

30th January 2018

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By email: submissions@ea.govt.nz

Dear Electricity Authority Board members

Re: Consultation Paper – List of distributed generation eligible to receive ACOT, lower South Island

NZ Energy Limited (NZE) owns and operates three small hydro power stations throughout New Zealand. These schemes are small in scale and are classed as distributed generators. They sit well with their communities, providing a valuable source of renewable energy whilst providing support and capacity for the local networks for which they connect into. NZE's hydro plants are not located in the lower South Island. However, we obviously have a strong interest in how the new grid reliability standards test has been applied for the first time.

Our DG plants have been in existence since electricity was first supplied to the communities in which they are located. In one instance this is now 100 years. Clearly these generators came well before the national grid. They have remained in place since that time because they still to this day provide an invaluable source of renewable energy to their communities as well as all the other system benefits like voltage stability, power factor control, reduced line losses and they have deferred distribution and transmission investment. Furthermore, they operate and supply power when the networks are periodically islanded from the national grid.

We, like Transpower and their advisor, have direct experience of our plant providing these additional benefits. Our view remains that the EA's test of the value of DG should include these benefits – both in the cost benefit analysis of the proposal and implementation of the Code change. The EA needs to clearly explain why they chose to ignore benefits that would otherwise destroy their CBA.

NZE operates its plant to maximise generation volumes during periods of peak demand in order to assist the network company and Transpower to manage their limited capacity. Any change to our current ACOT revenue will have a significant financial effect on our business along with huge implications to smaller rural communities and their respective distribution networks. Losing ACOT revenue will quite simply destroy our business. This would be an absolute travesty and it begs the question how the proposals put forward by the EA can have that effect on businesses that have operated for so many years. If ACOT revenue changes we, and other DG owners, will either be forced to shut down or operate their plant in a manner that reduces their costs but this will ultimately increase system peaks and reduce the overall efficiency of the transmission system resulting in a

further failure to meet the statutory objective of achieving an efficient operation of the electricity system.

NZE suggested an alternative approach in its July 2016 submission on the TPM and ACOT proposals. Progress with the TPM has been stalled for months. NZE suggests there is still the opportunity for the EA to adopt an approach to the TPM that promotes competition and is more efficient for DG. This is what we suggested in July 2016: "The payment of ACOT using the current TPM methodology has been a simple mechanism of paying DG for the benefits they provide. The payments however are not truly aligned to the long term benefits that DG provides. DG benefits are more closely linked to the LRMC of running the transmission system. Future payments should be defined for what they are, that being a "prudent payment" for the benefits DG brings to the LRMC of the transmission system. The setting of this payment would be established from Transpower's LRMC.

We find it unusual that the EA should choose to consider options for financial hardships and wealth transfers in its TPM, yet separate itself from making similar considerations in its DGPP proposal. The EA has recommended that a prudent discount policy be established so that discounts can be provided to load customers that would otherwise have an impact on the transmission system if they disconnected or reduced energy use. The cost of which will be "postage stamped" across all consumers. It would then stand to reason that a "prudent payment" made to DG's is costed in the same manner."

NZ Energy continues to be concerned that the EA has failed to understand the full extent of the effects technology will have on the transmission and distribution systems. Technology will drive consumer choice and vice versa. Poor regulatory intervention,

coupled with increased sector costs, will only escalate change. Virtual grid disconnection and load matching will have a massive impact on transmission. DG will be an important part of this technological change and will provide consumers with significant benefits. Those who will reap the benefits are those who adopt this technology. It is their given right (consumer choice) to do so. Those that are left will carry the cost. These are the important issues the EA need to be focusing on. The EA's efforts need to go into facilitating these changes and ensuring existing and new investment in DG – any type of distributed energy resources – is treated equally.

Further, the regulatory uncertainty that the EA has hanging over DG investors has dramatically increased the commercial risk of our investments. While the Code amendment applies to 'regulated terms', NZE has bilateral contracts. If our DG is not on the 'eligible list' we anticipate, as is happening in other networks, facing opposition from our network companies to continue paying ACOT as required by our agreement. This is highly unsatisfactory outcome of a poor regulatory process that clearly had no understanding or interest in practical implementation details. One would liken it to the Roman dictators throwing their enemies into the lion's den. They knew they didn't have a chance, they had the power to stop it but they still chose not to.

NZE continues to believe that the EA should establish an industry working party so that a robust set of rules are established for determining how all DG benefits are identified, defined and valued, including emerging technologies.

NZ Energy is a member of the IEGA Inc. and we fully support the submission of the IEGA Inc. and Pioneer Energy.

We would appreciate the opportunity to discuss this submission with you. Yours sincerely,

David f hal

David Inch Managing Director