

12 July 2017

Electricity Authority

Via email: [submissions@ea.govt.nz](mailto:submissions@ea.govt.nz)

## **Consultation Paper – Enabling Mass Participation in the Electricity Market**

Mercury welcomes the opportunity to comment on the Electricity Authority's consultation on enabling mass participation in the New Zealand electricity market.

Mercury is an electricity generator and retailer providing energy services to homes, businesses and industrial customers throughout New Zealand. We have a long heritage in renewable energy in New Zealand serving about 1-in-5 homes and businesses under the Mercury brand and other specialty brands. We also have proven capability and technical expertise in smart metering services and solar. Our goal is to be the leading energy brand in New Zealand, inspiring our customers, owners and partners by delivering value, innovation and outstanding experiences.

We support several areas of focus for the review but for some areas we consider there are unlikely to be net benefits at this stage of the market's development.

### **Support the focus on open access to distribution networks**

We are encouraged by the strong focus in the consultation paper on promoting open access to networks. We agree with the Authority's view that monopoly providers *".....have a privileged position. Distributors in particular...."* The Auditor General has also made observations that a short term focus for many distributors may be undermining effective management of its long-life assets. It also questioned some network owners' focus on non-core, unregulated activities.

We agree open access distribution networks are essential for promoting a level playing field for competition. We see the role for distribution networks is changing and needs to focus on becoming the platform to enable greater consumer participation rather than becoming the owners of the platform.

We support the Authority's assessment that distributors involvement in unregulated activities needs strengthening. The suggestion of ring fencing has been raised in the context of the recent Commerce Commission's Input Methodology review. We would be interested to understand whether the Authority considers it may have powers to enact such arrangements. Many other jurisdictions such as Australia and the UK have taken very proactive regulatory steps to introduce ring-fencing for monopoly service providers. We would be highly supportive of the Authority promoting this approach for New Zealand.

### **Access to data a key consideration**

There are several areas where access to and usage of data requires further consideration to better safeguard consumer interests and deliver the Authority's open access aspirations. Currently there is significant information asymmetry between distributors and third party service providers as to potential network investment opportunities. The Commerce Commission have raised concerns around the potential for distributors to favour related parties in network investment decisions. Mercury considers there are opportunities to enable greater participation and deliver more efficient outcomes by requiring distributors to disclose network investment opportunities and select options

based on a net benefit framework. There is significant precedence for this approach in transmission planning in New Zealand through the grid investment test process and in Australia distributors have been subject to a similar regulatory investment test for some time.

Access to consumer consumption data by distributors has also become an area of increased attention. Consumption data may be legitimately requested by distributors from retailers for network planning purposes. However, such data also has value in competitive markets for investments in emerging technologies, like batteries and solar, which increasingly some distributors are moving into competitively. Further, the increasing granularity of consumption data means it can potentially be linked to individuals and therefore becomes personal in nature and requiring greater protection. The Office of the Privacy Commissioner has recently raised concerns about distributor data requests and the need to ensure data is kept private via aggregation and that clear data privacy policies are developed.

Mercury considers the any default distribution agreement developed by the Electricity Authority should include provisions to ensure consumer data is only used for network planning purposes and subject to audit and penalty provisions. We note a further benefit of ring-fencing is that it would also provide an additional level of protection for consumer data.

### **Market will deliver increased consumer participation**

Mercury's considers the highly competitive nature of the retail market means that if there is significant consumer demand for products and services that enable greater consumer participation then they will be delivered. There is already significant evidence of consumer focussed innovation occurring in the market and this will continue to accelerate. It is highly unlikely the majority of individual consumers will ever want to register to become direct participants in the wholesale and retail markets. Instead they are more likely to use a third party service which makes it easy for them to participate and rewards them for doing so.

Given the above, we would be highly concerned if the Authority took the view that it might be necessary to consider significant reforms to the current market arrangements. References to the view that the current gross pool market model may not be compatible with Peer-to-Peer (P2P) trading are an example here. Given there is already a viable product offering for a P2P service that works within the existing market framework it is highly questionable as to what problem might be trying to be solved by further consideration by the Authority. The costs across the supply chain from a fundamental change to the market model would be so great that it seems inconceivable there could ever be net benefits from reform to enable participation in a P2P market that 99% of consumers could not participate in currently by virtue of not having any form of distributed generation. In comparison, the Authority's focus on open access for distribution networks will benefit the vast majority of consumers and in our view is where the Authority should focus its attention.

### **More diverse sources of electricity supply and demand response could improve competition**

We were pleased to note the Authority raises that there are limitations in the Code around batteries being able to offer ancillary services. We had raised this issue early this year with the Authority as we see it as an important area to increase participation. However, verbal indications from the Authority lead us to understand changes may not be achievable due to subsequent changes to subordinate legislation. At the time of this submission we have yet to receive any formal response from the Authority so are unclear as to the current status of this work.

One aspect that hasn't been addressed is the level of support or services available through larger scale generation facilities. There is currently a bias towards the development of small scale and embedded generation as network and transmission support services. However there are opportunities for encouraging the construction of large scale generation plant which could playing a significant role in transmission and distribution cost deferral. Transpower have traditionally been extremely hesitant to underwrite new generation investment of this nature from a "grid support" point of view. Such participants are expected to largely respond to nodal price signals rather than also responding to grid support type contracts.



Access to remuneration for services supplied to the market is crucial. Whoever provides services needs to have in place a contractual agreement to ensure there is a legal basis for provision and remuneration of services. This will also ensure any contracts that are inherently unfair to consumers will receive appropriate oversight. Mercury would envisage that these types of contracts will also outline the appropriate use of consumer data and how this data may be exchanged with third parties.

### **Trading behaviour**

Mercury would suggest the authority take the opportunity to ensure any changes to the participation code where a standard of behaviour is required are clear and concise. As we have recently observed there have been instances where participants have behaved in a manner they interpreted as aligning with their obligations only to have this behaviour questioned by the Authority. Mercury would suggest issues such as the definitions relating to appropriate trading behaviour are clear.

### **Monitor, inform and educate**

In general Mercury supports this work however we would suggest that the Authority focus on balanced education of consumers, participants and interested parties who may be impacted by current or future market conditions. Frameworks need to be developed that ensure a competitive level playing field with clearly defined obligations which would enhance the authorities' ability to monitor market dynamics. Change for the sake of market change will not be an efficient process in our view.

If you have any questions on the above submission please Andrew Robertson, Regulatory Adviser 09 308 8276 or [andrew.robertson@mercury.co.nz](mailto:andrew.robertson@mercury.co.nz)

Yours sincerely

A handwritten signature in black ink, appearing to read 'Nick Wilson', with a horizontal line drawn above it.

Nick Wilson  
**Manager Regulatory and Government Affairs**



Question	Business Response
<p>Q1. What is your view of the potential competition, reliability and efficiency benefits of more participation?</p>	<p>Increased competition for distribution services could have a material impact on the efficiency of network investment. Requiring the least cost market option to be selected could result in a reduction in or need for customised price path applications by distributors and therefore limit the need for increased network costs and possibly lead to overall cost reductions for network services.</p> <p>Open access to distribution services should also be positive for reliability in that it would allow more diverse set of solutions to be delivered and the much more rapid adoption and change out of new technologies. It is crucial that there is an open and competitive market for new services to ensure the most robust option delivers the greatest benefit.</p> <p>While we have not considered in detail one question raised is does enabling mass participation also increase the likelihood of participate failure and what mechanisms if any would be needed to manage this risk?</p> <p>As the Authority has noted, there has been an increase of circa 250% in the number of energy retailers in the past five years, with more expected in the future. If we overlay the potential increase in commercial offerings available to consumers with similar numbers of participants, the market is likely to become very crowded. This may create greater disruption as some models inevitably fail and are consolidated.</p>
<p>Q2. What is your view of the opportunities to promote competition and more participation in the electricity industry?</p>	<p>As per our cover letter we agree with the Authority that the focus should be on open access for distribution services as this will provide the greatest long term benefit to the vast majority of consumers. There does not appear to be any material barriers to the market delivering innovative products and services to enable more individual participation in the retail market. However there is a significant risk of substantial disbenefits resulting from regulatory change to market settings to potentially enable P2P trading for example which only is accessible to an extremely small number of consumers currently.</p>
<p>Q3. What other issues might inhibit efficient mass participation? Please provide your reasons.</p>	<p>The current information asymmetry between distributors and third party service providers and distributors not required to provide open tendering for solutions on a consistent basis (as outlined in our cover letter).</p> <p>Ensuring that consumer consumption data that distributors receive for network planning purposes is not used to favour competitive unregulated parts of their business is also a priority. Consumption data has value in a wide range of applications including for network planning and enabling new forms of business innovation and customer participation in the market.</p> <p>There are currently no barriers to consumers and their third party agents getting access to consumption data. However there are costs involved with collecting and maintaining the data and metering equipment, as well as the development of new services and innovation. These costs are incurred by the Meter Equipment Provider (MEP), who contracts with the retailer or distributor for the use and maintenance of the meter at a property on a competitive basis.</p> <p>Mercury therefore supports cost reflective and market based provision of data to ensure a level playing field for all potential business applications both present and future. We do not believe there are any barriers to the provision of data to who are able to enter into commercial negotiations with MEPs for data access.</p> <p>Mercury notes that this does not preclude additional or existing participants</p>



	<p>entering into a direct contract with a MEP for provision of other information that may be beneficial regarding network support services (e.g. voltage fluctuations) and could result in further advances and opportunities in the provision of metering devices. This also aligns with the Authority's view where different MEP services or possible participant classes could be utilised for data identified and required to settle unmetered loads.</p> <p>Mercury considers the any default distribution agreement developed by the Electricity Authority should include provisions to ensure consumer data is only used for network planning purposes and subject to audit and penalty provisions. We note a further benefit of ring-fencing is that it would also provide an additional level of protection for consumer data.</p>
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?	<p>Mercury fully supports network businesses exploring external options (and not expressly selecting technological solutions or favouring related parties) when considering potential network solutions. Refer to our cover letter for further discussion.</p> <p>Mercury is also aware that currently some distributors are testing multiple solutions with costs possibly being borne by consumers (V2G, P2P, first generation batteries) rather than looking for partnerships where costs and benefits could be shared.</p> <p>We support the view that "network businesses can buy network support from a range of parties using competitive tendering or some other market mechanism"</p>
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?	<p>Mercury is of the opinion consumer data protection is a key concern and will be interested to understand the Authority's view when its data paper is published later this year.</p> <p>As the Commerce Commission has highlighted, the utilisation of related parties for network services is potentially flawed due to transparency and decisions based upon accounting treatments rather than least cost solutions.</p>
Q6. What is your view on whether open access is required and what would be the elements for an effective open access framework?	<p>Mercury fully supports open access and sees it as the highest value focus for the Authority. Elements of an effective framework would include requiring distributors to provide a more detailed statement of opportunities within the network to provide services, an open process for third party participants to tender services and the development of a transparent net benefit framework where the most efficient solution was procured. This could be based on the same principles that underpin Transpower Grid Investment Test and the Regulatory Investment Test for Distribution that is implemented in Australia.</p>
Q7. How effective are the existing arrangements for open access? What are the problems?	<p>Mercury's view is that the current arrangements are not effective. Currently distributors have incentives to favour related parties to provide services and use regulated funds to stifle competition for emerging technology. We refer to the issues raised in the ERANZ submission to the Authority which document well retailers concerns as expressed to the recent Commerce Commission review.</p>
Q8. What type of distributor behaviours and outcomes should the Authority focus on to understand whether changes are required to support open access?	<p>Refer to Q7. Mainly we consider the Authority should focus on distributor behaviours and incentives that act to limit competition for alternative products or services and consider how best to address these. We outline our views in response to Q6.</p>
Q9. What changes to existing arrangements	<p>Refer to our cover letter. We do not see that there are any material barriers to enabling P2P currently as evidenced by at least one viable commercial offering</p>



might be required to enable peer-to peer electricity exchange?	currently and others proposed. The market will deliver more innovation in this area if there is significant consumer demand. We are highly concerned that given the extremely low penetration of distributed generation the Authority may be considering material changes to market arrangements which could have significant impacts.
Q10. What are the costs and the benefits of enabling peer-to peer electricity exchange?	Refer to our cover letter. The costs could potentially be prohibitively high and the benefits insignificant if the Authority is seriously considering material changes to the gross pool model. We do not see a need for enabling P2P given the market is already delivering this innovation for consumers and will continue to do so if demand increases.
Q11. What is your view of the possibility for, and impact of, any current or future blurring of participant type? What are your reasons?	<p>Mercury agrees that the level and type of participation in the electricity market will change and that it would be prudent for the authority to correctly classify participants based upon the services they provide to the market.</p> <p>We consider it appropriate for participant classes to aggregate services on behalf of multiple consumers or service providers. However it is crucial to ensure that the obligations remain with the participant who has the arrangement with the market. This would ensure that highly engaged prosumers (being engaged as participants) and aggregators of services are aware, and become responsible for appropriate obligations.</p> <p>It would be inefficient and likely unworkable to include obligations in the participation code that would apply to general consumers as they would not, and shouldn't need to have, a detailed understanding of the code obligations. It would be a perverse situation where consumers are being identified as breaching their code obligations and the Authority choosing to pursue them through for example the rulings panel.</p>
Q12. What types of participation are or might be prevented because the party is not recognised as a participant? What are the potential impacts?	<p>Whilst Mercury is of the view that it doesn't provide a level playing field, there is nothing precluding participation being on a partnership basis with existing participants (as we have seen starting to emerge).</p> <p>Mercury also notes that currently definitions in the code, e.g. Refer 7.19 – definitions of ancillary services (primarily instantaneous reserves) are not sufficiently technology agnostic and will stifle more efficient sources of supply unless the Authority acts swiftly.</p>
Q13. What challenges might new forms of generation, such as virtual power plants, or small and dispersed generators, face in entering the market?	Mercury is concerned that without a competitive level playing field anyone able to roll out inefficient solutions under the RAB model could smother investment by other participants and interested parties.
Q14. What changes might be required to the rule book to facilitate the emergence of virtual power plants or demand response?	<p>Refer to our response to Q12</p> <p>The code needs to be technology agnostic <u>today</u> or virtual power plants and demand response business cases will be stifled.</p> <p>The entire international, peer reviewed literature on mass participation and disruptive technologies agree that the business cases rely on a "stack" of value streams. Issues around the definitions of ancillary services/reserves erode the value stack and can often be the difference between an investment going ahead or not. The Authority also recognises that "all start-up businesses rely on finance." The absence of parts of the "value stack" due to an anachronistic rulebook will particularly disadvantage those newer entrants seeking finance as their business cases will appear less attractive to funders. This will leave the playing field for the</p>



	<p>more powerful incumbents to invest off the back of their larger balance sheets.</p> <p>The Authority cannot expect the technology to be deployed and “trialled” before contemplating Code changes for ancillary services.</p>
<p>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?</p>	<p>Mercury is unsure of the potential issue the Authority is seeking to address. Mercury is aware that there are currently hedge contracts on the ASX that go out many years in 0.1 MW increments.</p>

