

21 November 2024

Sheila Matthews
Manager – Future Security & Resilience
Electricity Authority
PO Box 10041
WELLINGTON 6143

Sent via email: fsr@ea.govt.nz

Dear Sheila

Part 8 Code amendment proposal

1. This is a brief submission from the Major Electricity Users' Group (MEUG) on the Electricity Authority's (Authority) consultation paper *Part 8 Code amendment proposal – Part 1*¹ published on 1 October 2024.
2. MEUG members have been consulted on the approach to this submission. This submission does not contain any confidential information and can be published on the Authority's website unaltered. Members may lodge separate submissions.

Potential causers of under-frequency events

3. MEUG welcomed the opportunity to discuss the technical aspects of this paper directly with Authority staff and we appreciate the opportunity to provide a late submission into the process to document those discussions. Our comments focus primarily on proposal FSR-003 which looks to include distributors and energy storage systems as potential causers of under frequency events (UFE).
4. MEUG questions the need to broaden out the definition of a "causer of an UFE" to include all potential causers of a UFE, including an increase in electricity demand (load). We appreciate that this approach future-proofs the Code to changes in market participants and any future arrangements or events that could impact the frequency of the network.
5. However, we are unaware of whether a load customer has ever caused a UFE or could cause a UFE on the system. Discussions with the Authority and the System Operator have found that *"a net importer of electricity is unlikely to cause a UFE, especially as it would require a huge increase in load (typically 120-160MW in the North Island) probably resulting from an onsite generating unit of that size tripping."*² Discussions with a number of MEUG members directly connected to the transmission grid echo this point, with it unclear how a UFE could be driven by a customer. Without clear evidence, it is unclear what the benefits are from making this change.

¹ [https://www.ea.govt.nz/documents/5740/Part_8_Code_amendment_proposal - Part 1.pdf](https://www.ea.govt.nz/documents/5740/Part_8_Code_amendment_proposal_-_Part_1.pdf)

² Email from the Authority to MEUG on 15 November 2024.

Dynamic reactive power compensation devices

6. During our discussions, one of our members has raised concerns with FSR-006 which proposes to amend the Code to apply to all dynamic reactive power compensation devices. We agree with their points – it is not clear what exact devices may be captured by this amendment, due to the ambiguity of the drafting, particularly the phrase “connected to the grid”. There are many ways of interpreting this phrase. We recommend that the Authority clarify the exact devices that are intended to be captured by this rule at what level of the grid, so the rule can be understood and applied without ambiguity.

Next steps

7. If you have any questions regarding our submission, please contact MEUG on 027 472 7798 or via email at karen@meug.co.nz.

Yours sincerely

A handwritten signature in black ink, appearing to read "K Boyes", with a long horizontal flourish extending to the right.

Karen Boyes
Major Electricity Users' Group