



26 May 2023

Ms Merryn York
Executive General Manager System Design
Australian Energy Market Operator
GPO Box 2008
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Via email: contact.connections@aemo.com.au

Dear Merryn

SUBMISSION ON REVIEW OF TECHNICAL REQUIREMENTS FOR CONNECTION

Powerlink Queensland welcomes the opportunity to provide input on the Australian Energy Market Operator's (AEMO's) Review of Technical Requirements for Connection (addendum to draft report). We support AEMO's view on the need to revise Schedule 5.3 (conditions for connection of customers) of the National Electricity Rules (NER) to accommodate connections of large loads. Our submission on the addendum to draft report reflects our commitment to continue to provide safe, secure, reliable and cost-effective transmission services to our five million Queensland customers.

Powerlink is aware of proposals for some very large load connections in Queensland. These new large loads could have a significant impact on power system dynamics and could impact security and reliability of the network if appropriate control measures are not put in place as part of the connection.

Powerlink would like to highlight the following comments in relation to additional requirements for load connection:

- Large loads, irrespective of their type (inverter based or non-inverter based), have the potential to impact inter and intra area transfer limits and power system security in the absence of appropriate Fault Ride Through (FRT) capability. Depending on the technology used, some loads may be able to offer ride through functionality but others may not. We suggest that Schedule 5.3 should allow Network Service Providers (NSP) to negotiate the details of dynamic performance (e.g. FRT, response to voltage and frequency disturbance) with the load prior to making an offer to connect. As the required performance is subject to the location and size of the load, the NSP is in the best position to negotiate the required performance so that a new load connection does not prevent the NSP meeting the required system standards.
- If required by the connecting NSP, loads should have flexibility to procure a service to remediate any material adverse impact on the network performance caused by the new load connection (e.g. trip of the load under disturbance) if the required dynamic performance cannot be achieved by the technology type chosen for the load.

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- We support defining a minimum access standards for operation of large loads during frequency and voltage disturbance. Care should be exercised while defining minimum access standards so that the NSP can offer flexibility to load connections if the new load connection does not prevent the NSP meeting the required system standards.
- Distribution and Transmission NSPs should agree on the required performance of a new load via joint planning if connection of a new load has potential to impact the Distribution or Transmission NSP meeting the system standards.

Powerlink is willing to further discuss these matters with AEMO in one on one meetings. If you have any questions in relation to this submission or require further clarification, please contact Sachin Goyal.

Yours sincerely,



Stewart Bell

EXECUTIVE GENERAL MANAGER NETWORK & BUSINESS DEVELOPMENT

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