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Australian Energy Market Operator (AEMO)

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Ausgrid response re Technical Requirements for 200 kW to 5 MW DER connections

Thank you for the opportunity to provide feedback on the *Technical Requirements for 200 kW to 5 MW DER connections - September 2024* Consultation Paper.

Ausgrid operates the electricity network that powers the homes and businesses of more than 4 million Australians living and working in an area that covers over 22,000 square kilometres from the Sydney CBD to the Upper Hunter.

Ausgrid's objective is to facilitate a timely, efficient and accessible energy transition at the grid scale and household level that meets the needs of all NSW customers. As distributed energy resources (**DER**) continue to grow, Ausgrid recognises the need to develop clear and consistent requirements for their connection to manage the security and stability of the National Electricity Market (**NEM**). We note the need to manage security risks also needs to be balanced against the impacts on customers, as overly onerous connection requirements could delay and increase the costs of connection for new renewable and storage projects.

Ausgrid generally supports the direction of the Consultation Paper and its recommendations. However, we have identified some gaps and the need for further detail on some key elements, which could impact Ausgrid's implementation of the proposed technical requirements. The clarifications we are seeking include:

- 1) **Non-independent (aggregated) systems:** While section 4.5.2 of the Consultation Paper provides direction on independent systems (non-aggregated), the proposed changes require clarity on the definition of a non-independent (aggregated) system and how these are intended to be treated. Further clarity is also sought on the terms used in this context such as "coordinated" and "common connection point".
- 2) **Registration of sub-5MW generator connections:** Section 4.5.2 suggests some sub-5MW generator connections 'may' be required to register as a Generator or Integrated Resource Provider. Ausgrid seeks clarity on the criteria AEMO would apply to determine that a sub-5MW connection is required to register as a Generator or Integrated Resource Provider.

For instance, does AEMO consider connection configuration only or are the services intended to be provided to AEMO also relevant? Can AEMO help to clarify this by providing some boundary case examples?

- 3) **Registration of aggregate connections:** Where aggregate connections “may” be required to register as a Generator or Integrated Resource Provider subject to the technical requirements of National Energy Rules (NER) schedule 5.2.5:
- a) will AEMO maintain their advisory capacity for these connections?
 - b) will other Chapter 5 requirements be adopted as though the aggregation is a single generator?
- 4) **Registration exemption criteria:** Can the registration exemption criteria for sub 5MW aggregate generators be detailed in AEMO’s guide to registration exemptions?

In addition to these clarifications, we also provide responses to AEMO’s specific consultation questions in more detail below.

Ausgrid response to AEMO consultation questions

Scope of technical requirements

Should AEMO also consider any or all of the requirements outlined in Section 2.5 (identified of interest to DNSPs only)?

Ausgrid supports AEMO’s position that these items will not have sufficient impact on the bulk power system and therefore do not need to be included in the guideline.

Options for implementation

Is initially introducing the proposed recommended settings via a guideline with DNSPs the most effective approach? Should the recommended settings be established as an Australian Standard?

Ausgrid supports the introduction of a guideline, as a reference that provides certainty and consistency for DNSPs and connecting generators. Ausgrid expects AEMO would develop this guideline through a public consultation process.

Ausgrid is open to the development of an Australian Standard via the Standards Australia process. However, noting the likely duration of the Standards Australia process and consequential need for a rule change proposal to amend Chapter 5A of the NER, we support the prompt development of an AEMO guideline as a nearer-term priority.

Appendix A1 – Proposed Settings

Ausgrid requests further clarity on the A1 statement on where AS4777.2 requirements are recommended to apply and where the A1 technical requirements are intended to apply.

The guidance provided in Appendix A1 (p. 59 onwards) is ambiguous about these boundaries. In developing a guideline, Ausgrid recommends AEMO demarcate the relevant parameters more clearly and welcomes a discussion with AEMO on how best to interpret and clarify these boundaries.

Regarding ‘Active power curtailment by remote signal’ and ‘Remote monitoring’, Ausgrid recommends that AEMO consider whether the Common Smart Inverter Profile for Australia (**CSIP-AUS**) can meet requirements for remote signal/remote monitoring, in preference to limiting these communications pathways to ‘traditional’ SCADA such as DNP3.

If you would like to discuss this submission further, please contact Andrew Tiddy at atiddy@ausgrid.com.au.

Yours sincerely



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