



11 March 2021

Mr Nino Ficca
Interim Chief Executive Officer
Australian Energy Market Operator

Lodged via email: mass.consultation@aemo.com.au

Dear Mr Ficca,

Market Ancillary Service Specification Consultation

The Clean Energy Council (CEC) is the peak body for the clean energy industry in Australia. We represent and work with hundreds of leading businesses operating in renewable energy and energy storage along with more than 7,000 solar and battery installers. We are committed to accelerating the transformation of Australia's energy system to one that is smarter and cleaner.

The CEC welcomes the opportunity to provide comment on the Australian Energy Market Operator's (AEMO's) consultation to amend the Market Ancillary Service Specification (MASS). The CEC broadly supports the proposed amendments and intent of the review of the MASS. Please find below high-level comments on elements of the consultation that we believe require further consideration.

Metering requirements for Virtual Power Plants (VPPs)

The CEC welcomes the proposal to relax metering requirements so that Virtual Power Plants (VPPs) can participate in Contingency Frequency Control Ancillary Service (FCAS) markets without the prohibitively expensive cost of metering. However, the proposed requirement for high-speed metering for every 5 MW per region is not supported. The rationale for the 5 MW per region threshold is unclear and the expense might not be justified. We understand that high speed meters cost between \$10,000 and \$15,000, comprising \$5,000 to \$10,000 per meter (depending on type), \$2,500 for the cost of installation, and \$2,500 for additional works such as provision of additional space in a new subboard and independent network connection and setup.

We suggest AEMO consider one high speed meter per technology type per region, rather than for every 5 MW per region.

Clarification of FOS references

The CEC supports the approach to clarify that all MASS references to the frequency range normal operating frequency band (NOFB) would refer to the band between 49.85 and 50.15 Hz

Frequency responsiveness of FCAS

We suggest that if AEMO has a strong understanding of the quantity of non-frequency responsive plant, and is able to model it, then AEMO should also be able to alter the amount of frequency responsive FCAS that is procured to balance this issue.

The paper also notes that the frequency operating standard (FOS) states that AEMO should restore frequency to be within the normal operating frequency band (NOFB), not its edge. The MASS indicates that frequency response should be maintained (or at least not withdrawn) until frequency recovers, defined as ± 0.1 Hz, inside the NOFB. We suggest that as the primary frequency response (PFR) settings established in 2020 indicate AEMO's willingness to use three decimal places, that ± 0.145 Hz may be suitable rather than ± 0.1 Hz.

Requirement of FCAS

The proposed telemetered data rate of eight seconds is inconsistent with other similar systems and appears unjustified. Transmission Network Service Provider (TNSP) and AEMO's systems such as Automatic Generation Control (AGC) do not always meet this requirement, so it appears inconsistent to require this for regulation FCAS.

The proposed minimum bid size of 2MW is not supported. It is possible for batteries to provide a clean output well below the 2MW threshold identified within the paper. We suggest AEMO consider the minimum bid size further and conduct deeper analysis as required.

Clarification of requirements for delayed FCAS

The CEC is comfortable with the proposed direction in the paper; however, we suggest that the noted potential to utilise AGC to trigger a specific shift in base power output should not be progressed. Instead, this should be implemented via logic based on local frequency measurement only.

Issues associated with pending rule changes and matters for separate consultation

The CEC strongly supports the implementation of fast frequency response (FFR) markets to encourage the speed and quality frequency response that new technologies, such as batteries, can provide to the power system. We support AEMO continuing to work with the Australian Energy Market Commission to provide the technical advice needed to appropriately design such markets. Where possible, any changes to the MASS that can be made through this review that will expedite the implementation process for FFR markets should be prioritised.

Mass readability and useability

The CEC supports the intent to improve the MASS function and readability.

Thank you for the opportunity to comment on this consultation. If you would like to discuss any of the issues raised in this submission, please contact Tom Parkinson, Policy Officer, on (03) 9929 4156 or tparkinson@cleanenergycouncil.org.au or myself, as outlined below.

Yours sincerely,



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