



To the

Electricity Authority – Te Mana Hiko
Attention: Distribution Team
PO Box 10041
Wellington 6143
New Zealand

By email: distribution.feedback@ea.govt.nz

Subject: Cross-submission – Improving information on high-voltage network capacity

Dear Electricity Authority team,

Thank you for publishing the submissions. GridQube appreciates the opportunity to provide this cross-submission.

We have reviewed the full set of responses and offer the following observations:

1. Broad support for HV-first visibility
We support the broad consensus for starting with high-voltage (MV in Australian terms) networks. This is a pragmatic and achievable first step. However, we encourage the Authority and industry to select technology solutions with the end state clearly in view — one that will almost certainly require seamless extension to LV networks in the medium term and the continued increase in cadence, including near real-time.
2. The importance of advanced, proven tools
Several parties emphasised the need for practical, accurate, and scalable solutions. GridQube strongly supports the inclusion of Distribution System State Estimation (DSSE) and related capabilities in the technical specifications. Our deployments demonstrate that DSSE delivers dynamic hosting capacity estimates and uncertainty quantification without requiring full sensor coverage.
3. Addressing achievability across different EDB scales
We note the range of views — from larger distributors indicating they are already progressing internal work, to smaller/regional distributors highlighting resource and cost constraints. Our experience in Australia shows this is achievable with focused effort and collaboration. We have successfully implemented DSSE-based network visibility and modelling solutions for both a very large DNSP and a smaller regional utility. In both cases, building accurate network models directly from GIS and asset data provided a strong and realistic

foundation. We believe similar outcomes are well within reach for New Zealand distributors and would welcome the opportunity to share relevant case studies.

4. Technical specifications and next steps

We support the collaborative development of detailed specifications. Priorities should include machine-readable outputs, clear accuracy/uncertainty standards, and pathways for evolving toward near-real-time data. GridQube is available to contribute to workshops or working groups during this phase.

We look forward to continuing to support the Authority and the sector as New Zealand advances its network visibility objectives.

Kind regards,

A handwritten signature in black ink, appearing to read 'Olav Krause', with a stylized flourish at the end.

Olav Krause

CEO