our energy

Our Energy submission re: Enabling Mass Participation Issues Paper

1. Our Energy welcomes the opportunity to submit on the Electricity Authority's Enabling Mass Participation Issues Paper.
2. Following some general comments, our submission focuses on two questions raised in the paper:
    - 2.1. What changes to existing arrangements might be required to enable peer-to-peer electricity exchange?; and
    - 2.2. What are the costs and the benefits of enabling peer-to-peer electricity exchange?

General comments

3. We agree that "the electricity industry is changing fundamentally as technology makes it possible to do things differently."
4. We encourage the EA to continue to 'think globally and act locally' when considering how to promote innovation and participation. Decisions made in the current market environment will impact the ability of market participants and other players in New Zealand to appropriately adapt to change here and seize global opportunities.
5. As with other industries that have faced or are facing substantial change, it is unlikely that erecting or maintaining artificial barriers to competition is a sustainable answer to the challenges being faced. The EA implicitly already recognises the importance of this stance in promoting innovation and participation when it states that:

> "We do not really know how mass participation might unfold into the future. However, it is likely that it will bring significant long-term benefits for consumers from more competition, and from a more reliable supply and more efficient electricity industry. Competition will increase, which will lead to greater consumer utility, or satisfaction, as suppliers innovate to develop new products and services to win customers and market share."

6. Our reading of this statement is that the EA considers the benefits of innovation and mass participation to outweigh the costs brought about by potential uncertainty that may result. This sets a high bar for rejecting change and it is an important and, in our view, positive signal to send to the market.
7. While the electricity sector has its intricacies, the challenges faced by the EA in the face of rapid technology change are not unique. For example, banking is another industry that is both heavily regulated and competitive, and is undergoing a tremendous amount of government and regulator-led change. 'Open banking' is designed to enable innovation and competition for the benefit of consumers.

8. While we are supportive of measures that promote innovation and greater participation, we encourage the EA to maintain a focus on 'problems' to be solved, rather than solutions to be enabled. Consumers may want (and increasingly expect to have) more choice and control over their electricity purchasing decisions, and solutions such as peer-to-peer electricity exchange can offer this in principle. However, other factors such as simplicity, accessibility and available time should not be underestimated as important drivers for decision making.

What changes to existing arrangements might be required to enable peer-to-peer electricity exchange?

9. In our view, this question is at risk of promoting a technical solution looking for a problem. Navigant Research has recently provided a helpful overview for understanding the effectiveness and practicalities of various 'peer to peer' energy offerings.[1] Our experience is that there is little evidence that true peer-to-peer electricity exchange is necessary, achievable or even desirable for most electricity consumers.

10. Although it creates less hype, we think that it is better to instead ask what changes to existing arrangements might be be needed to achieve outcomes like:

    10.1. increased customer choice;

    10.2. support of local generators;

    10.3. strong communities;

    10.4. reduced risk of mass grid defection in the long term; and

    10.5. better overall system resilience.

11. In our view, the EA's multiple trading relationships project is integral to addressing these 'problems' and we are keen to participate and contribute to this work as it develops. A feature of workably competitive markets is that consumers can generally access the services of multiple suppliers without needing to 'switch'.

12. Therefore, our view is that the multiple trading relationships project is key to promoting innovation and participation. In contrast, the type of competition promoted through switching activity has benefits for some, but it also has costs, which are ultimately borne by consumers overall.

[1] https://www.navigantresearch.com/blog/understanding-peer-to-peer-blockchain-and-transactive-energy

13. A question we have is whether the amounts 'saved' by consumers as a result of switching activity are actually worth it compared to the costs incurred by market participants in managing 'churn' (costs that are presumably passed through to consumers anyway)? As the marginal costs of electricity production trend toward zero, we consider it unlikely that innovation and participation (and achieving outcomes like those we note in paragraphs 8.1-8.4) will be aided by suppliers being incentivised to engage in a race to the bottom focused on price.

What are the costs and the benefits of enabling peer-to-peer electricity exchange?

14. Answering this question appropriately again requires a clear understanding of whether what is being suggested is actually true peer-to-peer electricity exchange, or something else that might resemble it and is called 'P2P' for marketing purposes.

15. Unless two 'peers' own and operate their own power line between them, which might be possible in a microgrid situation, peer-to-peer electricity exchange will not generally remove a centralised party from a transaction. As such, if not adequately conceived or designed, peer-to-peer electricity exchange may introduce 'friction' costs for customers and other parties rather than remove them.

16. We also note that while true peer-to-peer electricity exchange could have a very low distribution cost, there would likely be very high uncertainty for other market participants, including consumers who are not part of the exchange.

About Our Energy

17. Our Energy is a Wellington-based software-as-a service venture with a vision of putting communities at the heart of the digital, decentralised and decarbonised energy systems that are rapidly evolving here in New Zealand and around the world. Our first product, Lemonade, will enable users to buy, sell and gift clean, local energy within their community - in effect, creating virtual local energy markets.

18. No part of this submission is considered confidential. We welcome further engagement with the EA as it considers these and other important issues in its work programme for enabling mass participation and innovation.

Nga mihi

The Our Energy team

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