Independent Electricity Generators Association

The Secretary
c/-David Inch
P.O. Box 113
Motueka 7143

david@nzenergy.co.nz
or wensley@mountcampbell.co.nz
or stephen@simplyenergy.co.nz

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Electricity Authority
PO Box 10041
Wellington
By email: submissions@ea.govt.nz

Avoided cost of transmission (ACOT) payments for distributed generation

Dear Sir/Madam,

The IEGA comprises approximately 50 members either directly or indirectly associated with predominately small scale (100kW to 10sMW) hydro schemes throughout New Zealand for the purposes of commercial production.

Summary of consultation paper

The EA's Working Paper asserts that ~ $10 per ICP per year is paid out to distributed generators with no impact on transmission benefit, little effect on distribution investment and no other economic benefit. Accordingly payments to DG should be changed to better reflect statutory objectives.

Summary of the IEGA's submission

In response:

- We present a simple model of a single transmission line and calculate the dynamic efficiency benefits of DG as it reduces the need for future transmission investment and show annual benefits of $4 and $30 per ICP per year, increasing as DG growth meets more of a network's load growth. This benefit is reasonably comparable with the **short term** Transmission **charges** increase (as a result of Transpower's revenue cap) before the consideration of non-transmission benefits.

- This simple model understates DG benefits as we have not had the time or resource to evaluate other benefits including reductions in distribution investment, price signalling of peak demands to incentivise generation, reduction in spot market prices that put **downward pressure on retail electricity prices**, decreases in cost of capital from reduced cash flow volatility and **competition benefits** in regional electricity markets.

- We note that there have been other substantive pieces of work done to quantify the benefit of DG (for example, *Costs and Benefits of Connecting Distributed Generation to Local Networks*, Energy Efficiency and Conservation Authority, 24 September 2008). We request that the EA should do a basic literature search on the subject (it is not hard to find literature – a Google search on "the benefits of distributed generation" returns 1.9 million hits)

- We are concerned that the approach put forward in the working paper significantly departs from regulatory best practice by proposing fundamental changes to ACOT payments that have been a feature of the New Zealand electricity market (in a variety of forms) since at least the 1950s. Sudden changes in price signals that have consistently formed part of the justification to invest in DG over the asset's life undermine regulatory certainty and reduce dynamic efficiency which is not in the long term interest of consumers.
- The working paper is inconsistent with other positions taken by the EA and current regulation. For example
    - DG is the equivalent of negative load. Load reduction or demand-side response can avoid transmission charges. DG can avoid transmission charges through Part 6.4 of the Rules. The Working Paper proposed to change this part of the Regulation. This will create an inconsistency in the treatment of load, demand response and DG and uneconomic incentives to build infrastructure that embeds DG behind loads.
    - The EA is concerned that payments to older DG plant could result in inefficient subsidies. A similar concern (payments at high energy prices to depreciated generation assets) is the basis of the Labour – Greens 'NZ Power' , which Brent Layton has criticised.
- There are factual errors and misleading statements in the Working Paper. For example
    - The Working Paper concludes that ACOT-funded DG appears to have quite limited impact on Transpower's peak demand forecasts, and hence limited ability to defer the assessed need for transmission investment. Transpower were surprised at this conclusion when we raised it with them and we have identified numerous examples that show significant deferral of transmission investments.
    - In paragraph 11.11, the EA makes the pronouncement that "the wholesale and retail markets for electricity are considered to be **national** markets", and provides a reference to a Commerce Commission investigation report. The cited reference supports considering electricity markets as **regional**, particularly for smaller consumers in remote areas where DG is most likely to be deployed e.g. hydro and wind schemes.

Changes to Part 6

In summary we think the EA has let itself and the industry down with the poor quality of thought and analysis presented in the Working Paper. Changes to price signals that form part of investment decisions in long life assets should be carefully considered, with the onus of proof being on those who propose the change.

Our basic modelling suggests that current ACOT payments represent good value to consumers. The current form of Part 6 combined with the transmission pricing methodology allows for simple and efficient contracting with distribution companies to capture part of the external benefits created by DG.

Changes to Part 6 or the transmission pricing methodology that increase the complexity of calculating ACOT payments or reduce the amount paid to DG will risk inhibiting investment in DG that will be to the long term detriment of consumers.

Yours sincerely

Simply Energy Limited

Stephen Peterson
Chairman of the Independent Electricity Generators Association

This IEAG submission is explicitly supported by the following parties

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