



8 November 2011

Ms Jillian Broadbent AO
Chair
Clean Energy Finance Corporation

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Dear Ms Broadbent

Submissions Expert Review Panel – Clean Energy Finance Corporation

Ergon Energy welcomes the opportunity to provide input to the review of the scope and mandate for the Clean Energy Finance Corporation (CEFC).

Ergon Energy, as a Queensland Government Owned Corporation, operates as an electricity distributor, retailer and generator and services around 680,000 customers across its vast operating area of over one million square kilometres – 97% of the state of Queensland – from the expanding coastal and rural population centres to the remote communities of outback Queensland and the Torres Strait. Ergon Energy has around 4,600 employees and a total asset base of \$8.7 billion

Ergon Energy's electricity network consists of approximately 150,000 kilometres of powerlines and one million power poles, along with associated infrastructure such as major substations and power transformers. We also own and operate 33 stand-alone power stations that provide supply to isolated communities across Queensland which are not connected to the main electricity grid. Ergon Energy's network represents one of the largest and most diverse infrastructure networks in the world and provides unique challenges in delivering affordable, high quality and high reliability electricity to regional Queensland.

Ergon Energy is a major contributor to the development of skills across regional Queensland. We also take our social responsibility seriously by partnering with the communities we serve. We are one of Australia's largest purchasers of renewable energy and are actively involved in alternative energy generation solutions.

Challenges facing Queensland

The disaggregated structure of the electricity industry does not readily lend itself to solutions which address equitable sharing across the various stakeholders in the value chain. In this structure new innovative models based on holistic systems thinking must be created to transition us to a sustainable energy future. These new business models and alignment of interests of the key stakeholders are what we should be focussed on.

Ergon Energy is looking for solutions to key challenges on a highly radial and very sparse network including:

- Increasing customer expectations for affordability, service and choice
- Mitigate peakier loads to improve supply costs capital spend and asset capital efficiency
- Life extension and performance improvement of aging and stressed networks
- Reduced environmental impacts including increased renewable energy contribution

Partnering with CEFC

Ergon Energy is faced with challenges in integrating large scale renewable energy generation into its network because of the greater availability of both the land and the renewable energy resource in its footprint. The challenges will be greatest where intermittent renewable energy generation is developed in locations where such investment does not support the network. Ergon Energy sees a close working relationship with CEFC through industry collaboration as a potential mechanism to influence how, where and when renewable energy generation is connected.

Ergon Energy also has as desire to develop integrated Energy Conservation and Demand Management (ECDM) activities that seek to optimise the use of the network and provide customers with ways in which to manage electricity affordability challenges. ECDM activities may also benefit from an established low cost financing option to overcome some of the existing barriers to uptake of these programs.

Ergon Energy would welcome the opportunity to work with CEFC as it develops its investing mandate and provides a more detailed response in the attached **Response to Submission – CEFC**. We would welcome the opportunity to expand on these ideas at a mutually convenient time.

Kind regards



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Glenn Walden
Group Manager
Emerging Opportunities and Technology Development

Response to Submission – CEFC

Question 1:

How do you expect the CEFC to facilitate investment?

Ergon Energy anticipates CEFC will identify current barriers to investment and provide financing mechanisms to overcome these barriers. This may include taking investment positions in projects structured to improve their risk profile to enable private sector funding to be accessed. It may also include the CEFC providing a facilitating role through industry collaborations. Since many of these proposals will likely be located in our network, Ergon Energy would welcome the opportunity to participate in such collaborations.

Question 2.

Are there principles beyond financial viability that could be used to prioritise investments, such as emissions impact or demonstration affect?

Yes. Ergon Energy believes that by working with CEFC renewable energy projects can be better located to support the operation of the network, rather than create additional network investment which adds to the capital cost of the project. A prime example may be to locate solar energy projects adjacent to commercial and industrial loads (which are often day time peaks) to reduce peak demand and unnecessary network augmentation. Alternatively renewable energy projects could be co-located with large scale thermal energy storage which can be used for supplementing air conditioning loads. Ergon Energy has experience with and provided cofunding for a large district cooling concept at James Cook University in Townsville which substantially reduced the peak demand on the network. Consideration should also be given to programs which integrate renewable energy with energy efficiency and demand management such as the Townsville: Queensland Solar City (Ergon Energy is the lead consortium member of this project).

Question 3.

What are the opportunities for the CEFC to partner with other organisations to deliver its objectives?

As a partner to CEFC, Ergon Energy has the ability to enhance the viability of renewable energy and energy efficiency projects by incentivising them to be located where the greatest societal benefit can be achieved. Such benefits include the avoidance or deferral of network augmentation (which can dampen pressures on electricity costs) and leveraging its significant existing relationships with local governments and their communities. Ergon Energy has successfully partnered with local government in the Townsville: Queensland Solar City and Powersavvy programs. In addition Ergon Energy has "high cost to serve" locations in its network and in isolated communities where renewable energy and energy efficiency programs could be highly cost effective for project proponents and technology suppliers. The Queensland Government would also be beneficiary where the Community Service Obligation could be reduced.

Question 4.

How could the CEFC catalyse the flow of funds from financial institutions?

One of the major barriers for the uptake of energy efficiency activities is the upfront capital cost of energy efficient equipment. Ergon Energy has a number of Energy Conservation and Demand Management programs where the return on investment is not sufficient to encourage customers to take up incentive packages. Ergon Energy has in collaboration with others been developing some structured fund concepts to overcome these barriers by enhancing the credit risk position for lenders. CEFC may be interested in these concepts as one vehicle through which it could catalyse the flow of funds into projects and programs.

Question 5.

What experiences have firms in the clean energy sector had with trying to obtain finance; have term, cost or availability of funds been the inhibitor?

Ergon Energy regularly deals with project proponents developing renewable energy concepts. We would welcome an opportunity to share some perspectives with CEFC.

Question 6.

What non-financial factors inhibit clean energy projects?

Inhibiting factors include the costs of connection to the grid (proponent side) and the integration challenges (network side) of connecting intermittent renewable energy sources to the grid. A current example exists with significant challenges in managing the proliferation of small scale Solar PV which is causing substantial issues in the low voltage parts of the distribution network.

In addition technology risk continues to be an issue especially for renewable energy enhancement technologies such as battery storage.

Question 7.

Are there special factors that inhibit energy efficiency projects?

Refer answer to Question 4

Question 8.

How do you see the CEFC fitting with other government initiatives on clean energy?

Ergon Energy hopes that CEFC can integrate with other government initiatives particularly in the areas of innovation. Through its participation in the Guided Innovation Alliance (an alliance between Ergon Energy, Queensland University of Technology, Brookfield Financial and SmartGrid Partners formed to), Ergon Energy hopes to shorten the innovation pathway for energy technologies and bring advanced technology solutions to address its key challenges. Investment in energy innovation will be a key value add from the CEFC.