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Reliability Panel
c/- Australian Energy Market Commission
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Review of the Form of the Reliability Standard and Administered Price Cap (APC)

Snowy Hydro Limited welcomes the opportunity to comment on the Reliability Panel's Review of the form of the reliability standard and APC.

The NEM is experiencing unprecedented change as the system transitions to renewables. The dominance of wind and solar capacity as the primary source of bulk energy is the most profound structural change since the inception of the NEM. This change in generation mix is changing the risk profile of the power system and it is critical that the reliability standard and market settings accurately reflect these risks and safeguard the NEM against supply shortfalls.

In addition to its assessment of the reliability standard and market settings, the Panel has an important educational role in highlighting the evolving reliability risk in the NEM, the role of the reliability standard and the impact of changes on electricity costs. At a high level, the reliability standard must remain transparent, administratively straightforward and preserve the NEM's energy-only structure, supporting the use of price signals to drive investment decisions.

Key concepts for the Reliability Standard

Snowy Hydro supports a stable, single reliability standard and considers that the NEM should not face two standards as it does at present. The NEM needs consistency and this is best achieved through a NEM-wide reliability standard determined by the Panel. Inconsistent jurisdictional standards have the potential to confuse and dilute investment signals. A single, simple metric will create investment certainty for participants and facilitate the least-cost reliability outcome for consumers as required by the National Electricity Objective (NEO).

We agree with the Panel's recommendation that extensive analysis and consultation be carried out before the 2026 reliability standards and settings review to consider whether the transformation of the power system means that a new form of the reliability standard may be required to properly reflect the changing risks.

AEMO should seek to incorporate a 'tail risk' metric in combination with the existing expected value of the unserved energy metric. All NEM States have experienced an increasing number of actual or forecast LOR events in recent years. There is not likely to be any medium or large storage built in Victoria and New South Wales (NSW) before the completion of Snowy 2.0 and the reliability of the existing coal fleet is degrading. Snowy Hydro is concerned that it will only take a single coincidence of an extreme weather event together with an unplanned outage to a Victorian or NSW coal asset for another

energy crisis. The 2022 energy crisis highlighted that the key reliability risk in the NEM will increasingly be driven by shortfalls in supply, rather than simply demand peaks. The reliability standard will be critical in ensuring market settings are set at a correct level, incentivising an adequate level of contracting and ultimately investment in energy, firming and storage assets.

Concerns around resource adequacy are compounded by ongoing uncertainty in the timing of new transmission assets. Although progress is being made, potential delays to critical transmission projects, such as VNI West, are increasing the risk of blackouts. The maximum saving from a delayed commissioning of these projects is the cost of capital, however this must be set against the risks of long-tail risk events, which are becoming increasingly common.

AEMO's use of a Probability of Exceedance (PoE) 10 forecast is aimed at ensuring reliability in a 1 in 10-year extreme summer maximum demand event. Snowy Hydro believes the approach understates the growing risk from climate and, consequently, energy market volatility. In particular, AEMO's use of POE 10 in Electricity Statement of Opportunities (ESOO) modelling does not reflect the growing risk of long-tail events, which are increasing in magnitude as weather-dependent generation replaces coal assets. Snowy Hydro is also concerned that the risk of blackouts in the NEM is not adequately captured in AEMO reliability forecasts and transmission planning. This is undermining support for firming technologies and transmission and is concerning given the development given the scale of investment required to maintain system security.

The cost-benefit modelling for AEMO's Integrated System Plan (ISP) for example excludes risks related to "coincident heatwaves and bushfires", "extreme wind or solar droughts" and "other multiple or non-credible contingencies" from the primary Optimal Development Path. These are the very risks which only large scale storage and firming can address in the foreseeable future.

Interim Reliability Metric (IRM) is concerning

In the past the concept of "tail risk" was typically considered as a reason for changing (increasing) the *level* of the reliability standard when its primary relevance is on reliability forecast modelling. This need to retune forecasting models to take account of tail risk does not itself justify a change to the economically optimum reliability metric. That is, the improved calculation technique was confused with the desired calculation result. It is the task of the Panel and AEMO to ensure these models are calibrated to correctly capture extreme events.

Snowy Hydro notes that the Panel's analysis indicated that the IRM, at 0.0006 percent expected USE, is significantly tighter than a level of reliability consistent with consumer willingness to pay for reliability. It also considered 0.0006 percent was not a level of reliability that could be implemented or reasonably achieved through the market price settings as it would require an impractically high MPC leading to systemic financial risk issues. Noting that the Panel has not found evidence to support a tighter standard, we would not support the implementation of the IRM on a permanent basis in the absence of a cost benefits analysis establishing the case for this standard.



Reviewing the Administered Price Cap

Given the impact that high fuel costs had on thermal generators during the administered price period (APP) as noted by the Panel, Snowy Hydro agrees that the APC should be examined to account for links to fuel prices. As recent experience demonstrates, capping market prices below SRMC increases the risk of supply shortages, even where provisions exist for parties to claim compensation.

However, the critical point when considering adjustments to the level and structure of the APC is that sufficient allowance must be made for generators to adjust contracting positions, which are frequently set over a 2 - 3 year forward period. The determination by the Australian Energy Market Commission in 2022 to immediately increase the APC failed to recognise the importance of forward contracts in the NEM and unfairly exposed generators who had contracted in good faith based on the existing APC to a significantly higher level of risk. It is a precedent we would not wish to see repeated.

To avoid this scenario in future, Snowy Hydro considers there is merit in linking the APC to a market metric rather than set as a static value. Snowy Hydro suggests the APC could be calculated by multiplying the administered price cap for gas (\$40/GJ) by a heat rate for an open cycle gas turbine generator of 12 GJ/MWh. This equates to an APC of \$480/MWh. Using the cost of gas as a metric for determining the APC is appropriate given its role as the marginal fuel source during periods of system volatility in the NEM.

Finally, Snowy Hydro notes that there is little consideration in the Paper on the impact of changing the form of the APC on derivative contracts markets. Given the role that the APC plays in the management of participant risk through financial products, Snowy Hydro reiterates that the Panel should explicitly consider how any changes will interact with the contract market should it continue to explore options to change the form of the APC.

About the Snowy Hydro Group

Snowy Hydro Limited is a producer, supplier, trader and retailer of energy in the National Electricity Market and a leading provider of risk management financial hedge contracts. We are an integrated energy company with more than 5,500 megawatts of generating capacity. We are one of Australia's largest renewable generators, the third largest generator by capacity and the fourth largest retailer in the NEM through our award-winning retail energy companies - Red Energy and Lumo Energy. Collectively, they retail gas and electricity in South Australia, Victoria, New South Wales, Queensland and the ACT to over 1.2 million customers.

Snowy Hydro appreciates the opportunity to respond to the Reliability Panel in relation to this review.

