



11 July 2017

Submissions
Electricity Authority
By email: submissions@ea.govt.nz

Enabling mass participation in the electricity market – Consultation paper

Meridian supports the Authority's efforts to enable more participation in the electricity industry, promote competition and choice, and deliver benefits to consumers. We are excited about the opportunities and benefits that mass participation could provide in future. Meridian also appreciates the opportunity to identify barriers to competition and innovation that are not being considered elsewhere on the Authority's work programme.

Meridian supports the Authority's work on transmission pricing, distribution pricing, data and data exchange, a default distribution agreement, and multiple trading relationships.¹ These projects are all critical to enable mass participation and the benefits that potentially flow from it. We encourage the Authority to progress these projects as a matter of priority.²

Meridian has considered the remaining "gaps" identified by the Authority in the consultation paper. Meridian agrees in principle that further work might be useful in these areas. However, any regulatory changes must be based on robust cost benefit analysis and we look forward to engaging with the Authority in more detail as work progresses. In addition, there are broader regulatory concerns that the Authority on its own cannot fully address.

Meridian has reviewed (in draft) and supports the submission made by ERANZ on behalf of member companies.

¹ In respect of multiple trading relationships, Meridian considers that changes to enable this might be beneficial; however, there are multiple issues relating to set up costs, meter and data responsibilities, complexity of reconciliation and billing that will first need to be resolved.

² Particularly the review of the transmission pricing methodology guidelines. There are significant inefficiencies in the current methodology that can only be addressed through the Authority's review.

Competition can help provide the network service

We agree with the Authority's view that new technologies may mean some aspects of the traditional monopoly network service can be obtained from third parties. On the one hand, network businesses have opportunities to defer sunk costs in new assets and avoid costs associated with owning and controlling those assets. However, on the other hand, network businesses may be reluctant to change their traditional business models because of concerns about lack of control over the price and quality of network services.

It remains to be seen whether or not distributors will choose to relinquish some control in order to avoid costs. Additional incentives or rules might be required in order to enable competition and the resulting benefits for consumers.

Open access to distribution networks will promote competition

Open access to distribution networks provides a level playing field that enables participation and promotes competition and confidence that access to network infrastructure is on efficient and non-discriminatory terms.

Meridian supports the Authority's ongoing work on distribution pricing principles. Meridian is also supporting industry-led efforts to adopt more efficient distribution pricing. Efficient and, where possible, standardised charging will be a vital component of any future open access regime. We agree with the Authority that without more use of service-based charges (capacity, maximum demand, and/or time-of-use charging) the potential for inefficient investment is significant.

Similarly, Meridian supports the Authority's work on default distribution agreements. There are substantial costs associated with negotiating distribution agreements. Providing retailers with a default standardised agreement will reduce transaction costs and lead to more open and equal access to distribution services. Ultimately, this will lead to a more competitive retail market and benefits for consumers.

We look forward to contributing to the Authority's work on data and data exchange. Access to information will be critical to ensure that new business models can meaningfully engage with the market and compete with existing participants. Meridian requests that this project also consider transparent and mandatory public forecasting of network service requirements that enable market-based solutions to be developed by third parties.

Even if the Authority makes changes to level the playing field, there is a risk that the benefits of competition and mass participation will not be realised. There is merit in looking at distributors' involvement in unregulated activities and the appropriateness of existing ring-fencing thresholds. Some steps in this direction might require amendments to primary legislation that are beyond the Authority's jurisdiction; however there is also a wide variety of things the Authority can do itself. Meridian considers that further work may be required on the thresholds that trigger corporate separation and arm's-length rules for distributors and connected generation or retail.³ The current thresholds may be too high to promote competition in potentially small-scale, emerging markets for network services based on new technologies and innovation. For example, 50 MW of generation through the discharge of batteries may be enough for a distributor to gain a dominant position in this emerging market and deter new entrants.

Peer-to-peer platforms

As noted by the Authority, peer-to-peer platforms for electricity are already being established in New Zealand to allow households with solar panels to sell surplus electricity to other households. Those engaging in the activity may be better placed to identify any regulatory barriers, however, it seems that none to date have been insurmountable.

Meridian encourages the Authority to carefully assess the costs and benefits of any changes to enable peer-to-peer platforms. Consumer choices and competition aside, the benefits of peer-to-peer platforms seem based on the desirability of renewable electricity generation. Given the dominance of renewable generation in New Zealand⁴ there may be less benefits derived from peer-to-peer networks here compared to other countries.

Recognition of participants

Meridian agrees it is important that participants and non-participants are correctly identified. We support further work in principle but have no specific comments at this time.

³ Section 76 of the Electricity Industry Act 2010 currently requires corporate separation and arm's-length rules for distributors undertaking generation on their own network with a total capacity greater than 50 MW and for distributors involved in retailing more than 75GWh of electricity in a financial year.

⁴ In 2015 81 per cent of total electricity generation was from renewable sources. The Government has also set a target of 90 per cent renewable generation by 2025.

Financial challenges for new entrants

In section 8 of the consultation paper, the Authority considers changes to promote efficient investment in new forms of smaller and medium-sized generation and demand response. Meridian agrees with the Authority's view that the electricity and finance markets are workably competitive markets, and long-term hedges and power purchase agreements are likely to be available if required.

We do not see how greater transparency of long-term prices can be achieved. Prices on the ASX futures market are already transparent and participants submit contract details through the Electricity Hedge Disclosure System. Extending ASX trading beyond the current window may not provide significantly more transparency as 2020 contracts are not highly traded on ASX now and the further away the forecast priced period, the more thinly traded it is likely to be.

Greater standardisation of terms and conditions for long-term contracts might lead to reduced transaction costs for smaller businesses. Meridian supports the June 2015 findings of the Wholesale Advisory Group and the recommendation that the Authority (or an industry body like the New Zealand Financial Markets Association) could develop a standard contract to improve the efficiency of trading and to provide an option that reduces barriers to entry for less well-resourced parties. Meridian would not support going further to mandate contract terms due to the inflexibility and costs associated.

Low Fixed Charge Regulations

Further consideration of the Electricity (Low Fixed Charge Tariff Option for Domestic Consumers) Regulations 2004 is warranted. While this is beyond what the Authority can consider acting on its own, it is part of the broader regulatory framework that significantly distorts price signals and the efficiency of mass participation. We appreciate the Authority's efforts to clarify some of the issues around the low fixed charge in the context of distribution pricing reform. These clarifications have been helpful but compliance with the regulations continues to complicate decisions around pricing reform. In addition, it is clear that the regulations substantially increase the cost of charging electric vehicles and suppress their uptake while inefficiently over-incentivising the uptake of solar.⁵

⁵ See for example research by Concept Consulting: <http://www.concept.co.nz/publications.html>

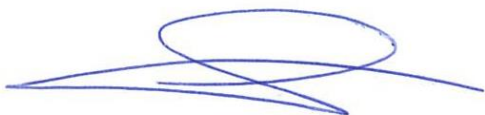
Implementation

Evolving technologies like solar panels and batteries involve significant investments by consumers in lasting assets. Clear communication from the Authority regarding the timing and implications of potential regulatory developments is important to give the certainty consumers require for efficient, 'no regrets' choices to be made.

Appendix A provides Meridian's responses to specific consultation questions.

Please contact me if you have any questions relating to this submission.

Yours sincerely

A handwritten signature in blue ink, consisting of a large loop and several horizontal strokes.

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Responses to consultation questions

| | Question | Response |
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| 1 | What is your view of the potential competition, reliability and efficiency benefits of more participation? | <p>Meridian agrees with the Authority's view that there are multiple potential benefits that could flow from more participation in the electricity market.</p> <p>We cannot know the extent to which benefits might be realised in future. For many people the motivation for investing in solar panels or a battery is increased energy independence and control. Given that driver, it is unclear whether those consumers would be willing to give up some control in order to provide network support services. Furthermore it is possible that many customers will favour simplicity and not having to think about their energy consumption or provision of services.</p> <p>Therefore, Meridian supports the Authority's intentions but suggests that the costs and benefits of implementing changes will need to be assessed and monitored over time to avoid inefficient or premature implementation.</p> |
| 2. | What is your view of the opportunities to promote competition and more participation in the electricity industry? | <p>Meridian is excited about the opportunities and benefits that mass participation could provide in future and supports the Authority's work to remove regulatory barriers and enable mass participation. The Authority's work programme has already identified the most critical issues such as transmission pricing, distribution pricing, default distribution agreements, and data and data exchange. We encourage the Authority to focus on these issues as a priority.</p> <p>While in principle we support further work on the remaining "gaps" identified by the Authority, the costs and benefits will need to be carefully assessed.</p> <p>There may be non-regulatory opportunities to promote competition and mass participation through greater consumer education and engagement.</p> |
| 3. | What other issues might inhibit efficient mass participation? Please provide your reasons. | <p>Reconsideration of the Electricity (Low Fixed Charge Tariff Option for Domestic Consumers) Regulations 2004 (the regulations) is warranted. While the Authority cannot change the regulations they are a key part of the broader regulatory framework that distorts price signals and the efficiency of mass participation.</p> <p>We appreciate the Authority's efforts to clarify some of the issues around the regulations in the context of distribution pricing reform. These clarifications have been helpful but compliance with the regulations continues to complicate decisions around distribution pricing reform. In addition, the regulations substantially increase the cost of charging electric vehicles and suppress their uptake while inefficiently over-incentivising the uptake of solar.</p> |

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| 4. | 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>As new technologies become increasingly pervasive, there should be opportunities for third parties to help to provide aspects of the network service. Competition of this nature would likely provide benefits to consumers. Currently it seems that network businesses are making the decision to invest in assets like batteries themselves rather than looking to the market to help them provide the most efficient solution.</p> <p>To enable third parties to compete it is critical that there is a level playing field. Meridian supports the further work signalled by the Authority on transmission pricing, distribution pricing principles, default distribution agreements, and data and data exchange. Similarly, Meridian supports industry led distribution pricing reform efforts. These projects have the potential to deliver more efficient price signals and a more level playing field.</p> <p>However, there may be merit in going further to look at distributors' involvement in unregulated activities and the appropriateness of existing ring-fencing thresholds. This would likely require amendments to primary legislation, in particular the triggers for corporate separation and arm's-length rules for distributors involved with connected generation or retail.</p> <p>European energy regulators are moving towards a requirement that distributors act as neutral market facilitators performing regulated core activities and not activities that can efficiently and practicably be left to a competitive market. This includes a prohibition on distributors owning or operating energy storage and EV charging infrastructure. This is seen as necessary to ensure that the benefits of competition are realised and distributors do not favour their own network solutions over potentially cheaper services, thereby raising costs and deterring investment and innovation.</p> <p>Meridian would support any rules or incentives for distributors to neutrally procure (rather than own or operate) network services based on batteries or similar technology, in order to ensure that networks develop in an efficient manner.</p> |
| 5. | 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? | See 4. above |

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| 6. | What is your view on whether open access is required and what would be the elements for an effective open access framework? | <p>Open access to distribution networks is required to enable more participation and the dynamic efficiency benefits of competition.</p> <p>The Authority has identified the key elements of an effective open access regime. Meridian supports the Authority's ongoing work on transmission pricing, distribution pricing principles, default distribution agreements, and data and data exchange. In particular:</p> <ul style="list-style-type: none"> • efficient and, where possible, standardised charging that provides efficient price signals will be a vital component of any future open access regime; • providing for a default standardised distribution agreement will reduce transaction costs and lead to more open and equal access to distribution services; and • access to information will be critical to ensure that new business models can meaningfully engage with the market and compete with existing participants. <p>There may be merit in looking at distributors' involvement in unregulated activities and the appropriateness of existing ring-fencing thresholds. This would likely require amendments to primary legislation.</p> |
| 7. | How effective are the existing arrangements for open access? What are the problems? | <p>Meridian is broadly comfortable with:</p> <ul style="list-style-type: none"> • the functioning of price and quality regulation and information disclosure regulation by the Commerce Commission under Part 4 of the Commerce Act 1986; • the process and terms for connecting distributed generation in Part 6 of the Code; and • the benchmark agreement with terms for the relationship between Transpower and parties connecting to the grid. <p>However:</p> <ul style="list-style-type: none"> • existing transmission and distribution pricing methods do not provide efficient price signals; • negotiating distribution agreements is costly; • there are large information asymmetries that are not addressed by the existing information disclosure requirements, and these make it difficult for new businesses to enter the market for network services; and • there is a risk that distributors may favour their own network solutions over potentially cheaper services, thereby raising costs and deterring investment and innovation. |
| 8. | What type of distributor behaviours and outcomes should the Authority focus on to understand whether changes are required to support open access? | <p>We would encourage the Authority to consider:</p> <ul style="list-style-type: none"> • the extent of distributor investment in batteries, EV charging, and similar technology; • the availability and timeliness of information supplied by distributors regarding future network needs; and • where alternative network service providers exist, the process followed by distributors to decide whether to procure those services from the market, from their own subsidiaries, or by investing in assets themselves. |

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| 9. | What changes to existing arrangements might be required to enable peer-to-peer electricity exchange? | Peer-to-peer networks are already operating. The parties operating those networks will be best placed to comment on the extent of any regulatory barriers. |
| 10. | What are the costs and the benefits of enabling peer-to-peer electricity exchange? | <p>There are potential competition benefits from enabling peer-to-peer networks in New Zealand. They provide consumers with another business model to choose from and could lead to greater efficiency.</p> <p>However, for consumers the benefits of peer-to-peer platforms seem based on the desirability of renewable electricity generation. Given the prevalence of renewable generation in New Zealand, there may be less benefit from peer-to-peer here compared with other countries (and therefore less uptake).</p> <p>There may be high costs involved to reconcile a range of contracts for supply across different networks and retailers. The extent to which blockchain might mitigate those costs is yet to be seen.</p> <p>If uptake is low, the costs of any regulatory change to enable peer-to-peer networks may not be justified. We encourage the Authority to base any regulatory changes on robust cost benefit analysis.</p> |
| 11. | What is your view of the possibility for, and impact of, any current or future blurring of participant type? What are your reasons? | Meridian agrees in principle that there may be issues to resolve in this space. We look forward to reading submissions and further analysis from the Authority on the extent of any issues. We do not have further comments at this stage. |
| 12. | What types of participation are or might be prevented because the party is not recognised as a participant? What are the potential impacts? | See 11. above. |

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| 13. | What challenges might new forms of generation, such as virtual power plants, or small and dispersed generators, face in entering the market? | As is currently the case, access to credit will likely be the biggest challenge for new entrants. Many small businesses fail, not because of bad business models, but because of constrained cash-flows. |
| 14. | What changes might be required to the rule book to facilitate the emergence of virtual power plants or demand response? | <p>Whether or not new entrants can gain access to credit to support new business models is not something the Authority should try to address via the Code.</p> <p>As identified by the Authority, the current Code may prevent virtual power plants from providing instantaneous reserves. The types of instantaneous reserves identified in the Code are partly loaded spinning reserve, tail water depressed reserve, and interruptible load. Batteries would be physically capable of providing instantaneous reserves but do not seem to be recognised in the current Code.</p> |
| 15. | 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>Meridian agrees with the Authority's view that the electricity and finance markets are workably competitive markets, and long-term hedge and power purchase agreement contracts are likely to be available if required.</p> <p>We do not see how much greater transparency of long-term prices can be achieved. Prices on the ASX futures market are transparent and participants submit hedge contract details through the Electricity Hedge Disclosure System. Extending ASX trading beyond the current window would not provide more transparency, only less reliability. As it stands, ASX 2020 contracts are not highly traded.</p> <p>Greater standardisation of terms and conditions for long-term contracts might lead to reduced transaction costs for smaller businesses. Meridian supports the June 2015 findings of the Wholesale Advisory Group and the recommendation that the Authority (or an industry body like the New Zealand Financial Markets Association) could develop a standard contract to improve the efficiency of trading and reduce barriers to entry for less well-resourced parties. Meridian would not support going further to mandate contract terms due to the costs resulting from inflexibility.</p> |