

Mark Pickup  
Senior Policy Analyst, Electricity Group  
Energy and Communications Branch  
Ministry of Economic Development  
PO Box 1473  
Wellington  
New Zealand

Email: [electricity@med.govt.nz](mailto:electricity@med.govt.nz)

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Dear Mark

**Investment in Electricity Generation by Lines Companies**

**EIRA Amendment 2007**

*Introduction*

MainPower wishes to thank the Ministry of Economic Development (MED) for seeking feedback on how well the draft Electricity Industry Reform Amendment (EIRA) Bill 2007<sup>1</sup> gives effect to the recent policy decisions made by the Government.

*MainPower*

Since 2000, MainPower's regional electricity demand has grown by over 6% pa and is predicted to grow by 4% pa for the foreseeable future. There is no electricity generated within MainPower's region. In response, MainPower has been investigating local generation opportunities utilizing renewable resources within our area. MainPower has recently announced its intention to apply for resource consents for a windfarm on Mt Cass<sup>2</sup> and aims to make several significant investment decisions relating to new renewable generation over the next few years.

***MainPower's long-term vision is to become self-sufficient in renewable energy.***

*Local Generation*

MainPower believes that locally-owned, small-scale, regionally diverse, renewable generation will not only assist the Government meet its macro economic and environmental objectives, but significant local benefits will also accrue, including:

- Increased local economic stimulus
- Reduced 'wealth transfer' via electricity bills
- Increased security of supply
- Diversity of generation mix
- Network benefits

Local generation can also create National benefits, including:

- Reduced environmental footprint

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<sup>1</sup> Draft Electricity Industry Reform Amendment Bill 2007  
[www.med.govt.nz/ers/electric/generation-investment](http://www.med.govt.nz/ers/electric/generation-investment)

<sup>2</sup> Mt Cass Media Release 28<sup>th</sup> March 2007 <http://www.localgeneration.co.nz/news/>

- Transmission benefits
- Projects of a scale that would not attract investment by existing Generator-Retailers

#### *EIRA 2007 Amendment*

The EIRA was originally enacted to reform the New Zealand Electricity Industry with the purpose of ensuring;

- **Downward pressure on prices and costs**
- **That all consumers benefit from efficient pricing**

This purpose was to be achieved through;

- **Separating** distribution from generation & retail
- Promoting **competition** in generation & retail

The EIRA amendments in 2001 and 2004 went some way to encouraging Lines Companies to re-invest in generation. However, the details of the Act, specifically relating to the arms-length and corporate separation precluded this investment.

It is MainPower's view that the EIRA 2007 Amendment goes significantly further towards delivering on its key purpose of renewed Lines Company investment in generation than the previous amendments. MainPower acknowledges the changes incorporated in the 2007 Amendment and the efforts of Government officials in understanding the very real barriers to Lines Company investment in generation after the implementation of the previous amendments.

Notwithstanding, MainPower believes there are additional changes/clarifications that should be included/resolved for the final draft of the 2007 Amendment to ensure the implementation is consistent with the policy objectives agreed by the Cabinet.

MainPower's recommended changes/clarifications are:

#### **1. Remove the uncertainty as to the ability to trade in spot energy**

MainPower believes that this anomaly should be removed/clarified to ensure Lines Companies can trade in spot energy and not just in financial hedging.

As way of example, MainPower is currently investigating a small-scale, run-of-river hydro plant (approx 750 kW). MainPower will be seeking resource consents for this project towards the end of this year and if successful, will finance and construct the project in 2008 with a combination of debt and balance sheet funding. The plant's output will be injected directly into the local network and the electrical output sold on the spot market. The project's narrow economic margins do not accommodate the overhead required to negotiate and conclude financial hedging and/or long-term power purchase agreements. Instead direct retailing and trading directly in the spot market is envisaged to secure project revenue.

There are many small-scale, renewable energy projects of this type available around NZ. However, the combination of high front-end costs associated with consenting and relatively low economic margins mean many projects will not get off the ground unless backed and/or funded by the local Lines Company.

Allowing the project and/or project sponsor to trade its output on the spot market will remove a major barrier to the implementation of these types of small-scale renewable generation projects.

**2. *Confirm methane gas generation qualifies as ‘renewable generation’, under the revised definition***

The definition of renewable generation has been changed to include solar, wind, hydro, geothermal, biomass, tidal, wave or ocean current sources.

MainPower applauds the widening of the definition which is drawn from the Reserve Management Act. However, we see two issues arising out of the new definition and the approach it represents.

First, we assume "biomass" is intended to cover landfill methane production. We expect that is the intention. However the question arises as to whether it includes new technologies involving animal waste based methane production or other technologies involving methane production.

Secondly by listing the known renewable sources we are concerned that the outcome is that new technologies will be excluded and therefore the development of these new technologies will not be encouraged.

To better reflect the underlying policy we suggest that the definition could incorporate principles such as "sources naturally occurring or occurring with the benefit of intervention" and "the use of which would not permanently deplete such energy sources".

In this way new technologies are encouraged thus providing a better policy outcome.

**3. *Equalizing the joint management threshold limit***

The reason provided for raising the threshold for arms-length rules requiring separate managers was that the original arms-length “provision is too onerous, and impacts in particular on smaller companies (usually trust owned)<sup>3</sup>.” The new higher threshold limit of 30MW was proposed as this “capacity equates to a turnover of around \$60m a year (generation and retail)”.

MainPower agrees with raising the threshold limit. However, for consistency across generation types, MainPower believes the threshold limit should be changed to the greater of 30MW or a turnover of \$60m. While a 30MW base load plant with a capacity factor of close to 100% could create a combined (generation and retail) turnover of approximately \$60m, many renewable generation types have much lower capacity factors (wind projects with capacity factors of 30-40% and run-of-river hydro projects with capacity factors of 50-75% are common). Basing the threshold limit on nominal capacity alone would unfairly penalize some renewable generation types which appears inconsistent with Government policy.

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<sup>3</sup> Cabinet Paper – Investment in Generation by Lines Companies July 2007

#### **4. Clarify the restriction limit on retails sales**

MainPower seeks to clarify the retail sales limit, defined as the ‘nominal annual output capacity of permitted generation,’ is calculated by multiplying the nominal nameplate installed capacity by 8760 (hours in the year) and by 100% (assumed capacity factor), regardless of generation type. This will ensure all renewable generation types are treated equally under the Amendment.

For example, MainPower’s proposed Mt Cass wind farm in North Canterbury could have an installed capacity of up to 63MW. Using the nominal annual output capacity calculation as highlighted above, would mean the restriction limit on retail sales for MainPower would be:

$$63 \text{ MW} * 8760 \text{ hrs} * 100 \% = \underline{552 \text{ GWh}} \{Retail Sale Limit\}$$

MainPower believes that some wording changes in the final drafting of the Amendment could better reflect the intention of this clause to ensure transparency and common understanding.

#### **5. Monitor the effectiveness of the Amendment**

MainPower suggests a mandated review period (say 3 years), for officials to review the amount of generation investment by Lines Companies and gauge the effectiveness of the Bill in general.

#### *Conclusion*

New Zealand requires more renewable generation on an ongoing basis. Lines Companies can constructively contribute to this, in a fashion that complements the roles of others. The smaller scale, geographically distributed renewable generation opportunities that Lines Companies are likely to advance have benefits for the entire electricity industry value chain; generation-transmission-wholesale-distribution-retail. There will be benefits for the national economy and the country’s environmental targets.

The MainPower Board sees generation in its network region as a very logical commercial opportunity but notes that generation is a complex and risky area of interest, and remains anxious to ensure the investigative work underway is not unduly burdened.

MainPower views the benefits of investment in local generation by Lines Companies include:

1. Most generation investments will be renewable. This will reduce the national reliance on fossil fuel supplies (at fluctuating international prices) and reduce national greenhouse gas emissions
2. The generation investments will reinforce the distribution network and offset or delay both network and, potentially, transmission grid investments
3. Most projects will be of a scale unlikely to interest the major Generator-Retailers

MainPower believes it is critical that this 2007 Amendment is passed into law in its current format (with minor recommendations/clarifications incorporated).

*Recommendations*

MainPower recommends the following minor changes/clarifications are made to the 2007 Amendment;

- 1. Remove the uncertainty as to the ability to trade in spot energy**
- 2. Confirm methane gas generation qualifies as renewable generation**
- 3. Equalize the joint management threshold limit**
- 4. Clarify the restriction limit on retails sales**
- 5. Monitor the effectiveness of the Amendment**

Finally, MainPower would like to note the importance of retaining ALL the changes as proposed in the draft 2007 Amendment. If any one of the elements for change (e.g. trading, ownership separation rules, retailing etc) is not implemented, then the remaining elements become seriously compromised in terms of giving effect to the recent Government policy decisions.

MainPower welcomes the opportunity to discuss these issues directly with MED staff. Indeed, as in earlier submissions, MainPower extends an invitation to MED officials to visit MainPower to meet MainPower Directors and Managers.

We wish to be involved in developing with you the appropriate solutions to deliver national outcomes.

Yours faithfully

A handwritten signature in black ink, appearing to be 'A Berge', is written over a vertical red line.

A Berge  
Managing Director