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18 November 2021

Amendment of the Market Ancillary Service Specification – DER and General Consultation, Second Draft Determination

AGL Energy (**AGL**) welcomes the opportunity to comment on the Australian Energy Market Operator's (**AEMO**) Amendment of the Market Ancillary Service (**MASS**) Specification – DER and General Consultation, Second Draft Determination, 28 October 2021 (**Second Draft Determination**).

AGL's view on the Second Draft Determination

AGL appreciates AEMO's further consideration and analysis (undertaken through the University of Melbourne) to establish a fit-for-purpose MASS Specification that supports the continued participation of DER assets in FCAS markets.

As we observed in our response to AEMO's First Draft Determination¹, to determine appropriate technical specifications for business-as-usual operations, AEMO needs to effectively balance the system security needs with the strategic intent to facilitate DER participation. We consider that AEMO's Second Draft Determination generally strikes the right balance.

AGL looks forward to continuing to engage with AEMO, through the provision of technical expertise to AEMO's Consultative Forum, to support DER participation in FCAS markets into the future.

1. Measurement time resolution for FCAS provided by DER

AGL supports AEMO's proposed variations to its First Draft Determination to:

- Lower the Fast FCAS measurement time resolution for aggregated ancillary service facilities (200 sites) with no inertial response to 200 ms (and require 50 ms for all other facilities);
- Apply a discount of 5% if the aggregated ancillary service facility comprises less than 200 sites
- Implement improvements to the FCAS Verification Tool before the updated MASS becomes effective to improve its accuracy.

We note the additional analysis undertaken by the University of Melbourne and consideration by AEMO that the 200ms measurement option is sufficient to verify the Fast FCAS delivery of aggregated facilities with no inertial response. As we observed in our response to the First Draft Determination, we understand that this option will be much more cost-effective for a broader cross-section of inverter manufacturers.

We also consider a range of alternative options may be more effective to address system security concerns whilst also proving more cost-efficient for market participants. In this regard, we support AEMO's intent to implement improvements to its FCAS Verification Tool and longer-term Consultative Forum to address broader system security concerns.

We recommend AEMO also prescribe the meaning of inertial response in the MASS, in order not to create any barriers to aggregated DER assets providing inertia market services into the future, should that be necessary as the NEM continues to evolve. While further technical work will be required to support the provision of inertia services from aggregated DER, the MASS should not inadvertently establish an additional barrier. We recommend AEMO incorporate the language used in the University of Melbourne's analysis, that describes inertial response by reference to the physical properties of "synchronous machines" rather than inertia as a market service.

¹ See AGL Submission to AEMO's Amendment of the Market Ancillary Service Specification (MASS) (6 August 2021), Available at <https://thehub.agl.com.au/articles/2021/08/agl-recommends-aemos-market-specifications-better-support-der-participation-in-fast-fcas-markets>.



2. Location of Measurement Point for FCAS provider by DER

AGL supports AEMO's position not to nominate a different metering point under clause 3.8.7A(c) of the NER, which means that FCAS bids will apply 'at or close' to the connection point to ensure the proper orchestration of DER and to verify the amount of FCAS delivered to the power system more accurately. As we observed in response to the Draft Determination, this approach is consistent with current market arrangements and mitigates the risk of inaccuracy and gaming between multiple parties that could otherwise impact overall system balancing.

We note that Clause 5.3.2 of the Draft MASS provides some flexibility for AEMO to determine the location of required FCAS metering during the FCAS assessment process on a case-by-case basis. While we support this flexibility to accommodate the potential for measurement at individual assets in certain circumstances (for example the commercial and industrial customer segment), we would encourage AEMO to develop consistent criteria to be applied in its FCAS assessment process to ensure consistent application. We would recommend these criteria be published as part of the final MASS to provide transparency to the market.

3. Trial Participant Transitional Issues

AGL notes that AEMO is not proposing any substantive changes to its determination of the transitional provisions in the MASS, other than the discount factor to be applied to those Trial Participants whose Ancillary Service Facilities continue to capture data with 1 s measurement time resolution.

We support AEMO's determination to amend the discount rates for VPP Demonstrations participants to 5% where measurement time resolution is lower than 200 ms but higher than or equal to 1s.

We also support the transitional period set out in the First Draft Determination until 30 June 2023 for participant in the Virtual Power Plant (VPP) Demonstrations to either comply with the measurement arrangements in the MASS for trial facilities or exit the FCAS markets.

4. Consultative Forum on the provision of FCAS by DER

AGL supports AEMO's intent to utilise its Consultative Forum as a vehicle for collaboration between AEMO and interested stakeholders to raise, prioritise, and progress issues relating to the development of market ancillary services in the NEM and address the concerns with DER inverter behaviour. We agree with AEMO's view that the Consultative Forum should primarily address technical issues (including power system security concerns, inverter behaviour, the impact on distribution network limits, the application of AS/NZS4777 2:2020) and be attended by technical experts.

AGL also welcomes AEMO's publication of a roadmap alongside its Second Draft Determination to indicate proposed work to be carried out in considering the provision of more FCAS by DER into the future. The roadmap will provide a useful starting point for AEMO to develop solutions to a range of complex challenges associated with DER participation in FCAS provision in collaboration with technical industry experts.

Should you have any questions in relation to this submission, please contact Kurt Winter, Regulatory Strategy Manager, on 03 8633 7204 or KWinter@agl.com.au.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'C. Hristodoulidis'.

Con Hristodoulidis

Senior Regulatory Strategy Manager