



Lone Wolf Enterprises Limited

## Updating the Regulatory Settings for Distribution Networks

*Na te whakarongo me te titiro ka puta mai te korero  
(Through looking and listening we gain wisdom)*

I welcome the opportunity to comment on the Electricity Authority's (the Authority) discussion paper: 'Updating the Regulatory Settings for Distribution Networks – Dec 22'. I am the principal of Lone Wolf Enterprises, a business providing consultancy services to the New Zealand energy industry. A key focus is on helping companies develop new capability in a changing sector.

I am also Chair of Waipa Networks, a Director of Network Waitaki, an advisor to Energy Trusts of New Zealand (ETNZ) and former independent Chair of the Electricity Networks Association's Smart Technology Working Group. The views expressed in this submission are my own and do not represent the views of these organisations.

I have previously submitted on the Authority's earlier discussion paper. A number of themes from my previous submission are repeated here. I have not followed the desired response format as it limits a respondent's ability to raise issues and provide feedback.

### INTRODUCTION

As I noted in my previous submission the Authority has rightly recognised the pivotal role of electricity networks in helping enable New Zealand's transition to a low carbon economy via increased electrification. It is timely for regulators to look for ways they can support the role of electricity networks as key enablers.

However the discussion paper is almost entirely focused on flexibility services with an underlying bias towards independent provision of these services while shrinking the role of the electricity network monopolies.

This seems to be solely based on an estimate from Sapere of the net benefit from widespread DER deployment (over 30 years) to be \$6.9 billion (of which an arbitrarily determined amount of \$2.8 billion flows through to consumers in terms of lower charges). This number is speculative and unproven and warrants more robust analysis before committing an industry sector to a direction that may not be the correct one.

The discussion paper references work by the EEA highlighting the future resource shortages facing the sector. This just highlights the need to only commit to least regrets actions now. We need to expend existing resources wisely. The choices we make today need to be well considered.

## **WE NEED TO FOCUS ON THE RIGHT ISSUES AND ASK THE RIGHT QUESTIONS**

A decarbonised economy will need a robust and resilient electricity system powered by renewable electricity. Many investments that are made today will still be in operation in a net-zero world. As an industry we need to ask ourselves what levels of service do we need to deliver to in this world and how do we transition to this state most effectively.

The discussion paper, as per the previous paper, is silent on the important issue of determining the service expectations of customers in a highly electrified world. The recent Auckland flooding and the impact of Cyclone Gabrielle have demonstrated the need for increased resilience in the face of the looming impacts of climate change. These events have highlighted our current vulnerability to extreme weather events. In a world where customers are even more dependent on electricity these vulnerabilities will be amplified.

Now is the time to have the debate as to what future performance customers will demand in a low carbon world powered by electricity. The Authority could play a lead role in facilitating this discussion on behalf of the industry but for reasons unknown is reluctant to do so. I am almost certain that addressing the challenge of meeting more demanding service levels will lead to profound changes in design, delivery, and operation of the electricity system – changes we must start moving towards now.

### **Recommendation 1**

*The Authority must lead an industrywide debate as to the future service levels required from the electricity sector in a low carbon world.*

The current focus on how to transition within the electricity sector appears to be based on minimising the cost of electricity. The Authority's direction seems to be influenced by its estimate of potential savings through the use of flexibility services. In its own words it talks to the 'massive potential for DER indicated by the Sapere research ...' We mustn't allow ourselves to be seduced by the sheer magnitude of savings - in reality, they represent less than 1% of total customer revenue over the same period.

Of far greater concern is that alternative pathways are much more likely to deliver greater (and more certain) savings. The Authority is guilty of taking a myopic electricity-centric view when a whole of energy lens is needed. Many commentators have demonstrated the savings to households from transitioning early. The collective economic saving from transitioning from fossil fuel to renewable energy dwarfs the Sapere estimate and points to the increased value of accelerating the transition.

Instead of focusing on cost reduction we need to focus on quicker implementation of the future electricity system to support our decarbonisation goals.

The Authority is dutybound to act in the best interests of consumers. It must ask itself if the path proposed in the discussion paper does this.



## **HOW CAN WE IMPROVE OUR COLLECTIVE UNDERSTANDING OF FLEXIBILITY SERVICES AND THEIR VALUE TO NETWORKS?**

Much of the paper is devoted to questions around how flexibility services are developing in New Zealand. Since the last discussion paper there has been progress in this area, but the underlying tone of the discussion paper suggests the Authority feels progress is too slow across the sector.

This area remains an emerging space. DER penetration is low and dispersed limiting their value. The Authority cites examples of networks who have procured flexibility services presumably to highlight their value. However, I am equally aware of others who have gone to market and have been unable to find suitable solutions. I am also not aware of any networks that have as yet delivered cost savings to their customers through the use of flexibility services. There is still much learning to be had and shared.

This includes the Authority. Rather than speculate as to the incentives of networks not to use flexibility services it needs to get alongside networks and understand the issues, in particular the investment processes within networks. Often traditional network investment represents the best solution still.

### **Recommendation 2**

*I recommend the Authority promote and facilitate further sharing of information around flexibility services, through a series of hui over the coming 18 months. This will give a true and accurate picture of the potential application and value of non-network alternatives before any regulations are developed to support this (if needed).*

There is little to be lost and much to be gained by improving the collective knowledge of the sector and the regulators. In a low WACC high inflation environment deferment leads to higher costs for customers

One option suggested in the discussion paper is to impose a requirement for networks to demonstrate they have sought to procure flexibility services for projects above a certain size. This is flawed. All networks in New Zealand are different and are responding to the issues of climate change and decarbonisation within their own context. However there is merit in the Authority requiring all networks to develop and publish a policy outlining when networks will consider procurement of non-network solutions. This will provide valuable feedback to the Authority and stimulate debate across the sector as to the place of independently supplied flexibility services.

### **Recommendation 3**

*I recommend the Authority require networks to publish a non-network solutions procurement policy which clearly articulates under which circumstances networks will seek to externally procure non-network solutions,*

## **WHAT NEW CAPABILITY IS REQUIRED?**

I support regulators asking the important question as to whether networks are able to develop the capability to support a new energy future. Sadly I was disappointed that the discussion paper did not give this question the full attention it deserves. The paper focuses solely on what is needed to

support flexibility services. It is silent on what other new capability networks will need, for example,

- The ability to manage data,
- Improved ways of engaging with customers, and
- Development of new planning techniques, such as scenario planning, that are more appropriate in the uncertain world we are currently in.

The Authority needs to provide greater clarity on this matter.

#### **Recommendation 4**

*I recommend the Authority publish a separate discussion paper outlining the future capability it expects networks to be developing and the expected timelines for doing so. This will provide clarity to networks as to how the Authority will monitor future progress against the question it has posed to them.*

#### **STANDARDS**

One of the key roles of the Authority is to ensure standards are suitably futureproofed. It was pleasing to see this included in the discussion paper. I support the Authority taking actions to ensure minimum levels of DER capability are deployed to support future needs. What is critical is to be clear what those future needs are. Standards embed capability for a technology cycle. This is a key lesson from New Zealand's advanced metering fleet which was installed in the absence of minimum standards. We are locked into the capability of this system for the next decade.

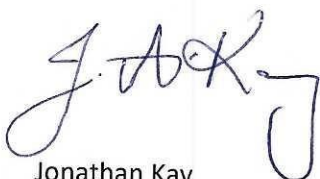
#### **CONCLUSION**

The next few years are pivotal as we plan for how we will respond to the challenge of decarbonisation in an uncertain environment. Keeping an open mind is critical.

Thank you again for the opportunity to submit on the discussion paper. I am available and willing to meet with the Authority to discuss any of the points raised in my submission. Please feel free to contact me on 021 306 877.

Electricity networks are enablers of decarbonisation. The best way to deliver New Zealand's decarbonisation goals is to enable the enablers and do so as quickly as possible.

Yours sincerely



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