6 May 2021

James Stevenson-Wallace CEO Electricity Authority

By e-mail:

battery@ea.govt.nz

Dear James Stevenson-Wallace,

## Changes are required to put batteries on a level playing field with other technologies

Electric Kiwi and Haast Energy Trading (Haast) supports the Authority taking steps to address shortfalls in the current regulatory settings which act to limit the value the electricity industry derives from batteries. Creating a level playing field with other technologies, with regards to both access and cost, will enable competition, promote efficient investment, and provide maximum benefit for consumers.

Energy storage, including batteries, will play an increasingly important role in New Zealand's electricity system as we strive towards decarbonisation whilst addressing challenges around security of supply and affordability. Technology is advancing quickly and, similar to the Climate Change Commission, we expect both grid scale and decentralised energy storage to contribute to reducing emissions.

We agree with the Authority that the current Code does not appear fit for purpose with regards to batteries, therefore we support the intent of the proposed changes. We are also encouraged that the consultation paper has signalled further work is planned to strengthen the regulatory settings for batteries in other parts of the electricity system.

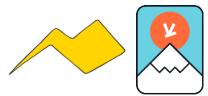
## Batteries will be important for decarbonisation

Both grid-scale and distributed storage are expected to play a significant role in decarbonising electricity generation to meet the government's goal of 100% renewable generation. The value potential of battery energy storage systems is significant due to their ability to:

- enable greater investment in intermittent, low-cost renewables (such as wind and solar),
- reduce emissions and prices through adding flexible capacity which in turn can lead to the avoidance or deferral of investment in transmission and distribution,
- further improve affordability by enabling price arbitrage, and
- play a role in addressing New Zealand's dry year risk, reducing the need for thermal peaking plants.

The Climate Change Commission's pathway to the electrification of transport also implies a large, distributed storage resource, in the form of electric vehicles, will be present in NZ within the next decade. Innovative industry players are likely to seek to orchestrate EVs and other DERs. This has the potential to improve wholesale and retail market competition significantly, for the benefit of all consumers. We encourage the Authority to have regard for distributed storage assets as it reforms the Code for large scale storage.

## Cost reflective network charges are critical to ensure a level playing field



Another of the key enablers for efficient battery investment are cost reflective price signals. While Transpower appears well advanced in considering how cost reflective network charges should be applied to grid scale batteries, Distributors are well behind in considering how this could apply to distributed batteries. We encourage the Authority to consider how it can better encourage cost reflective distribution pricing for distributed energy storage.

## **Concluding remarks**

Electric Kiwi and Haast are encouraged by the Authority's intention to review its regulatory settings in relation to batteries and we see this consultation as a positive first step. We consider that if batteries are put on a level playing field with other technologies, they will contribute significant value by enabling decarbonisation and greater competition to drive down prices.

As the Authority amends the Code regard should also be given to how distributed storage also participates. An ideal regulatory framework will be indifferent to whether a resource is centralised or decentralised.

Yours sincerely,

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