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Electricity Authority
Te Mana Hiko
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Tēnā koutou

CONSULTATION PAPER - FUTURE OPERATION OF NEW ZEALAND'S POWER SYSTEM

Unison Networks Limited (**Unison**) and Centralines Limited (**Centralines**) are electricity distribution businesses (**EDBs**) operating in Hawke's Bay, Rotorua, Taupō and Central Hawke's Bay, and are both consumer-shareholder trust owned. We appreciate the opportunity to submit on the Electricity Authority's ongoing work into the future operation of New Zealand's power system. The Consultation Paper captures the context and challenges of the emerging power system well.

Unison and Centralines support the Electricity Networks Aotearoa's (**ENA**) submission. We have highlighted matters in this submission reflected by the operation of our networks and business activities.

We agree with the Authority that: *A critical challenge will be making this transition while delivering a level of reliability of electricity supply that reflects consumers' preferences and minimises total costs,*[1] *as the power system becomes increasingly complex.*

Unison and Centralines consider that a significant driver of cost-efficiency for consumers is that the best information about how to integrate and optimise new technology on existing network assets sits within EDBs. EDBs are also lifeline utilities with social licence within communities to deliver what is now a service critical to people's wellbeing. In the medium term (noting the pace of change is difficult to foresee), keeping roles and responsibilities similar but balanced by appropriate oversight and adequate transparency, will enable the power system to evolve more quickly and cost efficiently for the consumer (than removing responsibilities or establishing new suppliers of a service).

The Authority's statutory objectives of promoting competition, reliable supply, and efficiency of the electricity industry[1] will be best served by EDBs using their existing systems, competency, and resourcing as the Distribution System Operator (**DSO**). As technology emerges, regulators, EDBs, stakeholders, and consumers can review the outcomes achieved.

Unison and Centralines acknowledge the challenges for regulators promoting competition and efficiency where emerging markets need transparency and a level playing field. Network planning is currently evolving to integrate the external factors influencing the resilience, reliability, and affordability of electricity to consumers.

Consumers, as increasing prosumers, need better information to participate and benefit from the future power system. Unison will soon release a customer focussed summary of its Asset Management Plan[2] – this seeks to help break down some information barriers that result from a regulator focussed document. We hope this also assists other stakeholders and we intend to build on this, year on year, as a broad communication tool.

Unison manages Centralines Limited's network under a management services agreement. This precedent is a useful model of a larger EDB cost-efficiently delivering Centralines' consumers a benefit of

[1] Electricity Industry Act 2010, s 15.
[2] Unison refers to this as its Regulatory Asset Management Plan.

larger scale, and additional capability and functions (that would otherwise be less affordable to those consumers). For example, Unison extends its capacity and capability to scenario plan on its network (i.e. consider different rates of uptake and the impacts) to Centralines' asset management planning. If new contracted services required to fulfil DSO obligations could be provided by any EDB (without distance being a barrier), this contracting service would create natural competition within EDBs. It may also give smaller networks the benefit of cost efficiency provided over time. As larger networks develop capability for their own purposes, smaller networks may benefit through contracting services in the future when the constraints materialise on their network.

We encourage surveying the industry to understand whether it considers it can extend operations to a DSO model cost-efficiently (accepting some additional funding will be required) and if not, whether it considers contracting the service to a larger EDB is attractive, and to understand any residual concerns. Understanding concerns with a proposal will help inform if regulation can resolve those issues.

In respect of the Authority's particular questions, several points are detailed below.

Q1. Do you consider section 3 to be an accurate summary of the existing arrangements for power system operation in New Zealand? Please give reasons if you do not agree.

Unison and Centralines' networks illustrate the equivalent power system operator role it plays on its networks impartially managing traditional demand side management (security and capacity) and embedded generation (system stability).

Traditional demand side management is Hot Water Control Load (HWCL) capability, which the implementation of varies around New Zealand. Our networks range in proportion between approximately 50 – 70% HWLC capability. Unison also has three embedded generators requiring maintaining system stability under contingency scenarios. The system is therefore designed to be dynamically operated (to avoid cascading failure). We consider there is adequate evidence of competent delivery of impartial system operation within many EDBs that new regulation can build on.

Q4: What do you consider will be most helpful to increase coordination in system operation? Please provide reasons for your answer.

Unison and Centralines support three priorities to promote competition, efficiency, and reliability:

1. Regulation of smart meter data to ensure consumers are not burdened by unfair pricing.
2. Data access and storage (centrally held and accessible by permitted entities for the right purpose), for example, accessing EV vehicle information or potential gas conversion by address (or aggregated to suburb).
3. Fair allocation of the risk of quality impacts to consumers (i.e. where EDBs must rely on other parties to maintain quality, and respond urgently to emergency management direction).

As the Authority works through these issues, there may be opportunities for updated regulation to facilitate the right outcomes for EDBs also participating as a DSO.

The Commerce Commission's Input Methodologies Determination commencing 1 April 2025, enable reopeners that result from regulatory change in certain circumstances. There is, therefore, the potential for non-exempt EDBs to access additional funding to extend operations for DSO responsibilities - if that is an Authority requirement. The clearer the rules and responses expected from EDBs, the more straightforward justifying additional funding should be (also streamlining resourcing requirements for the Commission).

The description of Transpower's System Operator regime (in particular, paras 3.40 – 3.42) are useful precedents for maintaining integrity and impartiality. Like Transpower, EDBs are heavily regulated (by the Commerce Commission and the Authority) and consumers already pay the resulting costs (along with receiving benefits) through line charges. No other electricity industry players are subject to the constraints and scrutiny of Transpower and non-exempt[3] EDBs. That is

[3] From price-quality regulation under a Default Price Quality Path Determination or Customised Price Quality Path Determination.

a result of being monopolies, but it enables unparalleled regulatory oversight and scrutiny. New Information Disclosure requirements may not be particularly burdensome and achieve the desired outcome.

Q6. Do you consider existing power system operation obligations are compatible with the uptake of DER and IBR generation? Please provide reasons for your answer.

The Authority says:

> *5.34. In New Zealand, distributors plan network upgrades broadly based on capacity, security, resilience and existing and forecast demand. The Commerce Commission requires distributors to disclose in their annual asset management plans, among other things, each planned asset replacement and renewal project and programme, a description of and the rationale for the projects and programmes, an overview of any network investments and non-network solutions considered, and the basis for selecting preferred solutions.*

The Commerce Commission now expects justification of capex investment by demonstrating the consideration of non-traditional solutions (and comparative feasibility of other solutions). The industry is exploring tools to create and quantify results, such as a flexibility assessment tool comparing the ultimate costs of flex vs. capex investment. As technology develops, more transparent methods of analysis will develop and offer information to the market, and to EDBs, to plan future focussed networks. What information is of most value will become more evident and can subsequently be regulated for transparency (through Information Disclosures) or for careful management of perceived or actual conflicts of interest.

Q8. Do you think there are significant conflicts of interests for industry participants with concurrent roles in network ownership, network operation and network planning?

We acknowledge that managing conflicts of interests requires the DSO to have robust and transparent policies and practices. There is a tension between promoting cost efficiency for the consumer through existing structure, system, competencies, and capability, and promoting competition in the sector. Managing perceived and actual conflicts is not, however, unresolvable for consumers, as reflected by Transpower's structure. With the right obligations and scrutiny in place, the consumer will gain the greatest benefit in the medium term from EDBs being able to optimise their existing systems and knowledge to quickly and cost-efficiently integrate new technology.

Unison and Centralines look forward to the Authority's further work on these matters and are happy to discuss any content raised in this submission.

Ngā mihi nui

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