

Policy Brief – November 2011

Distributed Energy Connection Issues

Summary

Reforms are required to remove regulatory obstacles to connection of distributed generators to the electricity network and facilitate greater uptake of distributed energy.

This policy briefing:

- Discusses the obstacles relating to network connection for distributed energy
- Proposes policy solutions to overcome connection issues for distributed generators
- Outlines the benefits of removing obstacles to distributed generation.

The Problem

Greater uptake of distributed generation is currently being hampered by issues relating to the connection to the distribution network, including:

- **Procedural obstacles**, namely a lack of clarity and transparency on procedural aspects of connection, including a lack of connection standards and lack of consistency of standards across different distribution network areas.
- **Technical obstacles**, combined with strict DNSP approaches to technical standards requirements (eg fault levels) for distributed generators.
- **Connection fees**, including the lack of transparency in connection fees, and lack of an approved process for calculating fees, particularly in relation to required network upgrades and augmentation.
- **Network value of distributed generation**, namely a practical inability of distributed generators to be compensated for the network value (through reduction in demand on the distribution and transmission network) of their facilities.

The obstacles to the integration of more distributed generation in the electricity network need to be removed in order to facilitate the uptake of distributed generation and the numerous benefits this will deliver.

Policy solutions

There are numerous policies, regulations and guidelines which can be amended to address the issues confronting distributed energy project proponents.

The draft *National Code of Practice for Embedded Generation* establishes a clear framework for distributed generators to connect to the distribution network.

Building on this Code, MEFL recommends that reforms be made to the National Electricity Rules (NER) and relevant connection processes to achieve the following:

1. **Connection processes:** Standardise and clarify connection processes for new distributed generators – including renewable energy generators – up to 5MW.
2. **Costs:** Establish clear and detailed guidelines for costs related to connection processes.

3. **Information:** Require the publication of better information about network constraints and other issues that may render certain locations unsuitable for new connections.
4. **Dispute resolution:** Establish a connection ombudsman or other dispute resolution process to resolve disputes arising out of connection processes.

These regulatory changes are needed to facilitate distributed generation projects.

Rationale for change

Greater uptake of distributed generation in the electricity network is desirable because it can produce:

- **Reduced network demand**, leading to lower line losses and reduced energy cost for all consumers
- **Reduced peak demand**, leading to reduced peak pool prices for electricity and thus lower costs for consumers, as well as reduced need for expensive infrastructure investment
- **Increased reliability of supply** through diversification of supply sources and reduction in peak demand
- **Cost savings for project proponents**, including through potentially lower electricity, heating and cooling costs, and protection against future energy price rises
- **Reduction in greenhouse gas emissions**, through lower carbon generation, utilisation of waste heat (in the case of co-generation and tri-generation) and reduced line losses.

About the Moreland Energy Foundation

MEFL is a not-for-profit organisation delivering sustainable energy solutions to the community. It was established by the City of Moreland in 2000 and has more than ten years experience in delivering energy saving programs through advice and information, home retrofitting and community bulk purchases, business efficiency and skills training activities and large urban development partnerships.

MEFL has established a joint venture with the Moreland City Council to develop a co-generation facility servicing the Fawkner Leisure Centre. The project has been established under an energy services company (ESCO) model.

MEFL recently participated in the Unlocking Barriers to Cogeneration (UBC) project, a multi-stakeholder process to develop near-term solutions to connection issues experienced by co- and tri-generation project proponents. The above policy solutions are largely drawn from that process. Participants included energy retailers, distribution businesses, property developers and managers, regulators and relevant government departments and agencies.

Further Information

Please contact Eli Court, Energy Policy Advocate on 9385 8529 or via eli@mefl.com.au