Submission

Enabling mass participation in the electricity market

11 July 2017

Table of Contents

1 Introduction

Aurora welcomes this opportunity to comment on the Electricity Authority's Consultation Paper "*Enabling mass participation in the electricity market*" (the Mass Participation Consultation Paper). Responses to the questions in the consultation paper are provided in the Appendix.

No part of our submission is confidential and we are happy for it to be publicly released.

If the Authority has any queries regarding this submission, please do not hesitate to contact:

Alec Findlater
General Manager Network Commercial
Aurora Energy Limited
alec.findlater@auroraenergy.co.nz
027-222-2169

2 Technological change

Technology has incredible scope to transform the electricity sector, increasing competition and choice for consumers, with potential for big winners and losers in different parts of the supply chain.

The experience in sectors such as the accommodation and transport markets, with the likes of AirBnB and Uber, highlight the potential for alternative business models, underpinned by new technology, to have a disruptive impact on markets and incumbent operators. These two examples highlight that existing regulatory regimes can be caught flat-footed, and can be an impediment to innovation and new entry.

Aurora is supportive of the Authority proactively exploring the potential impact of new and disruptive technologies in the electricity sector, including what the Authority labels as "mass participation". Aurora agrees that the Authority should concern itself with the potential for opportunities and benefits from new and disruptive technologies being lost or not developed because its "rule-book" doesn't accommodate new ways of doing things.

3 Clear and comprehensive problem definition required

Aurora's overall impression of the Mass Market Consultation Paper is that it starts out with a reasonable proposition (the need to test whether the existing "rule book" is geared up ensure innovation and new disruptive technology isn't impeded).

However, the Mass Participation Consultation Paper appears to take two key missteps:

- Jumping to options before firmly establishing the problem that may, or may not, need to be solved. This is an issue that has come up before, causing the Authority problems. The link between the current nascent problem definition (which could be labelled as 'emerging views') and options such as more heavy-handed network access requirements is less than clear to Aurora.
- Potentially repeating the same mistake the Authority made, early on in its existence, of identifying metering as an access problem. (The Authority subsequently remedied the misdiagnosis to recognise that metering is a competitive and contestable part of the supply chain.)

4 Direction of review

Aurora would like to see the Authority continue with its review into new and disruptive technology, including mass participation. Aurora thinks the best way for the Authority to go forward is to step back from option identification, at this stage, and develop and consult on a Problem Definition Working Paper.

Once the review is on firmer ground, in terms of determining what the actual problems or, given the forward-looking nature of the review, potential problems may be, the Authority would find itself better placed to start canvassing potential options for regulatory intervention or winding back aspects of the existing "rule-book".

Aurora would also like to see a more explicit and clearer consideration of the potential interaction and overlaps between the Authority's review and the work and role of the Commerce Commission, under Part 4 of the Commerce Act and elsewhere[1]. This includes describing how the Authority intends to manage these conflicts and discharge its obligations under section 32(2)(b) of the Electricity Industry Act 2010. By way of example:

- The discussion on whether electricity distribution businesses (EDBs) and Transpower are foregoing opportunities to improve efficiency through greater usage of outsourcing directly goes to the question of whether the Commerce Commission's operation of Part 4 is providing strong enough incentives to innovate and improve efficiency (core components of the Part 4 statutory objective). This is a debate that has played out during the Commerce Commission's statutory review of the Input Methodologies (IMs).
- Similarly, the Authority's discussion on separation options (accounting, corporate or ownership) mirrors the arguments run by the incumbent electricity retailers in the Input Methodologies (IMs) review (in relation to emerging technology, cost allocation and related party transactions), but doesn't balance this with the counter-arguments in the Commerce Commission's consultation. The discussion in the Mass Participation Consultation Paper begs the question whether the Authority considers the Commerce Commission has set the IMs in a way that provides adequate or strong enough accounting separation requirements.

5 Regulatory intervention

The regulatory interventions that the Authority is contemplating look at the sector based on traditional supply chains, with separate competitive and natural monopoly components.

It would be surprising if the solution for dealing with new and disruptive technologies mirrored the solutions for dealing with traditional, vertically-integrated, natural monopolies and network access issues; particularly as one of the impacts we are already seeing is the blurring and breaking down of the traditional boundaries between natural monopoly and competitive parts of the electricity sector. Yet this is what the Authority's consultation paper suggests.

We note, by way of illustration, that the prospect of 5G wireless in the telecommunications sector could result in mobile broadband becoming a stronger substitute for traditional fixed line (copper and fibre) broadband services.[2] (Likewise, over the last decade, the development and uptake of cellular services has diminished the need for price cap regulation for residential services under the Kiwi Share Obligation.) This would have the impact of reducing Chorus' market power and would diminish the need for network regulation. The Authority may be looking at the sector through the wrong end of the telescope (and history). A significant risk to the Authority's credibility and to industry performance is that many options that the Mass Participation Consultation Paper considers may either do nothing to facilitate new and disruptive technology, or may create additional barriers.

Specific comments on the options for promoting greater outsourcing by EDBs, and more heavy-handed (than the Default Distributor Agreement) network access and separation requirements are provided below.

6 Outsourcing network support

It appears that the Authority may have become side-tracked by the discussion about whether EDBs and Transpower should consider (greater) contracting with third party service providers for network support, and how this could reduce their costs and improve their efficiency. This is a much broader

[1] Consideration of network access issues have direct parallels with the Commerce Commission's responsibilities under the Telecommunications Act.

[2] http://www.nzherald.co.nz/business/news/article.cfm?c_id=3&objectid=11885363

topic than mass participation. We would caution, that as a regulator, the Authority (and the Commerce Commission) should be careful to facilitate innovation and efficiency improvement, without imposing its own views on how regulated suppliers should be operating.

The Mass Participation Consultation Paper extolls that: "*Network businesses can buy network support from a range of parties using competitive tendering or some other market mechanism. For instance, a distributor could contract with a third-party service provider that aggregates the responses of a group of smart hot water cylinders or batteries. A distributor would do this when it is cheaper than the distributor owning and controlling assets that provide the required service*"[3]. We agree.

The consultation paper then goes on to suggest that "*distributors might be reluctant to make greater use of competition to more efficiently supply the network service. For example, obtaining network support from third parties is currently not common practice for distributors, and some distributors may be reluctant to adopt an unfamiliar or unproven approach*"[4].

The consultation paper is then somewhat vague about why EDBs and Transpower may not be taking up supply options that decrease their costs (and presumably, by doing so, increase their profits). The consultation paper suggests EDBs may not be profit maximising, without overtly using that terminology, because they "*may be reluctant to adopt an unfamiliar or unproven approach*"[5] or don't understand "*improved communication and control technology, and innovation in contracting practices, reduces the need for a distributor to own and directly control the assets required to provide a service*"[6].

The consultation paper does not spell out that if there are substantial missed opportunities to save costs ("*a five per cent reduction in costs it could result in a $375 million cost saving over a 10 year time period*"[7]) then the Commerce Commission's operation of Part 4 of the Commerce Act must be failing to achieve the objectives of promoting incentives for regulated suppliers to innovate (s 52A(1)(a)) and improve efficiency (s 52A(1)(b)).

These same issues have been canvassed during the Commerce Commission's IMs review. The Commerce Commission's recent Related Party Transactions Paper, for example, stated the Commission is "… *concerned that a supplier of a regulated service may be incentivised to use a related party for an input to the related service even though it may not be the most efficient provider of the input*"[8].

Aurora reiterates our response. It applies equally to the Authority and Commission's respective consultations:

> *"If this is valid, it is a problem with the Part 4 regime not providing regulated suppliers with strong enough incentives to innovate and improve efficiency, not a problem with the RPT rules.*
>
> *The solution could be to rebalance the sharing of efficiency gains; e.g., allowing regulated suppliers to hold onto efficiency gains for longer before sharing them with consumers. Tightening the RPT rules would mask the symptom of the problem, rather than solving the problem itself."*[9]

If the concerns are soundly placed, then the solution would be to look at options for increasing incentives on regulated supplies to innovate and improve efficiency; e.g., by enabling regulated suppliers to hold on to the benefits of cost reduction for longer before passing on or sharing the benefits with consumers[10].

---

[3] Electricity Authority. (2017). *Enabling mass participation in the electricity market*, paragraph 4.13.

[4] Electricity Authority. (2017). *Enabling mass participation in the electricity market*, paragraph 4.17.

[5] Electricity Authority. (2017). *Enabling mass participation in the electricity market*, paragraph 4.18.

[6] Electricity Authority. (2017). *Enabling mass participation in the electricity market*, paragraph 4.19.

[7] Electricity Authority. (2017). *Enabling mass participation in the electricity market*, paragraph 4.16.

[8] Commerce Commission. (2017), Input methodologies review, Related party transactions – Invitation to contribute to problem definition, paragraph 2.7.

[9] Aurora Energy Limited. (2017). Submission: Input Methodologies Review: Related party transactions – Invitation to contribute to problem definition, section 4.

[10] Given the Authority's interpretation of its statutory objective this would amount to use of wealth transfers (delaying sharing of efficiency savings through lower prices) to improve efficiency (increase the 'size of the pie') and would be a relatively costless option.

Finally, if regulated suppliers are to rely on third-party providers for network support, they will need to consider how they will manage other regulatory frameworks in doing so; e.g., compliance with quality standards. Third-party providers may be reluctant to enter into contracts if they include liquidated damages that are proportionate to the likely sanctions on regulated suppliers for failure to comply with quality standards.

7 Network access regulation and separation requirements

The Authority states that "*One of our tasks is to develop a regulatory framework that makes sure networks provide open access and a level playing field*"[11] and "*We can introduce additional or different arrangements under the Code or through market facilitation measures*"[12].

The discussion in the consultation paper seems to indicate that the Authority is concerned that the Default Distributors Agreement (DDA) regime it is developing may not be adequate. Aurora finds it unsettling that, after more than three years of consulting on the DDA regime (with the review commencing over four years ago), the Authority is asking questions we would have expected to see at the start of the review process[13], and is now implying that the DDA regime it has been developing over this time may not be adequate.

Given the Authority's concerns, and despite the extended period the review of use-of-system agreements (UoSAs) has taken so far, it may be worth the Authority revisiting its DDA workstream to determine what, if any, further policy work is required before implementing the DDA (or alternative network access arrangements). We see this as a separate workstream to the Mass Participation consultation, with links between the two limited to the fringes.

The Authority might find it useful to draw on the precedent set by the access regime under the Telecommunications Act, rather than reinventing the wheel. The Authority's desire to ensure "*access would not be offered on a take-it-or-leave-it basis*"[14], for example, would be resolved by the Telecommunications Act's requirement for access seekers and providers to negotiate in good-faith[15]. The Commerce Commission uses the good-faith negotiation requirement as a trigger to determine whether it should intervene.

The consultation paper also raises the spectre of corporate and ownership separation, but leaves hanging whether the Authority considers these to be options it should consider, and/or whether a more heavy-handed access regime than the proposed DDA regime is required.

We were somewhat surprised that the Authority suggested the Commerce Commission has "*employed*" "*a weak form of ring-fencing ... referred to as accounting separation*"[16]. The consultation paper doesn't make it clear whether the Authority has particular concerns about the accounting separation regime the Commerce Commission has established (and is fine-tuning through the IMs review), or whether this is simply meant as a factual observation that corporate and ownership separation are more heavy-handed and invasive forms of regulation. If the Authority has concerns about the adequacy of the accounting separation requirements this should be transparently raised as part of the Commission's IMs review.

8 Managing vested interests

In looking at the potential problems that could arise due to new and disruptive technology, it might be useful for the Authority to consider who has the most to lose, and what kind of incentives and

[11] Electricity Authority. (2017). *Enabling mass participation in the electricity market*, paragraph 5.5.
[12] Electricity Authority. (2017). *Enabling mass participation in the electricity market*, paragraph 5.6.
[13] Questions 6 to 8 in the consultation paper ask about questions such as whether an open access regime is required, and how effective existing arrangements are.
[14] Electricity Authority. (2017). *Enabling mass participation in the electricity market*, paragraph 5.3 b).
[15] The Commerce Commission has had the advantage, over the Electricity Authority, that the access regime for telecommunications was prescribed in legislation and it could focus on implementation rather than developing a regime from scratch.
[16] Electricity Authority. (2017). *Enabling mass participation in the electricity market*, paragraph 5.11.

problems this might cause. Attempts can be made to use the regulatory environment as a barrier to entry to protect against development of new competitive threats.

This is illustrated by the lobbying by incumbent operators in the taxi sector trying to create roadblocks or additional costs for operators like Uber. The experience in France highlights this at its crudest.[17] [18]

Incumbent electricity retailers have adopted this type of defensive approach in New Zealand. It has played out during the Commerce Commission's review of its IMs, and the debate over how emerging technology impacts on the IMs and operation of Part 4.

Much of what electricity retailers have advocated, instead of facilitating new technology and innovation by EDBs, would result in EDBs incurring additional costs[19], or simply banning EDBs from engaging in such activity themselves; e.g., ownership separation. The kinds of arguments and positions the incumbent electricity retailers have advocated during the Part 4 IMs review seems to have spilled into the Authority's thinking in the Mass Participation Consultation Paper.

9 Concluding remarks

Aurora applauds the Authority for taking the initiative of thinking about how new and disruptive technology could impact the electricity sector, including in relation to mass participation, and whether this has implications for its existing "rule-book". Inevitably this adds an element of prophesy into the development of a problem definition. If the impact of new and disruptive technology could be anticipated with certainty it would not be disruptive.

While Aurora's submission raises concerns about whether the Mass Participation Consultation Paper has taken missteps, we don't see this as necessarily fatal. The Authority can readily put the review on an even keel by focussing on the development of a robust problem definition for the next stage of the review process, stepping back from the dominant focus on options for more (heavy-handed) regulatory intervention.

Given the heavy overlap between the Mass Participation Consultation Paper and the Commerce Commission's consideration of the impact of emerging technology in its IMs review, Aurora would like to see clear and transparent co-ordination between the two regulators on these matters. Elements of the Mass Participation Consultation Paper don't just skirmish the Commerce Commission's Part 4 responsibilities. They directly transplant one side of the debate about how the Commission should manage EDB incentives to innovate and operate efficiently, and separation requirements.

[17] https://www.theverge.com/2016/1/26/10832204/french-taxi-uber-strike-paris-vtc

[18] Similarly, competition limiting behaviour has been observed by supermarket and petrol companies using the resource consent process to thwart or stall competition by objecting to competitors' proposals for new retail outlets, which was why Part 11A "Act not to be used to oppose trade competitors" was added to the Resource Management Act in 2009.

[19] At its most egregious this includes a suggestion by retailers that EDBs include investment in new technologies such as batteries in their Regulatory Asset Base (RAB) at zero value.

10 Appendix: Responses to consultation questions

Q1. What is your view of the potential competition, reliability and efficiency benefits of more participation?

Q2. What is your view of the opportunities to promote competition and more participation in the electricity industry?

Q3. What other issues might inhibit efficient mass participation? Please provide your reasons.

Aurora considers these questions risk narrowing the focus of the Authority's review of the potential impact of new and disruptive technology on the electricity sector.

What the Authority labels "mass participation" is only one possible way new and disruptive technology could play out in the electricity sector.

Q4. What is your view of the opportunities for network businesses to obtain external help to provide aspects of the network service using competition or market mechanisms?

Q5. What do you think are the main challenges to be dealt with to increase the use of competition in supplying network services? What are your reasons?

These questions directly relate to how Part 4 of the Commerce Act is operated.

If there are substantial missed opportunities to save costs ("*a five per cent reduction in costs it could result in a $375 million cost saving*" *over a 10 year time period*") then the Commerce Commission's operation of Part 4 of the Commerce Act must be failing to achieve the objectives of promoting incentives for regulated suppliers to innovate (s52A(1)(a)) and improve efficiency (s52A(1)(b)).

Given these questions relate directly to the Commerce Commission's Part 4 responsibilities, we would expect this to be something the Authority would liaise directly with the Commission on, just as it has over other concerns the Authority has about how the Commission operates Part 4. We note the Authority has already written to the Commission in relation to the form of control and cost allocation.

Q6. What is your view on whether open access is required and what would be the elements for an effective open access framework?

Q7. How effective are the existing arrangements for open access? What are the problems?

Q8. What type of distributor behaviours and outcomes should the Authority focus on to understand whether changes are required to support open access?

These are the types of questions we would expect the Authority to have considered at the time it was establishing the Model Use of System Agreement (MUoSA) and/or when it commenced review of the MUoSA arrangements and consideration of whether to set the MUoSA as a mandatory or default agreement.

We are surprised the Authority is asking these questions now given it has been reviewing MUoSA arrangements for over four years now, with the first consultation over three years ago.

Q9. What changes to existing arrangements might be required to enable peer-to-peer electricity exchange?

Q10. What are the costs and the benefits of enabling peer-to-peer electricity exchange?

These questions illustrate that the Authority should undertake further work on problem definition prior to getting into options development.

Before the questions can be answered it needs to be determined what barriers or impediments to the establishment of peer-to-peer (P2P) electricity exchanges.

Our understanding is that for P2P to get greater adoption could require processes enabling customers to sign up to more than one retailer (which the consultation paper anticipates). We encourage the Authority to consider the issues for multiple trading relationship which would require some consideration of how customer consumption can be disaggregated between peer to peer consumption and grid energy.

The Authority may find it useful to discuss the experience with establishment of P2P exchanges with the existing operators.**Q11. What is your view of the possibility for, and impact of, any current or future blurring of participation type? What are your reasons?**

Q12. What types of participation are or might be prevented because the party is not recognised as a participant? What are the potential impacts?

Q13. What challenges might new forms of generation, such as virtual power plants, or small and dispersed generators, face in entering the market?

These questions may be useful to consider as part of problem definition development.

Q14. What changes might be required to the rule book to facilitate the emergence of virtual power plants or demand response?

Q15. Would the functioning of the market for hedges and PPAs and the availability of finance be improved if there were greater transparency of long-term prices and greater standardisation of terms and conditions for long-term contracts?

As per our response to questions 9 and 10, further work is required on problem definition development first.