27 June 2022

Submissions
Commerce Commission

By email: im.review@comcom.govt.nz

Process and issues paper for the Part 4 Input Methodologies review

Meridian appreciates the opportunity to provide feedback to the Commerce Commission on the Process and Issues paper, as part of the review of the input methodologies (IMs). Meridian's submission is focussed on identifying key topics or issues for consideration in respect of the regulation of electricity distribution businesses (EDBs) and Transpower.

This submission is structured around four key themes:

- Decarbonisation-driven investment requirements
- Innovation incentives that encourage collaboration
- The treatment of flexibility services and distributed energy resources
- Quality standards that encourage Transpower and EDBs to fully resource new grid connection enquiries.

Nothing in this submission is confidential.

Decarbonisation-driven investment requirements

Meridian agrees that the changing environment in which the electricity sector operates means it is important the IMs ensure that suppliers of regulated goods and services have incentives to invest and innovate to maintain reliable services, while responding to changing

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consumer preferences, technology, and other environmental factors, including climate change, consistent with outcomes in competitive markets.

Decarbonisation is likely to drive a step-change in investment for EDBs and Transpower given the expected increase in electricity demand driven by the electrification of transport and industrial process heat. Because of this change in investment need, Meridian understands that EDBs and Transpower may need to able to use a more forward-looking approach to forecasting for price-quality paths rather than an approach based on historic expenditure. In some cases where there is high confidence of demand growth, it may be prudent to enable investment to occur ahead of demand.

Meridian's Process Heat Electrification Programme was launched by Meridian in February 2021 to assist large customers in the switch from coal to electricity as a fuel source for their process heat. The programme targets two of the largest barriers to the decarbonisation of process heat – fuel price and long-term price certainty. For Meridian, it involves placing a commercial value on the reduction of carbon emissions and growth in South Island electricity demand to reduce the risks associated with potential closure of the New Zealand Aluminium Smelter. Sharp prices for fuel switching projects plus price certainty for ten years has led to a meaningful improvement to the viability of fuel switching projects. To date the programme covers eight customers in the South Island, and now has commitments that will reduce carbon emission by more than 130,000 tonnes per annum.

Meridian also supports customers in the programme to work with EECA to secure co-funding for capital costs through the GIDI fund. Meridian provides support for customers' funding applications which improves the overall project economics and competitiveness for funding. With the expansion of GIDI funding announced in the 2022 Budget, we expect to see increased uptake of process heat electrification. In areas where this could occur at pace, it may be prudent for EDBs and Transpower to be enabled to invest in network capacity ahead of the new demand. In Meridian's experience, the cost to alleviate network capacity issues can make or break an industrial decarbonisation project.

As well as encouraging regulatory settings that enable investment in network capacity ahead of demand growth, Meridian separately hope that the Electricity Authority will seriously consider distribution pricing regulation (akin to the transmission pricing methodology) to address the issue of first mover disadvantage on local networks. There are currently different approaches in each distribution network and the lack of a clear and consistent

approach to pricing to address first mover disadvantage could be a barrier to early industrial decarbonisation initiatives.

Innovation incentives that encourage collaboration

Meridian strongly believes that the regulatory framework should do more to encourage collaboration between EDBs, including collaboration on innovation and development of intellectual property regarding how best to utilise and dispatch flexibility services to manage network constraints. One example of this would be collaboration on the development of a small number of distribution system operators to price and dispatch flexibility services across multiple networks.

Meridian supports such collaboration given the number of EDBs of variable size and capability in New Zealand. We believe that there are significant efficiency gains that could be realised if EDBs collaborate on how to price and dispatch flexibility services rather than reinventing the wheel in every EDB across Aotearoa. Meridian is currently in conversations with industrial customers that are electrifying their process heat and based on those conversations we believe there is an opportunity to enable industrial demand flexibility through retention of old thermal boilers (perhaps run on biomass) alongside new electrode boilers.

Meridian sees value in seasonal flexibility to help manage dry year risk in the wholesale electricity market and in terms of Meridian's own generation portfolio. However, there is additional value that could be unlocked for customers from such arrangements if EDBs are able to quantify the value of flexibility to help reduce network capacity constraints and avoid additional network investment. EDBs do not currently seem able to price such services and there is a risk the opportunity will be lost as industrial electrification projects are progressing at speed. Meridian therefore sees an urgent need for increased collaboration and innovation from EDBs in this space.

The treatment of flexibility services and distributed energy resources

The Commission notes at paragraph 4.14.5 of the process and issues paper the large uptake of distributed energy or flexibility resources that may be required to avoid inefficient investment in networks. Meridian supports further thinking from the Commission on ways to encourage the use of distributed flexibility resources. In addition to the above point on incentivising collaboration, the Commission could also consider regulatory incentives to

encourage EDBs to trial flexibility services and third-party services. These emerging technologies and business models could make electricity demand more elastic and enable network services to be supplied more efficiently and at relatively lower cost relative to traditional poles and wires grid upgrades.

In Meridian's opinion, the regulatory regime should encourage EDBs and Transpower to use flexibility services but in such a way that services are procured through open competitive processes to identify the least cost provider from the market. In Meridian's opinion, the Commission should resist expanding the scope of the regulated lines service into emerging contestable markets for batteries, electric vehicle charging control, or other sources of demand flexibility. If networks want to build these technologies themselves then they should only do so either:

- outside of the regulated lines service so there is no regulated revenue and the EDB is exposed to the same risks as any other participant in these markets; or
- if the investment is within scope of the regulated lines service, then it should only be allowed through the related party transaction rules so that competitive pressure drives efficiency, i.e. networks should only invest in non-network solutions through open tenders to find the least cost provider from the competitive market rather than preferring self-supply by default.

As well as addressing this issue through the IMs review, the Commission should consider recommencing the joint Spotlight on Emerging Contestable Services with the Electricity Authority.[1] The Commission has previously helped to improve clarity in the industry about Impact of emerging technologies in monopoly parts of electricity sector, in particular the regulatory treatment of EV charger costs and revenue:[2]

> "The main purpose of EV chargers is to charge cars, not the provision of the regulated service (defined as conveyance of electricity by line). Therefore, our starting point is that we would not expect the costs and revenues associated with EV chargers to be within the scope of the regulated service."

Whether through the IMs review or the Spotlight project, the Commission should seek to provide similar clarity in respect of other emerging technologies including batteries, demand

[1] https://comcom.govt.nz/regulated-industries/electricity-lines/electricity-distributor-performance-and-data/commerce-commissionelectricity-authority-joint-project-spotlight-on-emerging-contestable-services
[2] https://comcom.govt.nz/__data/assets/pdf_file/0023/90581/Open-letter-Our-intention-to-gather-information-relating-to-emerging-technologies-9-May-2018.pdf

response control and other sources of flexibility. Many providers are positioning to compete to provide services in these emerging markets and need clarity on whether they will be competing on a level playing field with EDBs (or alternatively if EDBs will be able to de-risk investments by including them in their regulated asset base, limiting the ability of other parties to compete).

Meridian was pleased to see in Table 6 of the process and issues paper that the Commission has already heard from other stakeholders that there should be a level playing field for all potential providers of flexibility services.

Quality standards that encourage Transpower and EDBs to fully resource new grid connection enquiries

In paragraph 4.15.3 of the process and issues paper the Commission ask whether there are dimensions of service quality which are not currently measured but should be. Meridian would like to see new quality measures for Transpower that relate to the timely processing of new grid connection enquiries. Similar issues have been flagged by the Commission in Table 6 of the process and issues paper, which notes the volume and uncertainty of new connections.

In Meridian's opinion, the IMs and IPP should enable Transpower to increase the resources it has at its disposal to deal with volatile and increased connection enquiries. The goal should be for Transpower to be able to process all connection enquiries in parallel and not need to prioritise its resources. Such an approach would ensure competition amongst new generation developers is retained through open access to the grid, rather than risk Transpower picking which projects proceed based on its own subjective judgements when allocating limited resources to some projects ahead of others. Meridian has set out its concerns in detail in our submission on Transpower's proposed connection queue management system.[3]

Connecting customers pay Transpower for their services in processing grid connection enquiries so the issue may not be one of funding availability but rather of access to sufficient technical expertise that can flex to accommodate variable volumes of connection enquiries. Quality measures may incentivise improved ability to process all connection enquiries, but

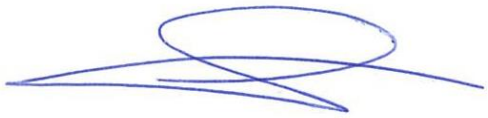
[3] Transpower has not yet published submission on the proposed connection queue management system. If that remains the case, Meridian would be happy to share its submission with the Commission if it is interested.

the Commission could also consider whether the IMs and IPP ensure Transpower has adequate flexibility in the way it recovers revenue for connection enquiries so that it can cover the costs of securing resources that will enable it to scale up and down as new connection enquiry volumes fluctuate.

In a similar vein, quality standards or reporting requirements could also be developed for EDBs responsible for new connections that are critical to the energy transition (for example, for EV chargers or electrode boilers). The intention would be to incentivise networks to dedicate adequate resources to new connection enquiries and progress connection projects in a timely manner. Quality standards and/or reporting requirements could be considered specifically for new connections that enable fuel switching and decarbonisation to recognise the public interest in meeting climate change targets.

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

Nāku noa, nā



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