



EEA Guide for the connection of PV to distribution networks

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EEA – Asset Management Group (AMG)

Objective: To provide leadership and guidance for effective asset management for the electricity supply industry.

We will achieve this through working with the electricity supply industry to facilitate, coordinate and lead the enhancement of asset management planning, practices, knowledge and performance through self-regulation, recognised systems and sound engineering practice principles:

- **Lead and promote knowledge and good practices** in asset management in the NZ electricity industry.
- **Provide working level practical advice and guidance** to improve industry understanding, support decision making, planning and the management of issues around asset management.
- **Enable the reporting and sharing of information** relating to asset performance, reliability and equipment failure trends (similar to industry sharing H&S incident information)

Distributed Generation – New challenges

- Impact on LV and MV networks (power quality)
- Uncertainty in PV uptake and understanding the NZ context
- New participants and multiple interests
- Safety concerns
- How to manage the connection process
- Proactive rather than reactive
- Decision making based on sound engineering and economic principals to ensure a better overall long term outcome

Guide Purpose

- Reduce PV application processing time and cost for EDBs
 - National guidelines, developed across EDBs
 - Models to support decision making when assessing applications
- Make PV application easier for the customer
 - Provide an application pathway that allows applicants to take advantage of fast track options
 - National guidelines that all EDBs could adopt, thereby providing uniform methods to all installers
- Avoid additional network costs in the future
 - Orderly allocation of network capacity for PV installations
 - Ensure compliance with technical and safety standards
 - Make use of in-built inverter voltage control – smart grid

Collaborative Solution

Academia

- Green Grid research and guide development

Industry

- Network Analysis Group (NAG) input
- Industry consultation

Government

- Electricity Industry Participation Code (EIPC)
- Electricity Safety Regulations (ESRs)