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NEM Reliability Forecasting Guidelines and Methodology Consultation

Pacific Energy Trading Pty Ltd (PET) appreciates the opportunity to provide comments on the Australian Energy Market Operator's (AEMO's) NEM Reliability Forecasting Guidelines and Methodology Consultation. The current methodology is inadequate and doesn't allow market participants and regulators to form an accurate view of the risks surrounding reliability. We are broadly supportive of AEMO's proposed improvements but believe that increased transparency can further aid planning and contracting in the NEM.

Energy Adequacy Assessment Methodology

Apart from periods of drought, the NEM has historically been a capacity-short, energy-rich market. As thermal generation retires and is replaced by variable renewable generation backed by storage-based firming generation, medium-to-long-term energy supply will increasingly become a source of reliability issues.

We have observed many instances where generators have reduced or neglected to secure fuel supplies, based on the belief that they would be able to purchase energy more cheaply from the broader market. While this can be a rational and acceptable strategy, it can threaten reliability when multiple portfolios attempt it at once, as appears to have been in the case in winter 2022.

In that instance, when generators with available fuel supplies went offline as a result of unplanned outages or found their supplies limited as a result of weather events, the remaining generators were unable to fill the supply gap for an extended period as they lacked the fuel supply required to support higher levels of generation. This exacerbated energy supply tightness and put further pressure on spot gas and coal markets. Over time, this energy supply shortage evolved into a reliability issue, as some generators found their fuel supplies so stretched that they were unable to generate at any price.

In contrast to many other power markets, generators in the NEM are not required to reveal their fuel supply arrangements. As demonstrated in winter 2022, this can produce an exaggerated or false sense of security, as generators unable to provide significant injections of energy to the system are included in forecasts of firm capacity. It is unlikely that so many generation portfolios would have reduced fuel supply contracting had they known that other generation portfolios would attempt to follow the same strategy.

In order to avoid this scenario in the future, we propose that generators should have to publicly disclose their forecast energy limits, much as they already disclose their forecast availability. These limits should take into account fuel supply contracting and availability, as well as any other energy constraints on the plant, including rail and pipeline access, water license requirements, stockpile and





storage levels. Submissions should indicate whether generators have contracted access to fuel or whether they intend to purchase supplies from spot markets on an ad hoc basis.

This will assist participants' and regulators' assessments of risks and contracting decisions and improve reliability in the NEM. Given the wide range of plant fuel costs and reliability, aggregated, anonymized data is insufficient for this purpose; only plant-specific information will permit the degree of accuracy required to ensure the NEM has adequate energy supplies moving forward.

MTPASA Generator Status and Recall Times

We are supportive of AEMO's proposal for implementing the updated MTPASA requirements. Following from our comments above, we suggest AEMO include an additional reason code for generators withdrawn at late notice as a result of fuel supply restrictions. These issues do not fit any of the current reason code categories, being partly physical and partly economic in nature, and have strongly impacted reliability in the recent past.

In addition, we propose AEMO take this opportunity to clarify the definitions of other terms used in the MTPASA process description. We have observed numerous instances of generators shifting their availability between unconstrained and constrained capacity. It is unclear what participants are meant to infer from these changes, as there is no agreed upon set of reasons for why they might occur. In addition to supplying reasons for changes in availability, generators should also provide reasons for switching availability between unconstrained and constrained capacity.

If you would like to discuss any aspect of this submission, please contact Tom Waye at tom.waye@pacificenergytrading.com.au.

Regards,

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