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Ms Audrey Zibelman
Chief Executive Officer
Australian Energy Market Operator
Level 22, 530 Collins Street
Melbourne VIC 3000

CC: DERProgram@aemo.com.au

Dear Ms Zibelman

Re: Consultation on initial distributed energy resource minimum technical standards

Thank you for the opportunity to comment on the Australian Energy Market Operator's (AEMO's) issues paper on initial distributed energy resources (DER) minimum technical standards.

The work program across the market bodies on ensuring that DER minimum technical standards are fit-for-purpose is important for integrating DER into the system. This work is becoming increasingly important as rising levels of DER are starting to create challenges associated with falling minimum demand levels and voltage management in some locations. Addressing these challenges is important for maintaining system security and avoiding inefficient disconnection of DER.

Voltage disturbance ride-through standard

This consultation aims to bring a standard for smart inverters' voltage disturbance ride-through capabilities (including testing procedures around this standard) into effect faster. It aims to do this by incorporating the test procedure into the initial DER standards, and by including an obligation on distribution network service providers (DNSPs) to incorporate the updated standard (AS/NZS 4777.2) into their Model Standing Offer (MSO).

We consider the updated standard to be a positive development and reflects the work of Standards Australia in revising standard AS/NZS 4777.2. We also understand that the additional cost to consumers from introducing the updated standard is small. We note that a significant proportion of inverters already have voltage disturbance ride-through capability, and that it is important to create a testing regime that delivers consistent outcomes in inverter compliance. Given this, we support AEMO's initiative in developing a test procedure to ascertain compliance with standard AS/NZS 4777.2.

DER data, communications and interoperability requirements

In the issues paper, AEMO recommends to 'not incorporate DER data, communications and interoperability provisions into the initial DER standard at this point in time as they are not sufficiently well prepared'. We understand that AEMO formed this view in close consultation with stakeholders, and we commend AEMO for considering stakeholder views. We support

AEMO's proposed approach to have coordinated industry consultation and to develop an implementation plan regarding DER data, communications and interoperability requirements and standards as soon as practicable.

As this work is undertaken, it will be valuable to demonstrate how standards relating to DER data, communications and interoperability will interact with other DER integration work to deliver the greatest benefits to electricity consumers. Given the breadth and complexity of this task, analysing the costs and benefits of proposed standards will require unpacking where policies complement each other or risk creating unnecessary costs due to duplication. In particular, it will be valuable to consider how this work will interact with:

- Dynamic export limits for distributed solar generation, which the AER has previously supported and approved as part of its regulatory determination for SA Power Networks. It would also be valuable to consider how this work will interact with related trials for dynamic operating envelopes that are underway in many states.
- Moves towards more cost reflective pricing that should help to mitigate the impacts of minimum demand events by providing DER owners with incentives that drive efficient deployment of DER, for example, for storing energy during the day rather than exporting to the grid during low demand periods. It will be important to consider these impacts as part of work undertaken on interoperability.
- Relevant rule change processes stemming from the Australian Renewable Energy Agency's (**ARENA's**) distributed energy integration program, and on integrating energy storage systems into the National Electricity Market.
- Other relevant areas of investigation, including the Energy Security Board's work on DER integration, and trials run by ARENA and various DNSPs.

It will be necessary to identify the key areas of interoperability where the development of standards is necessary to avoid the complexity and costs that occur from multiple different approaches. We agree that data and communications are key areas for standardisation as this will streamline systems and processes, thereby simplifying technological integration and minimising costs to DER owners and other customers. Standardised data and communications systems should also reduce barriers to competition by allowing software and devices owned by different parties to communicate and inter-face with each other.

We note that the interoperability of DER is key to enabling access to existing and new energy markets, as well as supporting the safe, secure and reliable operations of distribution networks and the overall energy system. From this perspective, it is important that any review of standards analyses the costs and benefits that different interoperability standards will have across the whole energy system.

Thank you again for the opportunity to comment on this important work. If you have any questions or wish to discuss any matters raised in this submission, please contact Lisa Beckmann on (02) 6243 1379.

Yours sincerely



Jim Cox
Deputy Chair
Australian Energy Regulator

Sent by email on: 29.09.2020