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29 January 2026

**Australian Energy Market Commission (AEMC or the Commission)**
Submitted via AEMC website

Dear Mr Stollmann,

**2026 Reliability Standard and Settings Review – Draft Report**

Hydro Tasmania welcomes the opportunity to respond to the Issues Paper for the *2026 Reliability Standard and Settings Review (RSSR)*.

The National Electricity Market (NEM) is undergoing a rapid transformation with the Reliability Standard and Settings (RSS) remaining a fundamental pillar of the market's regulatory framework as we shift to a low-emissions energy system. As noted in the NEM Wholesale Market Settings Review Final Report, the market price settings, including the Market Price Cap (MPC), Market Price Floor (MPF), Cumulative Price Threshold (CPT) and Administered Price Cap (APC), should remain linked to the value of customer reliability (VCR) and to revenue adequacy for efficient investment in bulk energy, shaping and firming services.[1] Recognising the scale and duration of the transition, the report also recommends that the Reliability Panel provide a longer-term outlook on the form of the market price settings, including through an initial review in 2026, to support long-term contracting and ensure the settings remain fit for purpose as the electricity market continues to evolve.[2]

Hydro Tasmania broadly supports the Reliability Panel's (the Panel) draft recommendations and provides the following detailed points:

- **Support a reliability standard and MPC/CPT that continues to support timely investment:** to ensure it reflects the critical need for replacement firm generation, provide greater revenue certainty during scarcity events to reduce the risk of intervention, and help ensure timely investment to maintain reliability through the transition.
- **Acknowledge complexity of modelling batteries:** while batteries will continue to be an important part of the energy mix as we transition, their revenue earned during unserved energy (USE) events is difficult to predict and model given assumptions around batteries cycle, revenue earned under normal conditions and reliance on scarcity pricing.
- **Consider appropriate to link the MPF to minimum system load 3 events (MSL3):** as this alignment provides an appropriate signal to the market during these conditions. We acknowledge, however, that the proposal introduces some complexity, and would welcome further modelling to ensure that any unintended consequences are identified and addressed.

[1] For more information see: National Electricity Market wholesale market settings review, page 122.
[2] For more information see: National Electricity Market wholesale market settings review, page 122.

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- **Accept retention of the current form of the CPT:** noting that the draft modelling suggests there is no material benefit in changing the form at this stage. We recognise, however, that this approach may undervalue long-duration capacity and storage. As such, the investment case for these assets requires further consideration and support. We would also support further exploration of the forward role of the CPT, particularly as a longer CPT could strengthen the investment signals for longer-duration energy storage that will be essential for system reliability and for better managing, and pricing, weather-driven reliability risks.
- **Accept retention of the MFP, APC and AFP values**: given that the draft modelling suggests there is no material benefits to change these settings at this time.
- **Support Panel's treatment of jurisdictional schemes:** and agree with the Panel's observation that these schemes are designed to complement, not replace, the market settings. We consider that the market settings should remain independent of government policies.

Please find our detailed responses to the consultation questions in Attachment 1. Please contact Shannon Culic at shannon.culic@hydro.com.au to discuss any follow up to this letter.

Yours sincerely,

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## ATTACHEMENT 1 – Response to Consultation Questions

**Question 1: The Panel's draft reliability standard is from 0.002% to 0.004% USE**

*What point from 0.002% USE to 0.004% USE would best serve the long-term interests of consumers, and why?*

*How should the Panel determine the optimal point that promotes the long-term interests of consumers?*

Hydro Tasmania supports a reliability standard that continues to enable timely and efficient investment in the power system. In our view, the standard should be set at a level that provides clear signals for investment in firming technologies and dispatchable capacity, reducing the risk of delays in replacing ageing thermal plant. As these assets approach end of life, their reliability typically declines and operating and maintenance costs increase. Continued reliance on them also prolongs higher-emissions generation and delays the transition to cleaner, lower-cost supply, imposing greater long-run cost, reliability and transition risks on consumers.

The current standard of 0.002% USE has been supported across multiple reviews and parameter updates, and reflects a consistent weight of evidence over time, providing a stable and predictable framework that supports timely investment and maintains consumer confidence in long-term system reliability and affordability. By contrast, the current review appears to reflect a particular combination of assumptions, most notably around emerging technology costs and updated VCR estimates, that may represent an outlier relative to the broader historical evidence base. We therefore consider that any material change to the standard should be informed by a greater body of evidence, assessed over successive reviews, rather than a single set of assumptions. Further, this approach would help mitigate the risk of adjusting the standard based on potential recency bias, where recent periods of minimal USE events could unduly influence decision-making.

In this context, Hydro Tasmania believes that retaining the current reliability standard of 0.002% USE would best serve the long-term interests of consumers. This level offers greater investment certainty, consistency for market participants, and supports sufficient, forward-looking investment to maintain consumer expectations regarding system reliability as the generation mix continues to evolve. In addition, it would accommodate a broader customer base by reflecting the differing VCR trends for residential and commercial customers.

Should the Panel determine that an adjustment to the current standard is warranted, we consider 0.003% USE to be the maximum appropriate level, to ensure the integrity of the reliability settings are preserved. Loosening the standard beyond this point would lead to significantly weaker investment signals and increase the likelihood of delayed or reactive investment. This risks the need for greater intervention and potentially higher direct or indirect costs for consumers over the longer-term.

In determining the optimal point within the proposed range, it is important for the Panel to remain mindful that a tighter reliability standard does not necessarily result in higher prices for consumers. Stronger investment signals can support increased supply, greater competition, and reduced time spent at the MPC. While a higher MPC or CPT may increase costs if scarcity conditions persist, a

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tighter standard that drives timely investment can reduce the frequency and duration of those scarcity events, moderating long-run costs and delivering more stable and efficient pricing outcomes for consumers.

**Question 2: Assumptions of battery behaviour for the next RSSR**
*How should we assume batteries participate in the market when determining the level of revenue recovered during USE events?*

Assumptions about battery participation during USE events are inherently complex. Battery behaviour is influenced by daily cycling patterns, reliance on scarcity pricing to recover fixed costs and battery contracting strategy in general, and the extent to which models assume perfect foresight and optimal dispatch. These factors make it challenging to accurately represent how batteries would preserve state of charge, arbitrage across scarcity periods, and respond to evolving price and reliability signals during extended periods of system stress.

As energy constrained assets, batteries only have a limited number of charge and discharge opportunities within a day and consequently, their realised revenue is highly sensitive to the timing of those decisions. In our submission on the 2026 Integrated System Plan (ISP) Methodology Issues Paper, we presented comparisons of spot revenue from modelled batteries with perfect foresight and actual revenue from batteries in the NEM. We showed that Wallgrove BESS and Hazelwood BESS earned only 54 per cent and 62 per cent of the revenue of their respective modelled counterparts. This gap highlights the challenges faced by batteries operating in real time, which must make operational decisions under uncertainty, resulting in materially lower realised revenues compared to modelled outcomes (see charts below).

As part of the modelling for the 2026 ISP, the Australian Energy Market Operator (AEMO) accounts for the limitations of batteries by introducing headroom and footroom energy reserve requirements and creating imperfect charge profiles for batteries. We would support a similar approach to modelling battery behaviour for the next RSSR, as this would improve consistency with ISP assumptions and better capture real-world operational limitations.

**Revenue per MW – Wallgrove BESS vs modelled results**

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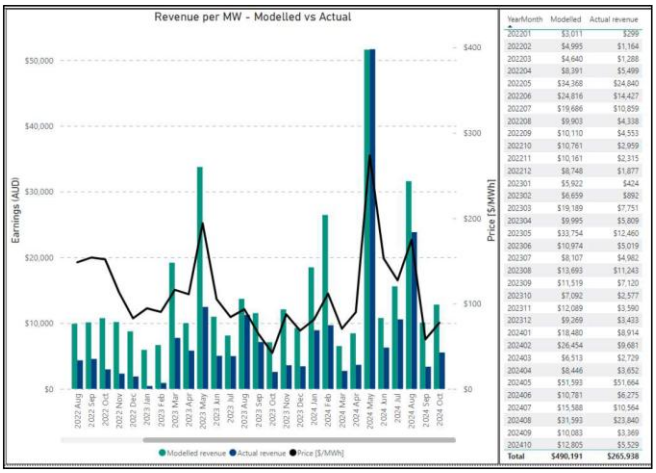
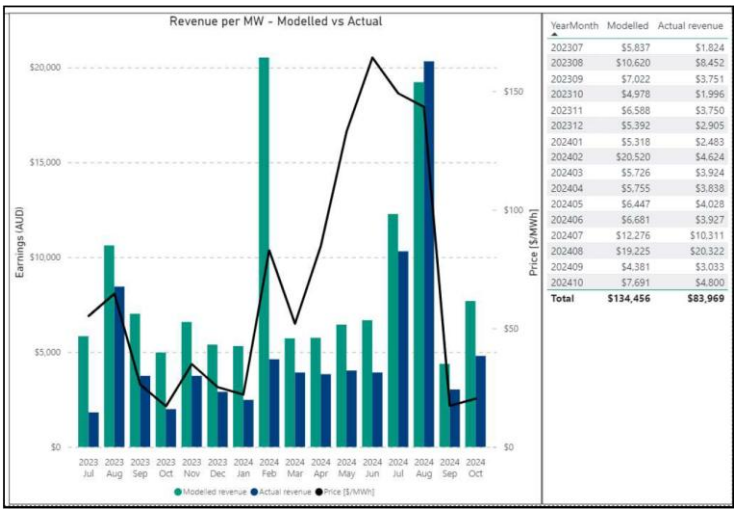



| YearMonth | Modelled | Actual revenue |
|---|---|---|
| 202201 | $3,011 | $299 |
| 202202 | $4,995 | $1,164 |
| 202203 | $4,640 | $1,288 |
| 202204 | $8,391 | $5,499 |
| 202205 | $34,368 | $24,840 |
| 202206 | $24,816 | $14,427 |
| 202207 | $19,686 | $10,859 |
| 202208 | $9,903 | $4,338 |
| 202209 | $10,110 | $4,553 |
| 202210 | $10,761 | $2,959 |
| 202211 | $10,161 | $2,315 |
| 202212 | $8,748 | $1,877 |
| 202301 | $5,922 | $424 |
| 202302 | $4,659 | $892 |
| 202303 | $19,189 | $7,751 |
| 202304 | $9,995 | $5,809 |
| 202305 | $33,754 | $12,460 |
| 202306 | $10,974 | $5,019 |
| 202307 | $8,107 | $4,982 |
| 202308 | $13,693 | $11,243 |
| 202309 | $11,519 | $7,120 |
| 202310 | $7,092 | $2,577 |
| 202311 | $12,089 | $3,590 |
| 202312 | $9,269 | $3,433 |
| 202401 | $18,480 | $8,914 |
| 202402 | $26,454 | $9,681 |
| 202403 | $6,513 | $2,729 |
| 202404 | $8,446 | $3,652 |
| 202405 | $51,593 | $51,664 |
| 202406 | $10,781 | $6,275 |
| 202407 | $15,588 | $10,564 |
| 202408 | $31,593 | $23,840 |
| 202409 | $10,083 | $3,369 |
| 202410 | $12,805 | $5,529 |
| Total | $490,191 | $265,938 |

**Revenue per MW – Hazelwood BESS vs modelled results**




| YearMonth | Modelled | Actual revenue |
|---|---|---|
| 202307 | $5,837 | $1,824 |
| 202308 | $10,620 | $8,452 |
| 202309 | $7,022 | $3,751 |
| 202310 | $4,978 | $1,996 |
| 202311 | $6,588 | $3,750 |
| 202312 | $5,392 | $2,905 |
| 202401 | $5,318 | $2,483 |
| 202402 | $20,520 | $4,624 |
| 202403 | $5,726 | $3,924 |
| 202404 | $5,755 | $3,838 |
| 202405 | $6,447 | $4,028 |
| 202406 | $6,681 | $3,927 |
| 202407 | $12,276 | $10,311 |
| 202408 | $19,225 | $20,322 |
| 202409 | $4,381 | $3,033 |
| 202410 | $7,691 | $4,800 |
| Total | $134,456 | $83,969 |

Although not directly within the scope of the Panel's question, we consider it appropriate to note the following in relation to battery behaviour and associated market signals. In this context, the NEM Wholesale Market Settings Review proposes applying an APC to some technologies while allowing higher or uncapped pricing for marginal technologies such as batteries. This approach seeks to address situations where gas or diesel units set prices during APC periods, flattening price outcomes and weakening the economic signal for storage to shift energy across time, despite an ongoing system need for firming.

While AEMO can intervene through directions if this occurs, interventions such as these are not designed to substitute market-based incentives. We would welcome further analysis on the

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materiality of this issue and the potential design options to ensure storage investment and dispatch signals remain effective during periods of market stress.

**Question 3: A national reliability standard to reflect regional differences**
*What level of the Reliability Standard in the range of 0.002% to 0.004% USE would best reflect the needs across the NEM? Otherwise, how should the Panel consider regional differences?*

Hydro Tasmania supports a single, national reliability standard across the NEM, reflecting the interconnected nature of the market and the need for clear, consistent investment signals. However, the standard should be set at a level that is sufficient to incentivise timely investment in firming and dispatchable capacity across *all* regions. Without this, additional interventions or investment support would be needed for some regions, which may lead to fragmentation of investment signals and a more complex NEM, and also potentially imposing higher costs on consumers and taxpayers.

The Panel's modelling indicates that a reliability standard of 0.003% USE would primarily drive investment in Queensland and New South Wales, leaving Victoria and South Australia at risk of insufficient firming and dispatchable capacity. [3] In contrast, retaining the standard at 0.002% USE supports investment across all NEM regions, helping to maintain system reliability and avoid widespread load shedding. A 0.002% standard therefore is more consistent with whole-of-NEM reliability and price settings, reducing the need for regional interventions or differing standards.

**Question 4: The importance of regulatory stability**
*How should the Panel balance the value of regulatory stability versus the need to remain flexible to changing circumstances?*
*What are the implications for the Panel determining the optimal reliability standard?*

We acknowledge the tension between making gradual movements over time and not being so gradual as to fail to adequately incentivise investment. As noted in our submission to the Issues Paper, the reliability standard provides stability to market participants, and it is important that changes are only made if there are significant benefit to doing so.[4]

In this context, we consider that now is not the time to dilute those signals. The current review represents the first instance in which a materially weaker standard has been proposed, and it appears to be driven by a relatively narrow set of assumptions and limited recent evidence that may evolve over time. We therefore suggest that the Panel place greater weight on outcomes and trends observed across multiple reviews, rather than a single review in isolation. Assessing market performance, investment responses and reliability outcomes over successive review cycles would provide a more

[3] For more information see: https://www.aemc.gov.au/2026 RSSR - Draft Report, p.25.
[4] For more information see: https://www.aemc.gov.au/20226 RSSR - Draft Report/Hydro Tas, p. 3.

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robust evidence base to inform decision-making and help avoid unnecessary instability in the standard. Consistent with this, we uphold that retaining the current reliability standard of 0.002% USE would best serve the long-term interests of consumers.

Looking forward, Hydro Tasmania considers that a modest evolution of the CPT at this stage could better align market settings with emerging system risks and reduce the need for more reactive and material changes in later reviews. Maintaining the CPT at its current level (7.5 hours of the market price cap over a seven-day period, increasing to 8.5 hours by 2027) creates a risk that investment signals for long-duration capability remain insufficient as thermal capacity retires. In the absence of stronger incentives, investment is more likely to concentrate on shorter-duration assets, notwithstanding the system's growing exposure to multi-day, weather-driven reliability risks. We also note that long duration technologies do require significant lead times for development and increases to the CPT now will position the market to address those risks as they emerge. We expand on these considerations in our response to Questions 5 and 6 below.

**Question 5: Optimal level of the market price settings**
*Which of the combination of market price setting frontiers and corresponding reliability standard do stakeholders think best balance the long term interests of consumers?*
*How should the MPC be traded off with the CPT along these frontiers to best meet system needs?*
*How should the Panel meet the varying needs of different regions through the MPC and CPT?*

We consider that the combination of market price settings that best serves the long-term interests of consumers is one that recognises the changing nature of reliability risks as the resource mix evolves. In particular, while the MPC should be retained to support efficient dispatch and investment, we continue to see merit in a longer CPT and would not want to see its value diminish.

Current settings appear to work well for incentivising short-duration battery investment, but are less effective in addressing sustained, multi-day renewable droughts and/or peak demand events. Our analysis of AEMO's *NEM October 2025 Generation Information* dataset shows that there is a significant pipeline of battery projects with less than 4 hours of storage entering the market and little investment in assets capable in addressing prolonged supply shortages (see chart below).

Extending the CPT would better support investment in longer-duration firming resources over the medium to longer term, particularly as coal exits the system and weather-driven risks become more pronounced. A longer CPT also provides a more flexible way to accommodate differing regional risk profiles without relying on region-specific price settings.

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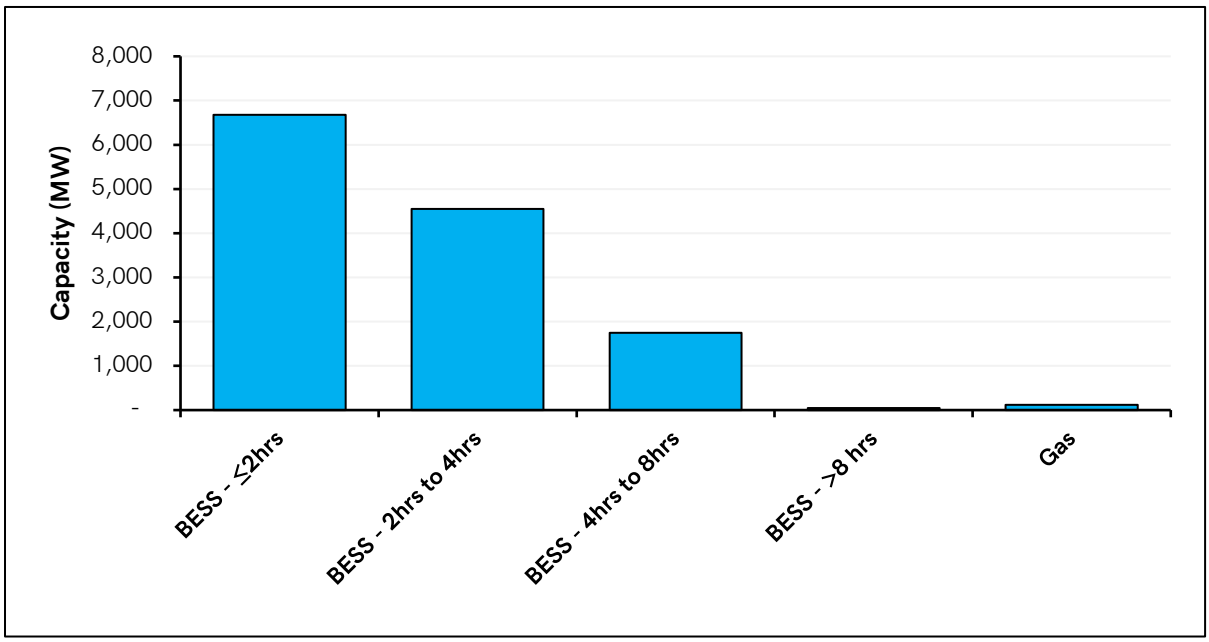
**Committed and Anticipated BESS and Gas Capacity in the NEM**




Adopting different MPCs across regions would likely give rise to unintended market and operational consequences, including sustained one-directional energy flows during periods of system stress and could lead to significant differences in the value of financial derivatives, such as caps between regions (likely impacting Settlement Residue Auctions).

**Question 6: The Panel's draft recommendation to retain the current form of the cumulative price threshold**

*Do stakeholders agree with the draft recommendation to retain the current form of the cumulative price threshold?*

We accept the Panel's draft recommendation to retain the current form of the CPT. However, we consider this should remain under review. As the generation mix continues to change, further exploration of longer or alternative CPT designs will be warranted, particularly where a longer CPT could strengthen investment signals for longer-duration storage and improve the management of extreme, weather-driven reliability risks. This is particularly relevant for periods around and following significant coal closure.

The draft 2026 ISP groups storage technologies across the 4–12 hour range, yet current market settings provide limited price signals beyond around 8 hours of duration. While batteries play an important role in frequency control and intraday balancing, they cannot deliver the sustained, multi-day dispatch needed to manage renewable droughts or extended periods of low wind and solar generation. In high-renewable systems, reliability depends not just on the volume of storage, but on the duration and

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flexibility, and ability to dispatch over prolonged periods. It is therefore important that long-duration storage and firm capacity continue to be incentivised to enter the market in advance of major plant retirements.

As noted in our submission to the Issues Paper we consider that a longer CPT could better reflect these emerging risks by strengthening incentives for capacity and storage to remain available through prolonged periods of low variable renewable output.[5] This, in turn, can support investment in longer-duration storage, preserve market liquidity by encouraging higher levels of hedging, and reduce the likelihood of abrupt transitions into administered pricing during extended market stress. As the NEM becomes more reliant on VRE, the form and calibration of the CPT will be increasingly important in ensuring that reliability safeguards and investment signals remain fit for purpose.

**Question 7: The Panel's draft recommendation to retain the current market floor price**
*Do stakeholders agree with the draft recommendation to retain the current market floor price of -$1,000/MWh?*

We support the Panel's draft recommendation to retain the current MFP of -$1,000/MWh, given that the draft modelling suggests there is no material benefit to change this setting at this time.

**Question 8: The Panel's draft recommendation to link the market floor price and minimum system load events**
*Do stakeholders agree with the Panel's draft recommendation to require the market to clear at the MFP during MSL3 conditions?*

We support the Panel's draft recommendation to link the MFP to MSL3 conditions, as this alignment provides an appropriate and transparent signal to the market during periods of very low demand. Linking the MFP to these conditions can help reinforce efficient operational and investment responses when system conditions are most challenging. We acknowledge that the proposal introduces additional complexity and would welcome further analysis and modelling to ensure any unintended consequences are well understood and appropriately managed before implementation.

**Question 9: The Panel's draft recommendations on the administered price cap and floor**
*Do stakeholders agree with the draft recommendation to retain the current level of the APC at $600/MWh?*
*Do stakeholders agree with the draft recommendation to retain the current level of the AFP at -$600/MWh?*

[5] For more information see: https://www.aemc.gov.au/20226 RSSR - Draft Report/Hydro Tas, pp. 6-7.

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We support the Panel's draft recommendation to retain the current levels of the APC, given that the draft modelling suggests there is no material benefits to change this setting at this time.

**Question 10: Treatment of jurisdictional schemes**
*Do stakeholders agree with the Panel's decision to run a low-WACC sensitivity to determine the effect of jurisdictional schemes when determining the optimal reliability standard?*
*Do stakeholders agree or disagree that the effect of jurisdictional schemes should not be considered when determining the efficient market price settings? If disagree, how should we quantify the monetary value of jurisdictional support schemes in our modelling?*

We support the Panel's approach to modelling jurisdictional schemes through a low-WACC sensitivity when assessing the optimal reliability standard. As outlined in our submission to the Issues Paper, these schemes are temporary, targeted interventions intended to address specific, time-bound investment challenges through out-of-market mechanisms. We agree with the Panel's observation that such schemes are designed to complement, rather than replace, market settings. Considering their effects through sensitivity analysis appropriately recognises their influence while avoiding the risk that temporary, jurisdiction-specific measures distort efficient market price settings or the core reliability framework. We agree with the Panel's draft position to recommend settings that can stand on their own to meet the reliability standard, independent of jurisdictional schemes.

**Question 11: Battery revenue requirements**
*Do stakeholders consider that the market settings benchmarked based on OCGTs are high enough to incentivise a new entrant 4hr BESS, given the results above?*

We do not have a specific view on whether the market settings benchmarked against OCGTs are sufficient to incentivise a new entrant 4-hour BESS.