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Submissions EA Authority PO Box 10041 Wellington 6143

By Email – distribution.feedback@ea.govt.nz

Consultation Paper – Updating the regulatory Settings for Distribution Networks

To Whom it may concern.

We appreciate the opportunity to provide a submission in the exciting space of Flexibility Services and Distributed Energy Resources (DER). We have been participating in this space since 2019, working alongside Transpower and an EDB.

This part of the sector continues to evolve. Our role as a load aggregator is primarily to match flexible load at the end user with a need for load from an industry participant. Our view is the end user owns the load and we leverage that load to maximise value. This involves multiple components, including hardware & coms, hardware management platforms, creation of specifically designed programs, calling of events, reconciliation of performance and billing.

Over the past 2 years we have noticed the need for such services from EDB's as well as Transpower. Some of the examples we are seeing in the market are,

- Stressed Zone Sub needing ~3MW of load during summer irrigation peaks.
- GXP exceeding its limit by ~4MW during summer irrigation peaks
- Transmission circuit needing support for maintenance during Winter
- EDB looking to manage its Irrigation peak to reduce Transmission costs

Providing the appropriate funds are allocated to manage each scenario, the above can all be mitigated. Our experience is that end users are ready (for the right price) and all that is required is a signal from the EDB. The cost to 'manage' the asset is cheaper than to upgrade, so in theory should be a no brainer....

We appreciate the DER philosophy is somewhat new to NZ and if not implemented correctly, it could potentially turn into the wild west. Safety, reliability, and cost to the end user must remain paramount. We would support a model that has a 'central component', in which all flexibility services run through. EDB's & Transpower should have accessibility to load to guarantee continued and safe supply. But so should innovative businesses looking to

maximise potential for the end user. It could be that something like Transpower's platform becomes the 'heart' of Flexibility services and DER. Load aggregators connect to this via their own platforms and run events through multiple hardware devices and with multiple value streams. In the event where an EDB or Transpower need to act, disaster management, black start, imminent collapse etc, they have the ability to do so through the 'heart' and load aggregators devices.

If Flexibility services and DER is to be a success, we believe it needs positive collaboration from all parties, and an acceptance of working with 3rd parties. We think the below quote from Glenn Coates – GM Asset management & planning at Aurora is a great start.

"Need to let others innovate and do their job well – they do it way better than us".

EDB's have an important part to play in this space. Our engagement to date with various EDB's has been mostly positive. However, some still have their guards up and are reluctant to address various constraints, pain points and what the future might look like. The sooner collaborative and open discussions can be had, the sooner we can achieve better outcomes for NZ Inc.

Yours sincerely

Pete Summerfield

Director

- Q.1 Have you experienced issues relating to a lack of information or uneven access to information? Yes. Our experience has been conflicting information or lack of desire to act on information.
- Q.2 What information do you need to make more informed investment and operation decisions? Not so much information, but trust that EDB's will act in the best interest of their customers and be willing to address pain points on their Networks with alternate and innovative solutions. There appears to be a lot of dragging of feet.
- Q.3 What options do you think should be considered to help improve access to information? Database for EDB's to register constraints or potential projects. A lot of this information is hidden away in AMP's.
- Q.7 Is there a case to be made for minimum mandatory equipment standards for DER equipment, specifically inverter connected DER? Yes. We believe most EDB's take an active and appropriate level of interest with inverters being connected.
- Q.10 What flexibility services are you pursuing? Demand Response & Reserves
- Q.11 Are flexibility services being pursued through a competitive process? Some are. The EDB's that have taken a positive view of the future and accept working with others, appear to be operating under normal commercial conditions.
- Q.12 What options should be considered to incentivise non-network solutions? Possible tender process. There may be limited tenderers in the early years. However, the EDB/ grid operator should consider the cost of investment vs the cost of "non-network" solution, if the "non-network" solution is more cost effective, theoretically that should be the solution. Transpower appear to have a process in place for this. It appears too early for EDB's to have nailed this down just yet.
- Q.14 Have you experienced difficulties with negotiating operating agreements for flexibility services? *Not as yet.*
- Q.15 Are the transaction costs of developing contracts a barrier to entering the market for flexibility services? *Not as yet*.
- Q.16 Would an operating agreement help lower transaction costs and level negotiating positions? *Possibly. A standardised agreement and contract may ensure all parties are negotiating at the same level.*
- Q.18 What are distributors doing to ensure their network can efficiently and effectively manage the transformation of networks?

EDB's are thinking and appear ready to act to minimise disruption to their networks from increased electrification. Progress is slow however, and the concern is, by deferring decisions around flexibility services, does that result in a rushed implementation when needed.