Electricity Engineers' Association

ASSET MANAGEMENT

Asset Management Forum 2023

Common Connection Guideline

Dr Stuart Johnston – Lead Advisor, Engineering & Technical, EEA

EEA.CO.NZ

What is the issue

Perception that the current process is costly and time consuming for DER proponents due to a combination of :

- Requirements being too onerous/complicated and not achieving the right balance between:
  - Mitigation of network risks / network costs
  - Efficiency in the connection process
- Inconsistency across networks in terms of level of technical requirements, documentation requirements and structure of documents
- Lack of clarity with respect to technical and documentation requirements.

Electricity Engineers' Association

Who would these guidelines apply to?

Stakeholder Type	Directly applies?	Indirectly applies	How the Guidelines should be used.
Electricity Distribution Businesses (EDBs)	✓	✗	To directly adopt in the development and application of their technical requirements for grid connection of DER
Transpower	✗	✓	For awareness as the system operator & to ensure consistency
Proponents	✗	✓	To navigate and understand the technical requirements for connection to EDB networks
Installers	✗	✓	To navigate and understand the technical requirements for connection to EDB networks
Electricity Authority	✗	✓	Align the technical requirements of the code with the connection process
Commerce Commission	✗	✓	To assist in determining whether the technical requirements as proposed by EDBs are fair and reasonable
Other Stakeholders	✗	✓	To navigate and understand the technical requirements for connection to EDB networks

eea Electricity Engineers' Association

Significant new operational capabilities required

- Grid design and operation
- Distribution Interface with System Operator
  - Visibility of DER
  - DER ancillary services
- Forecasting energy and demand
- Increased data transparency to animate markets
- Cyber Security
- Consistent Connection requirements

eea Electricity Engineers' Association

Why Are they needed

1. Common DER Network Connection Guideline/s
   - A guide, or series of guidelines which set out the structure, definitions and technical settings New Zealand EDBs should adopt in the development and application of their technical requirements for grid connection of distributed energy resources (DER).
   - The guidelines use instructional language directed towards network service providers (NSPs) in developing and applying their technical requirements
2. Increase consistency between EDBs in terms of technical requirements, documentation requirements and structure of technical requirements documentation
3. Improve clarity with respect to technical requirements

eea Electricity Engineers' Association

Desired outcomes

1. Increase consistency between EDBs in terms of technical requirements, documentation requirements and structure of technical requirements documentation
2. Improve clarity with respect to technical requirements as outlined in the Code.
3. Strike the right balance between:
   a) Mitigation of network risks / network costs
   b) Efficiency in the connection process

   In terms of the level of **onerousness** of technical requirements
4. Establish a platform for EDBs to develop common standards and protocols for future management of active DER

eea Electricity Engineers' Association

How will we establish the correct technical settings?

1. Partner with ENA
2. Direct engagement with primary stakeholders through meetings and workshops with a cross section of the industry, including (but not limited to):
   - EDBs
   - SEANZ
   - The Electricity Authority – i.e. CQTG
   - The Commerce Commission
3. Quarterly briefings to the EEA AMG, EEA Board, Energy Networks Aotearoa members (representing all EDBs) and the Authority
4. Public webinars
5. Draft revision process via email submission from EDBs and stakeholders such as Flexforum, SEANZ and the Authority

eea Electricity Engineers' Association

Contact

If you would like more information or would like to engage with the team, please contact:

- Stuart Johnston at stuart@eea.co.nz or 021 198 6535

eea Electricity Engineers' Association