



28 September 2021

Submissions
Electricity Authority

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

Updating regulatory settings for distribution networks

Meridian welcomes the opportunity to comment on the discussion paper *Updating regulatory settings for distribution networks*. References to Meridian in this submission are to both the Meridian and Powershop brands. We have read and in general support the submission made by ERANZ. Meridian's submission therefore focuses on any points of difference for Meridian or additional detail to supplement the ERANZ submission.

Meridian agrees that distribution networks have a critical role to play in supporting New Zealand's transition to a low emissions economy. They provide essential infrastructure and will become even more critical as additional parts of the economy transition from fossil fuels to electricity.

We agree that there is significant potential for new technology and distributed energy resources (DER) to support an affordable transition to a low emissions economy and to help to provide flexibility to manage future challenges to supply and reliability. Importantly, DER has the potential to offer a wide range of benefits to consumers, much broader than just reductions in network infrastructure investment. DER also has potential value to participants in competitive markets who might, for example, see opportunities to offer cheaper reserves or manage peak energy costs for consumers. There is strength in a diversity of views about the best use of DER and ultimately consumers will be best placed to decide the use of DER that best suits their needs.

This submission is structured to address each of the topics raised in the discussion paper which are relevant to Meridian:

- Access to information on power flows and hosting capacity
- Market settings for equal access
- Operating agreements
- Capability and capacity.

Most of our key points are contained within the body of this submission. However, we have made some comments on some of the specific questions raised in the consultation. These comments are contained in Appendix A.

Access to information on power flows and hosting capacity

Consistent with the ERANZ submission, Meridian believes that access to information on appropriate terms is important. High quality near real-time data will be essential if the potential for DER and new technologies is to be realised.

While the discussion paper is focused on power flows and hosting capacity information about low-voltage networks, it also discusses broader data sharing issues within the industry.

Existing processes and regulation seem appropriate for some data flows and in other areas further consideration may be warranted:

- *Network requests for consumption data* – This has been adequately addressed by the default agreement for the provision of consumption data in Schedule 12A.1, Appendix C of the Code. This default agreement provides a robust framework for the regular sharing of consumption data with networks for permitted purposes and in such a way that consumer privacy is protected. Further improvements could be made to codify the industry agreed tweaks regarding the combining of data sets for permitted purposes. Those changes have been widely discussed by ERANZ and the ENA and their adoption in the Code would make the process to form data agreements between retailers and distributors more efficient.
- *Access to consumption data by consumers and their agents* – As noted in the discussion paper, the Code requires that consumers have access to their

consumption data within five days. Meridian and Powershop customers can access their data immediately through the app or website. Consumers can also give permission for their data to be shared with an agent such as a DER provider. While improvements have been made to streamline access by agents, further changes could be warranted to make data access more instantaneous. Meridian suggests that changes of this kind would best be addressed through the Consumer Data Right under development by MBIE.

- *Access to information on power flows and hosting capacity* – Meridian sees no barrier to distributors contracting with metering equipment providers (MEPs) for access to information about their low voltage network. We are not aware of any barriers in the Code and to the extent any barriers exist due to contractual arrangements with retailers, we would expect those to be easily overcome commercially – certainly Meridian would be happy to enable distributors to collect this information directly from MEPs. Information on power quality and flows is not personal information so does not need to come through retailers who have the customer relationship. In most cases, retailers do not hold this information as they have no current use for it and do not pay MEPs to provide it. Once distributors, working with MEPs, have built an understanding of their low-voltage networks including any constraints, it will be critical for that information to be made readily available to the public. Meridian sometimes experiences challenges accessing basic information about some networks like the location of lines. Access to quality information about networks in a consistent and reliable way would facilitate a wide range of service providers to connect to and operate on networks more efficiently. This includes access to information that will enable firms contemplating investments in DER or firms operating DER to understand any network needs or limitations, enabling greater use of existing network capacity and reducing network costs. Access to this data would also enable DER providers to compete to provide services on a level playing-field with the same information as everyone else. Without open access to this data, distributors will always have an advantage in DER markets relative to other firms. We note that in Australia the Energy Security Board has come to the same conclusion and proposed that “monopoly network providers should be required to support greater transparency in local network performance and hosting capacity, emerging constraints, and voltage issues with the market.”¹

¹ Energy Security Board *Data Strategy Final Recommendations* July 2021 available at: <https://www.datocms-assets.com/32572/1630275857-esb-data-strategy-july-2021.pdf>

- *Timely information sharing on network outages* – Each distributor takes a different approach when communicating outage information to retailers on their network. This leads to issues that are broader than just the optimisation of DER. There is a significant opportunity to deliver better outcomes for consumers if retailers are consistently informed of outages and can build automated processes to communicate that with customers, particularly medically dependent customers. This could be achieved by mandating the use of electricity exchange protocols (EIEP5B as well as EIEP5A). The proposed changes to the Electricity Industry Act recently introduced to Parliament, once passed, would also offer the Authority greater ability to regulate default terms and increase standardisation and therefore the efficiency of default distribution agreements. An ongoing source of frustration for Meridian is the willingness of distributors to rewrite the recorded terms in their default agreements. This seems outside of what was contemplated from default agreements and erodes the efficiency gains that would otherwise be delivered by standardisation. A good example is the recorded terms on supply interruptions and how they will be communicated with retailers.

Meridian supports the consideration of a central meter data store or series of API arrangements for standardised data access (which is highlighted as a potential option if the issue is found to be significant). Accessing data via a single channel request would address issues around timeliness of data provision, standardisation, and competition. It would also help a wide range of industry participants to make more efficient investment decisions and reduce transaction costs for data sharing. It could also provide a way for aggregate data to be easily extracted, which could provide more opportunities for analysis (for example, linking into efforts to include energy consumption data in the Stats NZ Integrated Data Infrastructure).

We would like to see more detail around the potential design and implementation of a central meter data store or API arrangement. There are likely to be many practical issues to be worked through before a benefits case can be prepared. Rules governing access would need careful consideration to ensure consumer rights are protected and data is only used for proper purposes. A system would also have to be developed to fairly allocate the costs of data collection and storage to the various users of that data.

Market settings for equal access

Meridian strongly agrees with the Authority that the overarching objective should be to have a competitive market for non-network solutions.

Options considered to address issues relating to incentivising the use of non-network solutions (where they are more efficient than network solutions) and competition for flexibility services

Meridian believes that it is important that markets for DER are competitive in order to drive efficient outcomes for consumers in the long term and aid the transition to a low-emissions economy. For flexibility markets to reach their potential, it is essential that they are kept competitive. As part of this, care should be taken to ensure that market participants (such as distribution networks) do not use their position as natural monopolies to tilt the competitive playing field in their favour. The types of regulation the Authority might like to consider could include:

- As noted on page 3 of this submission, open access to information about networks including capacity constraints.
- Non-discrimination requirements to ensure that flexibility service providers can connect to and operate on networks on the same terms as say a subsidiary of the network company itself.
- Requirements for distribution networks to procure flexibility services from the least cost provider (to the extent this is not already addressed by regulation under Part 4 of the Commerce Act).
- Open access and common communication protocols to enable third parties service providers to use load control infrastructure, for example:
 - if a network owns load control infrastructure, they should make it available for retailers to use for the purposes of generation peak management;
 - likewise, if a retailer or other third party owned load control infrastructure, they would need to enable the network company to use it for the purpose of network management.
- Requiring networks to invest in DER through arms-length subsidiaries only and following a tender process in which other providers can compete with the subsidiary.

We think that distributors are well placed to positively influence the uptake of DER, given their area of expertise. Any regulation should be balanced against the positives that DER

will bring. Barriers to investment could have the effect of delaying investment and therefore diminishing the potential from DER.

Options for increasing competition for flexibility services

For clarity, Meridian does not support the option to enable multiple trading relationships (assuming what is meant by that is the complexity of multi-party reconciliation, billing, and sharing of network and other costs at a single ICP). It is not clear that this option would increase competition amongst DER or flexibility service providers. Multiple trading relationships are already possible through contractual arrangements between service providers and retailers or through the installation of a second meter. Forcing the industry and consumers to accept the costs of multiple parties simultaneously carrying out market functions at a single ICP would not result in any corresponding net benefit given the other avenues available to deliver the same outcome for consumers. This option has been considered in previous consultation papers and rightly not progressed.² Meridian's view remains unchanged from our previous submission.³

We would also like to note the view from IPAG that DER management should be carried out by flexibility traders, rather than by network owners (paragraph 6.48 of the discussion paper). This is because the economic value of DER is higher if it can be allocated to its highest use across all flexibility markets. We agree that this would be a more efficient market design.

Operating agreements

Meridian supports the development of a "DDA style" standardised default agreement for flexibility services. This could provide a useful starting point for agreements and would encourage consistency and fair terms across the 29 distribution networks. Without a default agreement there could be significant cost and administrative barriers to establishing flexibility services in multiple network regions. We note the practical challenges that might be involved in preparing a default agreement to cover the diverse range of potential DER providers. However, to the extent possible, standardisation of network agreements does reduce barriers and it improves efficiency for firms connected to or operating on multiple networks.

² See for example the consultation paper [Multiple Trading Relationships](#)

³ See our submission in response to the consultation paper linked in the footnote above: [23201Meridian.PDF \(ea.govt.nz\)](#) See also the report from the Competition Economists Group which was appended to the submission: [Economic case for intervention to promote MTRs \(ea.govt.nz\)](#)

Meridian's experiences in negotiating EV smart charging agreements

Meridian is currently working on rolling out EV chargers with smart features, which means that they have the ability to flex their output. Developing our charging network has required lots of interaction with network companies when setting up new connection points.

Our experience is that the distribution networks are often very interested in smart charging and willing to assist us. However, given the potential for load management, we have sought commercial terms to reflect the benefits from the smart features of our chargers. We have found that although the distribution networks agree that there is value in our offerings, they are not especially interested in negotiating terms to reflect this. Standard connection agreements do not easily enable flexibility agreements.

Since EV charging offers benefits from flexibility services, there is potential for retailers to offer cheaper controlled rates to customers (in exchange for an ability to call upon stored energy during network peak demands or to manage peak wholesale electricity prices). This in turn could drive benefits from reduced network upgrade costs. However, for retailers to be able to offer cheaper controlled rates, it is essential that the networks help by adjusting their own terms accordingly.

Capability and capacity

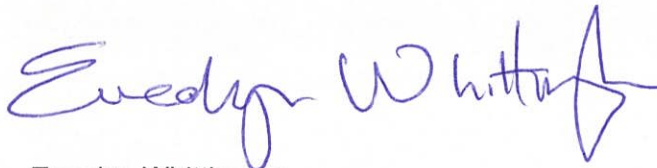
As noted in the paper, New Zealand has 29 distribution networks with varying capability and capacity to deal with the transition to a low-emissions economy with higher DER penetration. In our experience, they all have unique challenges and operational contexts. We support the options to encourage collaboration and joint ventures. These efforts would likely be low risk and result in positive outcomes. We think that there is merit in exploring the role of distribution systems operators in the longer-term.

Conclusion

We are optimistic about the potential for new (and existing) technology to aid in the transition to a low emissions economy. The CBA by Sapere presents a compelling case for enabling DER markets and removing any barriers. We support efforts by the Electricity Authority to encourage investment and ensure that there are appropriate regulatory settings in place.

Please contact me if you have any queries regarding this submission.

Nāku noa, nā

A handwritten signature in blue ink, reading "Evealyn Whittington". The signature is fluid and cursive, with a large, stylized 'E' and a distinctive flourish at the end of the last name.

Evealyn Whittington
Senior Regulatory Specialist

Appendix A: Responses to consultation questions

	Question	Response
1.	Have you experienced issues relating to a lack of information or uneven access to information?	Yes.
2.	What information do you need to make more informed investment and operation decisions?	More information about network hosting capacity and constraints would enable us to make more efficient and targeted investments in EV charging infrastructure.
3.	What options do you think should be considered to help improve access to information?	See the body of this submission.
10.	What flexibility services are you pursuing?	Meridian has announced our intention to develop a nationwide network of more than 200 EV chargers that we will install within the next three years. Meridian is also planning to invest in a 100MW battery in the North Island.
11.	Are flexibility services being pursued through a competitive process?	Yes.
12.	What options should be considered to incentivise non-network solutions?	As noted in the submission, we think that it is important that the market for flexibility services is kept competitive, as this will ensure efficiency and therefore a level-playing field for encouraging non-network solutions.
13.	What options would encourage competitive procurement processes for flexibility services?	See the body of this submission.
14.	Have you experienced difficulties with negotiating operating agreements for flexibility services?	See the body of this submission.
15.	Are the transaction costs of developing contracts a barrier to	Yes, the transaction costs to contract with many networks is a barrier. A company the

	entering the market for flexibility services?	size of Meridian can surmount this barrier, but it may present more of a challenge for new entrants in these emerging markets. The extent to which this is a barrier will depend on the business model of each flexibility service provider and whether they operate nationally or only in one or two networks.
16.	Would an operating agreement help lower transaction costs and level negotiating positions?	As noted in our submission, Meridian would support a default template operating agreement to help lower transaction costs.
17.	What kind of operating agreement would address the issues described in this chapter?	This could follow a similar format to the DDA but given the potential diversity of DER and flexibility providers the focus may need to be on minimum elements that might be in common for all DER and flexibility providers, rather than trying to deal with the specifics of every potential business.
18.	What are distributors doing to ensure their network can efficiently and effectively manage the transformation of networks?	Distributors are best placed to answer this question.
19.	How are distributors currently working together to achieve better outcomes for consumers?	Distributors are best placed to answer this question.
20.	Could more coordination between distributors improve the efficiency of distribution?	Yes.