Great value energy
for kiwi families & businesses

nova energy

Nova Energy Limited
PO Box 10141, Wellington 6140
www.novaenergy.co.nz

28 September 2021

Submissions
Electricity Authority
PO Box 10041
Wellington 6143

By email: distribution.feedback@ea.govt.nz

Re: Discussion Paper – Updating the regulatory settings for distribution networks

Nova Energy supports the Authority's review of regulatory settings for distribution networks. In the context of the expected transition from energy systems sustained by thermal fuels to renewable energy sources, it is critical that market signals lead to efficient investment decisions.

By taking a systems wide approach to market design it is expected the Authority may be able to redress some of the difficulties parties have in engaging with a multitude of electricity distributors with different requirements, pricing structures and service levels. In addition to the 29 regional electricity distribution businesses there are almost twice as many embedded electricity networks.

The current model for embedded networks is expensive for retailers to administer in terms of contracting, pricing, and reconciliation. These costs will ultimately be passed on to consumers in these networks through higher retail prices.

As DER capability grows, embedded networks have the potential to become micro-grids, with their own generation, storage, and demand response capabilities. However, the current arrangements for embedded networks fail to facilitate the benefits that DER can generate within a micro-grid.

It would be appropriate therefore for the Authority to consider the application of the Code to micro-grids as part of its regulatory settings for distribution networks. Nova believes consumers would be better served if embedded networks become either network extensions, or customer networks.

Nova's detailed response is appended to this letter. Please feel free to contact me if you wish to discuss our views further.

Yours sincerely

Paul Baker

Commercial & Regulatory Manager

P +64 4 901 7338 **E** pbaker@novaenergy.co.nz

Nova submission:

Updating the regulatory settings for distribution networks - Improving competition and supporting a low emissions economy

Q No.	Question	Response
Q1.	Have you experienced issues relating to a lack of information or uneven access to information?	Yes. Developing options for DER requires a good understanding of the location and status of the distribution networks in order to identify sites or regions with potential, or in need of capacity upgrades before anything can be advanced. Network information from Electricity Distribution Businesses (EDBs) is currently scarce and mostly inaccessible.
Q2.	What information do you need to make more informed investment and operation decisions?	Developers and promoters of distributed generation need access to location, capacity, and power-flow data for Medium Voltage (MV) feeder networks. Additionally, details from asset management plans that can be reconciled with MV network data, should be available in order to assess potential projects, without needing to request data from the Distributor in every case. With expected growth in the number of electric vehicles utilising some low-voltage networks it may also become necessary for EDBs to highlight in advance potential capacity constraints on those networks. Such transparency can then trigger potential market responses ahead of building increased network capacity.
Q3.	What options do you think should be considered to help improve access to information?	All EDB's should provide a GIS referenced map viewer for all MV network, pole, and substation locations, with this information freely available for download, or at the very least, available for registered users. In respect of meter data the MEPs are better placed to make available the different data sets available from AMI meters; in fact consumption data is just one element of the data that can be collected and stored. The capability of MEPs to provide a broader range of data services could be expanded and developed independently from the provision of meters and associated supporting services to consumers via their retailer. The responsibility for data integrity is currently determined contractually between the retailer and their customer, but this could be replaced by the Code and

Q No.	Question	Response
		thereby avoiding the complex questions over ownership of data and responsibility for its protection. While EDB's should not be expected to pay for consumption data, as inevitably this cost will be recovered though network charges to retailers in any case, there is a case for them to pay for additional data services, e.g. voltage data or power factor data. In respect of using half-hour data for reconciliation purposes, rather than considering mandating submission of hhr consumption data it is important to look at the incentives that is driving that behaviour. If there are benefits from submitting monthly consumption data, then that can be expected to continue.
Q6.	Does Part 6 remain fit for purpose? If not, what changes do you think are needed (a) in the near term and (b) in the longer term?	Part 6 seeks to address issues between developers of DER and EDBs, whereas it would be useful if it was more consumer centric in the sense that consumers could make choices between alternative suppliers of DER equipment and services. Currently the challenges of addressing network access are still relatively cumbersome and bespoke for every new connection. Some EDBs are not at all well set up for responding to requests for network access. Sunergise NZ has experienced varied levels of competence and engagement, with variance of average approval timelines from 30 days through to more than 90 days.
Q8.	What standards should be considered to help address reliability and connectivity issues?	While there is significant uncertainty over how responsive consumers will be to cost reflective pricing, it should still be the primary mechanism for effecting change. DER can be expected to provide more diverse options for consumers and market participants, and these are most likely to develop if there are appropriate price signals. The Lines Company with its former peak load pricing had the foundation of the right pricing model, except that it was focussed excessively on very few trading periods, and at the time of its implementation consumers did not have sufficient tools available to avoid the peak charges. One simple way for many consumers in that region to manage peak load however was to use wood burners for peak heating, and in some cases, also for water heating. LPG water and space heating was also another more convenient option that consumers used in some cases to avoid peak lines charges.

Q No.	Question	Response
Q9.	Is there a case to look at connection and operation standards under Part 6 with a view to mandating aspects of these standards?	Yes, refer response to Q6.
Q11.	Are flexibility services being pursued through a competitive process?	Much of the value of flexibility services can be captured through mechanisms as simple as load control of hot water systems. Traditionally this has entirely operated at the whim of the EDBs for the purpose of managing Transpower charges and managing peak network load. Consumers benefitted from the pass through of lower transmission charges. Given the new Transmission Pricing Methodology (TPM) and likely increased volatility of energy prices as NZ increases its reliance on intermittent generation, the focus of managing load will need to become more energy price and customer focussed. The first step to unlocking the potential for customer focussed demand response must be to remove the automatic right of EDBs to retain control over frequency relays controlling load at the ICP, excepting in emergency circumstances. Only then will retailers and third parties have sufficient incentive to aggregate resources and apply new load control technologies. Under such a revised regime, there will still be scope for EDBs to contract with retailers, but that needs to be on an equitable basis that supports the additional investment required; and gives retailers the scope to engage with consumers on what levels of supply security they need.
Q12.	What options should be considered to incentivise non-network solutions?	As per the response to Q.11, the right to control load should be shifted from EDBs to customers who can then assign control to retailers or third parties.
Q13.	What options would encourage competitive procurement processes for flexibility services?	New Zealand is a small market and for most DER applications economies of scale are important. A long as EDBs participate in DER the opportunity for any third party to build scale is reduced, even if the EDB operations are operated on an arms-length basis. This reason alone should be sufficient to restrict EDBs from controlling access to load control or engaging in activities related to DER.