The Electricity Authority - Te Mana Hiko

Te Whanganui-a-Tara - Wellington

Via Email: fsr@ea.govt.nz

To whom it may concern:

Thank you to *Te Mana Hiko – The Electricity Authority* for the opportunity to provide input on the open consultation regarding the appropriate <u>distribution system operator (DSO)</u> for New Zealand's future energy system. The Authority's focus on the three proposed models—a TSO, a DSO, and a hybrid—offers an important moment to consider how these functions are shared between Transpower and electricity distribution businesses (EDBs).

Core Principles

To guide this decision, I suggest three key principles:

1. Design for a new system, not an extension of the current one.

Aotearoa New Zealand's energy future will be shaped by increased electrification, growth in distributed energy resources (DERs), widespread demand flexibility, and bi-directional electric vehicles. Tomorrow's consumers will not only use electricity but also generate, store, and trade it. The DSO framework should therefore be designed for this more decentralised, participatory system—rather than as a modification of the existing model.

2. Ensure equity and inclusion.

The new system must overcome existing inequalities. Residential customers face diverse challenges: such as high energy hardship, inefficient housing stock, or medically vulnerable households. Industrial and commercial users face steep costs in electrifying operations. A fair DSO model should support all consumer groups in the transition without shifting costs disproportionately.

3. Enable transparency and shared standards.

Effective planning and operation require open data protocols and common standards across transmission, distribution, generators, aggregators, and communities.

Transparent information flows will unlock participation, improve flexibility, reduce costs, and optimise the system as a whole.

Recommendation

Building on these principles, I recommend pursuing a **Hybrid+ Model**—an enhanced hybrid that not only involves Transpower and EDBs but also actively incorporates local communities and DER owners as participants. In this model, consumers are not treated solely as passive users but as empowered traders, generators, and decision-makers.

International experience supports this approach:

- In the US, <u>Community Choice Aggregators</u> give local jurisdictions a role in managing customer assets and DERs.
- In the UK, the Social DSO (<u>Electricity NorthWest</u>) and Community DSO (<u>Northern Power Grid</u>.) demonstrate the value of strong community participation in decentralised energy management.
- Recent studies in the US for the State of Maine (<u>Strategen, 2025</u>) and Australia (<u>Energy Catalyst, 2025</u>) emphasise collaborative, transparent, and co-designed processes for future grid planning.

I believe a DSO **Hybrid+ model**, with more local community participation, would:

- Guarantee the benefits & outcomes of the system (affordability, decarbonisation, reliability, resilience) to all customers (small and large, rural and urban)
- Promotes these outcomes through **active community participation**, education, outreach and community **decision making**
- Achieve optimisation for all stakeholders and parties involved through new accessible communications protocols (software and hardware) without raising energy prices that is with fair cost allocation of new costs.
- Optimises the transition and balance between DERs and centralised generation.
 Facilitates flexibility and minimises the impacts of the integration with current infrastructure.
- Enables scale and just transition with access to DERs affordably and gradually. This may
 require more coordination between other agencies such as EECA studying inclusive
 funding and financing options, and other local governments proposing financing
 options for their constituencies.

Thank you for the consideration of these comments.

Warmly, **Margarita Parra**Ōtautahi - Christchurch