ELECTRICITY AUTHORITY
TE MANA HIKO

1 June 2016

Commerce Commission
Level 6, 44 The Terrace
PO Box 2351
WELLINGTON

By Email

Attention: Commissioner Sue Begg

Dear Sue

Implications of regulatory treatment of cash flows for emerging technology

Recent discussions between the Authority and the Commerce Commission have identified that the two organisations have overlapping interests in evolving technologies, such as batteries. The services these technologies offer could materially affect how electricity services are provided across the supply chain. We would like to advance our discussions on these issues by putting our thoughts and queries in this letter.

Consumer-owned demand response and distributed energy resources will play a greater role in electricity markets

We recently completed a preliminary study of possible regulatory barriers to consumers who wish to participate directly in electricity markets. We undertook the study because we expect that consumers utilising technologies, such as solar photovoltaic generation, batteries and the 'internet of things', could fundamentally change the electricity industry and markets. Such changes are likely to have implications for the Authority's activities.

One conclusion of the study is that we will need to remove barriers to participation by consumers providing the various services available from demand management, batteries and distributed generation. We will have to consider how the market arrangements can accommodate participation of more diverse and small-scale participants.

Under the Electricity Industry Act 2010, the Authority can create markets and provide for broader participation in existing markets. For example, demand response has been provided to the instantaneous reserves market for many years. In 2011 and 2013 we amended the Code to facilitate more demand response in the spot electricity market by enhancing demand-side bidding and forecasting arrangements and introducing dispatchable demand.

We have also worked with Transpower and the Commerce Commission to put in place measures to address the adverse effects on competition of the Transpower demand response programme. We subsequently consulted on the expectations that should apply to demand response initiatives.

The Commission's approach to cost allocation has implications for competition in the wholesale spot and ancillary markets

We understand the Commission intends retaining the approach currently in the cost allocation input methodology for investments that distributors can include in their regulated asset base (RAB) and associated cost allocations. This approach would mean distributors could include some portion of the costs of investments in batteries in their RAB while using the batteries for

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purposes in addition to network management (eg, to arbitrage spot prices or provide ancillary services).

It is already evident that a range of parties can invest in batteries, for example:

- some individual consumers have already installed batteries at their premises
- Genesis Energy is working with the battery supplier Enphase to offer its customers a home energy solution
- distributors have, or plan to, invested in utility-scale storage batteries for distribution network support services.

We consider the cost allocation proposals for distributors raise similar concerns to those identified in relation to the Transpower demand response programme. The main issue was described in our Demand response guiding regulatory principles information paper as follows:

"Some entities can recover the costs of procuring demand response from parties who are compelled by regulation to make payments. If these entities use their demand response to participate in competitive markets, it may be difficult for purely commercial participants to compete. In the long run, the result may be that commercial demand response providers drop out of the market, reducing competition and innovation. In other words, there is a risk that public subsidies may crowd out private investment."[1]

We want to better understand the incentive effects of the cost allocation approach on efficiency and competition in the broader electricity market. Specifically, we want to make sure we have the optimal regulatory settings to:

- promote efficient investment in emerging technologies, including batteries, across the electricity sector, to achieve long-term benefits for consumers
- facilitate competition in wholesale and ancillary services markets by removing barriers to entry and providing a level playing field for participation.

In particular, the Authority is interested in the potential for the cost allocation arrangements to provide distributors with an advantage relative to other parties that reduces competition in ways that do not deliver long-term benefits to consumers.

The Authority's view is that, "where a demand-side response programme is paid for in whole or in part by regulated funds, the organisation running the programme should: (a) have processes to ensure that the demand response is used in a way that produces economic value (b) clearly explain to stakeholders how, when, where and why the demand response will be used, and how this will produce economic value. Explaining how demand response will be used provides a degree of regulatory certainty to parties making commercial decisions."[2] This approach was adopted by Transpower after working with the Authority and the Commerce Commission.

We are aware that the Commission must carry out its work on the cost allocation input methodology within legislative constraints. As a result, the issues identified in this letter may need to be addressed through other avenues. We would like to discuss with you how we might work through this overlap of our interests in order to achieve the greatest benefit for consumers.

As discussed, we would be happy for you to publish this letter so that it can form part of your consultation process and assist in reaching a final view on the regulatory treatment of cash

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1 Electricity Authority, Demand response guiding regulatory principles, Information paper, page 18. Available at: https://ea.govt.nz/dmsdocument/19671.

2 Ibid, page 29.

flows for emerging technology. We will also publish the letter at the same time on the web-page for our Distribution Pricing Review project.

If you wish to discuss our comments, please contact me or John Rampton on 04 4718630. We would be happy to share the results of our scoping study into the direct participation of consumers in the electricity market with you as part of that discussion.

Yours sincerely

Carl Hansen

Carl Hansen
Chief Executive

cc: John Groot
Diego Villalobos Alberú