31 May 2024

Climate Change Commission | He Pou a Rangi
1 Willis Street, Wellington, 6011.
By email to haveyoursay@climatecommission.govt.nz

ENA submission on the Climate Change Commission | He Pou a Rangi draft advice on the fourth emissions budget (2036–2040)

Electricity Networks Aotearoa (ENA) appreciates the opportunity to submit on the Climate Change Commission (the Commission) draft advice on the fourth emissions budget (2036–2040).

ENA is the industry membership body that represents the 27 electricity distribution businesses (EDBs, sometimes called lines companies) that take power from the national grid and deliver it to homes and businesses. ENA harnesses the collective expertise of members to promote safe, reliable, and affordable power for our members' customers. A list of our members can be found in Appendix A.

We broadly support the Commission's draft advice to deliver on Aotearoa New Zealand's 2050 emission reduction target. The distribution sector recognises the criticality of its networks in achieving the government's decarbonisation objectives. It stands ready to support New Zealand as it undertakes a significant energy use transformation. ENA has focussed its submission on Chapters 4 and 5, which relate most to electricity distribution and, therefore, ENA members.

Do not hesitate to get in touch with ENA if you'd like to discuss any of the points raised in our submission. Please contact Sophie Tulley (sophie@electricity.org.nz) in the first instance.

Yours sincerely,

Sophie Tulley
Policy & Innovation Advisor
Electricity Networks Aotearoa

1. CHAPTER 4 Sector contributions to meeting the fourth emissions budget

ENA agrees with the Commission's assertion that "…demand-side response can play a key role in helping to reduce peak electricity demand and hence electricity supply costs". However, significant investment in EDB infrastructure and systems is needed for extensive use of demand response (DR) to become a reality. There are several external barriers EDBs face in achieving the level of transformation required to both their networks and businesses to facilitate a flourishing DR market. These include timely progress from the Electricity Authority on their distribution reform programme, especially access to smart meter data for EDBs on reasonable terms. Although a few examples of EDB access to smart meter data exists, most EDBs face significant hurdles accessing the data from issues related to data privacy and restrictive contracts between retailers and metering equipment providers (MEPs). For EDBs, access to accurate and real-time network information is a key component enabling them to meet customer aspirations and future consumer demand as cheaply and effectively as possible. However, it's important to note that while the Electricity Authority work programme anticipates distribution reform concluding by December 2025, in reality it will take years for the market to develop, roles to become embedded, and for DR to begin to play a significant role in the electricity system. The Commission should consider including uptake of demand response as a 'change item' to Table 6.2 *Changes evaluated for significance using the framework* for review in the future.

Timely progress on the Ministry of Business, Innovation and Employment (MBIE) and Energy Efficiency & Conservation Authority (EECA) reform of the Energy Efficiency (Energy Using Products) Regulations 2002 to mandate 'smart' chargers will significantly improve EDBs ability to manage increased peak demand from private electric vehicle charging. Mandating 'smart' EV chargers will reduce the need for investment in network infrastructure that would otherwise be required to meet this demand in a passive EV charging scenario.[1]

ENA would like to add that, alongside the step change required in new generation capacity building noted by the Commission, change is also needed in infrastructure investment for the distribution networks. EDBs need regulatory settings that support simultaneous investment in replacing and maintaining existing assets, upgrading the network to meet immediate demand, and anticipatory network investment in readiness for future demand and climate change impacts. The electricity sector will need demand response, new traditional and distributed generation, and significant investment in distribution infrastructure and systems. Revenue allowances set by the Commerce Commission must enable this investment to prevent EDBs becoming a bottleneck in the system as the energy sector transforms.

2. CHAPTER 5 The impacts of meeting the fourth emissions budget on New Zealanders

ENA strongly agrees with the Commission's assessment that greater use of demand side response can decrease the need to build additional network capacity to meet demand peaks, and in turn this will reduce the extent of the increase in electricity costs. This is a key driver behind EDBs' efforts to pursue

[1] Electricity Authority. (2024, May 13). *Delivering key distribution sector reform - work programme published.* Retrieved from Electricity Authority Web site: https://www.ea.govt.nz/documents/3929/Work_programme_Oct_231406907.13.pdf

the reforms outlined in our comments above. ENA is supporting an initiative led by PowerNet to investigate the potential for an alternative financing model for future electricity distribution funding for some EDBs. The intent is to help accelerate economic growth, productivity, support affordability and New Zealand's climate change goals.

ENA agrees that "…targeting policies, investment and support to those who will face the greatest relative costs will be important for managing impacts…". EDBs have partnered with Electricity Retailers' Association of New Zealand (ERANZ) to support the creation of EnergyMate, a free in-home energy coaching service for households facing energy hardship and struggling to afford their power bills or keep their homes warm. Alongside online resources, community hui are held to help people understand simple and cheap power saving tips.[2] EDBs have also worked with ERANZ to establish the $5 million Power Credits scheme to help consumers experiencing energy hardship over the five-year period in which Low Fixed Charge Tariff regulations are phased out. Through the Power Credits scheme, households experiencing energy hardship can access a $110 credit to help offset some of the price impacts of this transition.[3]

Workforce shortages are a challenge facing most industries globally, this is not an issue which is exclusive to the electricity sector. But there is no doubt that without the workforce we need, it will be difficult for EDBs to deliver the investment needed, at pace. There is work being done throughout the electricity sector to try to address this, and ENA would welcome the opportunity to brief the Commission if there is interest.

[2] ERANZ. (2024, May 16). *How we can help*. Retrieved from EnergyMate Web site: https://www.energymate.nz/how-we-can-help/

[3] MBIE. (2023, August 18). *Support Available*. Retrieved from MBIE Web site: https://www.mbie.govt.nz/building-and-energy/energy-and-natural-resources/energy-consultations-and-reviews/electricity-price/phasing-out-low-fixed-charge-tariff-regulations/support-available

Appendix A – ENA Members

Electricity Networks Aotearoa makes this submission along with the support of its members, listed below.

Alpine Energy
Aurora Energy
Buller Electricity
Centralines
Counties Energy
Firstlight Network
Electra
EA Networks
Horizon Energy Distribution
Mainpower NZ
Marlborough Lines
Nelson Electricity
Network Tasman
Network Waitaki
Northpower
Orion New Zealand
Powerco
PowerNet
Scanpower
Top Energy
The Lines Company
Unison Networks
Vector
Waipa Networks
WEL Networks
Wellington Electricity Lines
Westpower