Iberdrola Australia is of the view that there is a need to change the APC. We consider that the APC should be high enough to prevent the situation where a large portion of the generation fleet has a short-run marginal cost above the administered price. This creates a complex operating environment for generators to run (including cash flow impacts, bidding complexity, etc.). It can also lead to a large portion of the day where price is at the cap, which removes the relationship between the diurnal price and demand and removes price signals that would allow the spot market to signal energy storage or load shifting to help meet peak demand.

However, consistent with the Panel's arguments, we do not think that the price cap should be raised at all times, as this may cause an unnecessary cost increase to consumers (e.g., major transmission line failure, etc.) Rather we propose there should be a mechanism in place by which the APC will be increased if the marginal unit required to meet demand has an SRMC above the standard \$300/MWh, so that the APC is set above the implied SRMC of that unit for their given fuel price.

5 Market Floor Price (MFP)

Iberdrola Australia agrees that it is appropriate to maintain the market floor price at its current level of -\$1,000/MWh in the target period. We consider that the existing market floor price strikes the right balance between providing signals for flexibility and allowing the market to clear in an efficient manner.

Regarding the question of the fundamental purpose of the MFP, we consider that there may be merit to changing the role of the MFP in future, from a primarily operational signal to a broader investment signal, as the generation mix changes and minimum operational demand decreases due to the uptake of rooftop PV. A lower MFP may provide a better signal to shift consumption to low-demand periods and incentivise more flexible generation and storage. This value would depend on the opportunity costs for shutdown and cycling of thermal plant, and the controllability and flexibility of

the demand side. We recommend this should be investigated by the Panel in future work, but that a change is not warranted within the current review period given the other major reform work underway (both market and engineering).

6 Conclusions

We look forward to the opportunity to continue to engage with the AEMC. If you would like to discuss this submission, please contact Jack Munro at jack.munro@iberdrola.com.au, or on 0468 661 563.

Yours sincerely,

Tim Nelson
EGM, Energy Markets