Your Ref: REL0080

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Lisa Shrimpton
Australian Energy Market Commission
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Dear Ms Shrimpton

## Submission: Review of the Reliability Standard and Settings Guidelines

CS Energy welcomes the opportunity to provide a submission to the Australian Energy Market Commission's (**AEMC's**) *Consultation Paper – Review of the Reliability Standard and Settings Guidelines* (**Consultation Paper**). CS Energy is strongly supportive of ensuring that market settings facilitate the effective and efficient delivery of secure and reliable energy into the future.

### About CS Energy

CS Energy is a Queensland energy company that generates and sells electricity in the National Electricity Market (**NEM**). CS Energy owns and operates the Kogan Creek and Callide B coal-fired power stations and has a 50% share in the Callide C station (which it also operates). CS Energy sells electricity into the NEM from these power stations, as well as electricity generated by other power stations that CS Energy holds the trading rights to.

CS Energy also operates a retail business, offering retail contracts to large commercial and industrial users in Queensland, and is part of the South-East Queensland retail market through our joint venture with Alinta Energy.

CS Energy is 100 percent owned by the Queensland government.

### Key recommendations

A review of the reliability standard and settings guidelines is timely given the changing dynamics of the NEM as it transitions to a market with more variable renewable energy (**VRE**) and an overall lower carbon footprint, and the broader work underway to assess market and regulatory frameworks.

The Consultation Paper considers the market design initiatives being considered by the Energy Security Board (**ESB**) and the fundamental interdependencies between these initiatives and the reliability standard and settings guidelines. In its NEM Post 2025 Market Reform, the ESB focuses on resource adequacy mechanisms as one of four priority workstreams. To date, this workstream has not considered the role of the market settings

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as scoped in this Consultation Paper in delivering resource adequacy, nor has it explored how these settings may need to be more directly reflective of the system services that will be increasingly important in maintaining the stability of the NEM. As elucidated in the Consultation Paper, an assessment of what changes may be required against the landscape of the energy transformation is essential. It is thus incumbent on the AEMC and Reliability Panel to perform this work and realign the market settings to ensure the National Electricity Objective is met.

It is important to acknowledge the different roles of the market settings, with some required to incentivise sufficient *capacity* at times while others need to more align with system stability requirements. Specifically, in CS Energy's view, the Market Floor Price (**MFP**) needs reassessment to ensure it will efficiently and effectively incentivise the right *capability* to deliver system stability at times of lower operational demand. The Reliability Panel may need to explore new approaches to capture these system stability outcomes effectively.

**Reframing the approach**

While the Consultation Paper outlines the changes that the NEM has undergone since the last review, in CS Energy's view the materiality of these changes hasn't been sufficiently articulated nor have the outcomes of these changes in the context of the current reliability settings. CS Energy suggests that the AEMC reframe the approach of the review, shifting from providing the case for what is in scope, to considering all aspects open and demonstrating why any of these should not be within the scope of the review. This would allow:

- Understanding of the potentially changing role of the market settings during and after the transition of the NEM, and how these may be interlinked with changes implemented via the ESB's NEM 2025 program, particularly new markets for essential system services;

- Proper examination of the individual settings and whether their objectives and outcomes are still fit-for-purpose;

- Updating the criteria of any materiality assessments to better align with the intended objectives; and

- Consideration of whether the form of the settings adequately capture the system security requirements for reliable supply.

**Form of the standard**

CS Energy does not consider a need to review the form of the Reliability Standard itself, given it is a clear, outcomes-based metric. It would however, be beneficial for the AEMC to clarify the role of the Interim Reliability Mechanism in the review.

**Market settings**

CS Energy is concerned that the market settings, as currently defined in terms of bulk energy, will continue to depart from the dynamic needs of the power system, and therefore will not incentivise the required mix of capability at all times. Reliability outcomes driven by the market settings is no longer confined to periods of tight supply and higher spot market prices. The emerging threat to power system stability and reliability is during lower demand periods, with Distributed Energy Resources (**DER**) reducing operational demand accompanied with abundant VRE and the increase in negative market prices.

The MFP exemplifies the need for market settings to incorporate consideration of system security as well as bulk energy to deliver reliability outcomes both in the short-term as well as strengthening forward investment signals. CS Energy argues that the Reliability Panel's obligation to recommend a MFP that does "*not create substantial risks which threaten the overall stability and integrity of the market*"[1] is currently not met. In Queensland alone[2]:

- Instances of negative spot prices have increased from 61 in 2017 to 3,540 in 2020, the latter equivalent to 295 hours;

- Of these instances in 2020, 63% reflected a price lower than -$25/MWh despite only 1% of instances at the MFP; and

- Forward contract prices are impacted by the increased negative pricing and may fall below levels required to incentivise the right mix of generation capability, whether existing or new.

Negative pricing is not sustainable in the NEM as it fails to recognise:

- The market distortion created from side-markets such as renewable energy targets. Off-take agreements for some VRE make negative price periods financially viable for plant to generate and thus there is no incentive not to generate during these periods;

- The financial burden that is borne by less flexible units which have the additional onus of needing to stay online during these periods to provide essential security services that are not currently remunerated; and

- The need to incentivise capability beyond bulk energy.

Recurring negative prices will lead to increased risk of system instability and costly interventions as they fail to incentivise the required capability at times of system need. They also inevitably impose a cost impost on consumers who indirectly pay the difference between the negative prices and the strike price of offtake agreements from side markets. It also exacerbates the welfare transfer from consumers who do not have DER to those that do and are paid a fixed feed-in-tariff even when the market price is negative.

CS Energy notes that the previous review of the reliability standard and settings considered the "*viability of storage technologies*" in the materiality assessment of the MFP[3]. This consideration should be technology agnostic focusing instead on the viability of existing and new investment in delivering essential system services as well as energy.

The Consultation Paper suggests consideration of a minimum cumulative price threshold and associated minimum administered price period and administered price floor to manage the financial risk to participants. CS Energy suggests caution in this approach as the settings will be sensitive to many variables including system security requirements and the level of DER, and will unlikely address the challenges related to market distortions.

Furthermore, there is a risk in mimicking the settings applied to manage high prices as the market price cap and MFP serve different roles and so cannot necessarily be symmetric. The Reliability Panel needs to consider what the role of the MFP will be as the power system transitions, and how it needs to reflect system stability needs as well as energy. Given the

[1] National Electricity Rules 3.9.3A(h)(2)
[2] CS Energy analysis
[3] Reliability Panel, *Final Report - Reliability Standard and Settings Review*, 30 April 2018, p.36

implementation of five-minute settlement and potentially operating reserves, the role of the MFP to incentivise flexibility is less relevant than the need to incentivise system stability and this needs to be reflected in the settings. CS Energy suggests that the Reliability Panel:

- Reassess and clearly articulate the role of the MFP in terms of system stability;

- Assess the impact of market distortions such as feed-in-tariffs and the decoupling of the market price with incentives for VRE to generate. Note, in international jurisdictions this decoupling presents less of a risk as subsidies have been structured to either cap the level of payment during low price periods or to deem generation as ineligible for subsidies during negative prices[4]. Negative prices are also buffered by interconnection with neighbouring power systems; and

- Determine the structure of the MFP and potential new associated settings that will most efficiently and effectively incentivise the right capability to deliver system stability at times of lower operational demand. This will likely require a framework and approach that is different to that applied to manage high prices as the latter is set to incentivise sufficient *capacity* while the MFP needs to incentivise sufficient *capability*. CS Energy encourages the Reliability Panel to consider more creative options alongside the current approach. For example, Ontario applies different MFPs to different participants based on their capabilities to incentivise the right mix of technology online.[5]

If you would like to discuss this submission, please contact Alison Demaria (Market Regulatory Manager) on 0407 548 627 or ademaria@csenergy.com.au.

Yours sincerely

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[4] For example, under European Union Regulations, an exception can be triggered that means no subsidy can be paid for electricity generated during a period in which prices are negative for six hours or longer. This however, applies only to the day ahead price and has had mixed results. The UK has extended the six-hour negative pricing rule in future contracts for difference to ensure that difference payments are not made at all when prices are negative in order to provide the right incentives for system needs.
[5] Ontario Independent Electricity System Operator, www.ieso.ca/en