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Australian Energy Market Operator, Level 22, 530 Collins Street, Melbourne, VIC 3000.

Lodged electronically: mass.consultation@aemo.com.au

Dear MASS Team,

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FAST FREQUENCY RESPONSE MARKET ANCILLARY SERVICES SPECIFICATION ISSUES PAPER

EnergyAustralia (EA) welcomes the opportunity to comment on the Australian Energy Market Operator's (AEMO's) Fast Frequency Response (FFR) Market Ancillary Service Specification (MASS) Issues Paper. EA is one of Australia's largest energy companies with around 2.4 million electricity and gas accounts in NSW, Victoria, Queensland, South Australia, and the Australian Capital Territory. EA owns, contracts and operates a diversified energy generation portfolio that includes coal, gas, battery storage, demand response, solar and wind assets. Combined, these assets total 4,500MW of generation capacity.

EA is dedicated to building an energy system that lowers emissions and delivers secure, reliable and affordable energy to all households and businesses. This requires being a good neighbour in the communities we operate in. We, therefore, recognise the value in working with Aboriginal and Torres Strait Islander peoples as the traditional custodians of this land. We acknowledge and respect their continued connection to all aspects of Country.

EA appreciates AEMO's additional efforts to investigate whether MASS settings are appropriate in light of ongoing technological and operational change. Ensuring these settings are fit for purpose will be a vital enabler of a rapid and robust energy market transition.

Very Fast General Settings Are Supported

EA agrees that higher Rates of Change of Frequency (RoCoF) following contingency events will be seen as the NEM transitions. The technical settings of the new Very Fast raise and lower Frequency Control Ancillary Services (FCAS) will, therefore, be a key tool to manage this challenge. Based on the technical evidence presented, we agree with and support the general settings for Very Fast FCAS proposed in the issues paper. These include:

- a 1 second response time,
- a 6 second total timeframe,
- raise/lower reference frequency set in line with other Contingency FCAS,
- an assumed frequency ramp rate of 1 Hz/s, and

 procurement volumes to be adjusted for inertia levels and the size of the largest credible risk.

We also agree with and support the changes proposed to the Fast FCAS market, provided modelling shows it will not result in a significant reduction in system inertia. Combined with the above, we consider these settings will strike an appropriate balance between:

- secure system outcomes,
- adherence to the Frequency Operating Standards (FOS),
- minimising the risk of service over procurement, and
- the cannibalisation of revenues from other existing FCAS markets.

But Changes To Contingency Event Time Are Strongly Opposed

We strongly disagree with the proposal to move back to Frequency Disturbance Time (FDT) as the starting point for FCAS measurement from Contingency Event Time (CET). In the original Primary Frequency Control (PFR) rule change, AEMO committed to ensuring that PFR response counted toward a unit's contingency FCAS enablement during a frequency disturbance. Unfortunately, the proposed compensatory offset-band mechanism will effectively undermine this commitment. This is a result of the mechanism not factoring in the response provided between the PFR deadband and the edge of the Normal Operating Frequency Band (NOFB). For example, if the frequency during the initial MW measurement is 50Hz, there will be no offset band at all.

Such a change will have critical market ramifications. Beyond seeing a substantial quantity of FCAS response ignored in the response assessment, this will also inevitably result in a significant reduction in offered FCAS volumes. This is due to the effective loss of operational tolerances which would otherwise be used to meet FCAS enablement requirements.

Together, these factors raise the very real risk that inadequate FCAS resources will be available to ensure sufficient aggregate response to meet power system limits following contingency events. Thus, damaging both AEMO's ability and credibility as the system operator. Moreover, such scarcity of supply would inevitably see customers face markedly increased costs for the provision of system security services. EA considers these are highly undesirable outcomes when weighed against the benefits of a small number of generators being more easily able to determine CET. In particular, when there are several other simpler, less risky and economically benign solutions available. For example, simplifying the definition of CET or having AEMO publish the CET for each event. We, therefore, strongly urge reconsideration of any changes to CET.

Capping FCAS Registered Capacity Is Also Concerning

EA acknowledges the theoretical arguments underlying the proposal to cap the maximum registered ancillary service capacity. We also strongly agree that participants should not be paid for services not actually delivered to keep customer costs as low and as transparent as possible. However, we question the significance and frequency of this outcome in practice.

Under current arrangements, participants must deliver services in line with their offered FCAS volumes. To the extent any under-delivery occurs, there are mechanisms to

ensure payments are recouped and future performance is compliant with market obligations.

As an example, CS Energy was fined \$200k and had to repay \$1.13m to AEMO in February 2021 because it was not capable of complying with its FCAS offers due to temporary settings at its Gladstone and Callide B power stations¹. CS Energy has since changed its processes to ensure FCAS is not offered from these stations when the temporary settings are enabled. Such outcomes demonstrate the strong incentives to ensure delivered volumes match offered volumes, regardless of registration technicalities.

As outlined in the most recent Frequently Asked Questions (FAQ) document, the cap is intended to apply across all markets and to all FCAS providers. This makes sense for new FCAS participants, but we strongly question its application to existing FCAS providers. Forcing an existing plant to re-register when it has already demonstrated market compliance seems to be introducing additional regulatory burden and costs for no benefit. In particular, when any changes to the FCAS assessment methodology can be simply handled by adjusting bids in line with the incentives described above or via a Schedule 3.1 form if any unintended over-offering occurs. Further clarity on, and justification for, the proposed change as it relates to existing providers is, therefore, sought.

Other Aspects Are Supported

EA supports further investigation into overload capacity and the use of combination controllers. We also support the proposal that FCAS response is initiated no later than halfway through the relevant ramp-up period. All would seem to offer the potential for improved frequency outcomes, from both technical and economic perspectives.

We would very much appreciate the opportunity to hear more of AEMO's insights on this consultation and look forward to continuing collaboration to achieve effective, efficient and equitable MASS outcomes. To arrange a meeting, please contact me on 0435 435 533 or via email at bradley.woods@energyaustralia.com.au.

Regards, **Bradley Woods**Regulatory Affairs Lead