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

Dear John

Working Paper – Avoided Cost of Transmission Payments

Thank you for the opportunity to comment on the working paper *TPM Avoided cost of transmission (ACOT) payments for distributed generation* published by the Electricity Authority (The Authority) on 19th November 2013. Our interest in this consultation is as grid owner.

While we expect this working paper to elicit much debate, the focus of this submission is clarifying how we account for distributed generation in our load forecasts and grid planning.

Distributed generation is reflected in load forecasts and grid planning

The Authority concludes at paragraph 1.15(b) that "…*ACOT payments, and the existence of DG, appear to have no observed effect on transmission investments*." One interpretation of this statement could be that distributed generation does not avoid or defer transmission investment and, by extension, avoid or defer transmission costs. We consider that a conclusion based on this interpretation would be incorrect and thought it would be helpful to briefly describe how distributed generation is treated in Transpower demand forecasts.

- We analyse investment paths to meet net off take demand i.e. gross demand minus the contribution to serving that demand made by generation in the distribution network.

- Planned (within a five year horizon) plant with output greater than 1MW is explicitly accounted for in the demand forecasting process and therefore directly impacts transmission planning (plant with output less than 1MW will indirectly affect transmission planning and investment by lowering observed demand at each GXP).

- Analysis accounts for the relative contribution from "firm" and "intermittent" generation technologies in the relevant distribution network.

- At current demand, forecasts provide for distributed generation to generate, at an aggregate level, 173MW[1] at regional peak times (they have provided between 150 and 250 MW at regional peak times over the last 10 years).

[1] Predominantly geothermal, co-gen and hydro

We would be happy to provide further information or insight into how we forecast demand and plan the grid if that would assist the Authority's deliberations in this area.

Yours sincerely

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