

23 May 2023

Mr Daniel Westerman
Chief Executive Officer
Australian Energy Market Operator
GPO Box 2008
Melbourne VIC 3001

Submitted via email to contact.connections@aemo.com.au

Dear Mr Westerman

Review of technical requirements for connection (Schedule 5.3) – Addendum to Draft Report

Ergon Energy Corporation Limited (Ergon Energy) and Energex Limited (Energex), both distribution network service providers (DNSPs) operating in Queensland, welcome the opportunity to provide comment to the Australian Energy Market Operator (AEMO) on its *Review of technical requirements for connection – Addendum to Draft Report* (the Addendum).

Feedback and comments on the Addendum questions are included in the attached response template.

Should AEMO require additional information or wish to discuss any aspect of this response, please contact me on 0429 394 855 or Laura Males on 0429 954 346.

Yours sincerely,



Alena Christmas
Acting Manager Regulation

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Encl: *Ergon Energy and Energex's comments on the Addendum questions*

Addendum to draft report Stakeholder feedback template:

AEMO Review of technical requirements for connection (NER 5.2.6A)

Stakeholders making a submission on the recommendations set out in the addendum to the draft report may use the below template to provide feedback. Feedback on the **addendum** is due to AEMO by **5:00 pm, 23 May 2023** (please note the earlier submission date for feedback on the primary draft report).

Please consider the confidentiality disclaimer at the end of this document.

Stakeholder: Organisation name

Ergon Energy and Energex

Schedule 5.3 Conditions for Connection of Customers

Issue	Schedule 5.3 Recommendations
Policy positions	
Recognition of different load technologies	Ergon Energy and Energex agree that there are differences in load types, and consequently, their capabilities and thus performance obligations. As such, we support Option 2.
Size and technology-based thresholds for ride through capability requirements	In our view, the proposed approach is reasonable. However, Ergon Energy and Energex is interested in how the technical capability of the plant will be determined in order to inform whether the proposed protection sections are reasonable.
Treatment of different load technologies within a load facility	While Ergon Energy and Energex do not disagree that the IBL component is the appropriate threshold, it is not clear how the ride-through performance for a facility with a combination of technologies will be assessed. We seek clarity if this will be conducted through modelling.
Continuous uninterrupted operation (CUO) requirements	Ergon Energy and Energex agree that part (d) is a key consideration for any continuous uninterrupted operation (CUO).
Treatment of loads with uninterruptible power supplies	Ergon Energy and Energex provide no comment.
AEMO advisory matters	Ergon Energy and Energex are supportive of Option 2 and reiterates our response to the S5.2 consultation in terms of retaining existing AEMO advisory thresholds for generating systems. We suggest that the thresholds for loads and generation should be consistent.
New definitions – for use with ride-through requirements	
Single facility load	Ergon Energy and Energex provide no comment.
Large single facility load	Ergon Energy and Energex provide no comment.
Large single facility inverter-based load	Ergon Energy and Energex provide no comment.
New/amended clauses for ride-through requirements	

Issue	Schedule 5.3 Recommendations
Operation of large loads during frequency disturbances	Ergon Energy and Energex consider that a clear definition for the required CUO performance for inverter-based loads forms an essential part of the new performance standards and agree that requirements similar to generators is appropriate.
Operation of large loads during contingency events	Ergon Energy and Energex provide no comment.
Operation of large loads during voltage disturbances	Ergon Energy and Energex provide no comment.
NER S5.3.3 – protection systems and settings	
Link to ‘ride through’ requirements and maximising protection	Ergon Energy and Energex provide no comment.
NER S5.3.10 – Load shedding facilities	
Emergency Under-frequency ramp down of large loads	While the ramping option introduces options in design of under-frequency load shedding schemes, it also introduces additional complexity in the design of such schemes, which for DNSPs, are already complex. For example, DNSPs must consider distribution feeders that may be net generators during certain periods. Therefore, we suggest consideration should be given on a case-by-case basis as to whether this approach is practical for the load and the affected network.
New clause for instability monitoring and prevention	
Stability of IBL – monitoring, protection and performance	Ergon Energy and Energex provide no comment.