6 November 2026

Transpower (System Operator)
Waikoukou
22 Boulcott St
PO Box 1021
Wellington, 6011

By email to: system.operator@transpower.co.nz

Dear System Operator team,

Discussion Document — *TSO–DSO coordination: Operational requirements*

Electricity Networks Aotearoa (ENA) welcomes the opportunity to make a submission to the System Operator (SO) on its discussion document on *TSO–DSO coordination: Operational requirements.*

ENA is the membership organisation representing all 28 electricity distribution businesses (EDBs) that distribute electricity across Aotearoa (EDBs represented are listed in Appendix A).

EDBs employ over 7,800 people, deliver energy to more than two million homes and businesses, and have spent or invested $6.8 billion in network assets over the last five years. ENA harnesses members' collective expertise to promote safe, reliable, and affordable power for our members' customers.

ENA welcomes Transpower's initiative in bringing forward this discussion and identifying the foundational arrangements needed for effective coordination between transmission and distribution system operations. As the electricity system becomes increasingly distributed, and more parties are involved in operating and controlling resources connected to distribution networks, effective coordination and information exchange across the electricity system will become increasingly important.

ENA is broadly supportive of the five foundational operational requirements identified in the discussion document. We consider these a sensible starting point for further industry engagement and the development of more detailed operational arrangements. We particularly welcome Transpower's recognition that requirements should be driven by clearly identified operational needs, proportionate to the risks and benefits involved, and capable of being implemented progressively as those needs develop.

At this early stage, ENA does not propose substantive changes to the five overarching requirements. However, we offer the following observations to help inform their further development.

Proportionate and practical implementation

EDBs vary considerably in their network characteristics, operational capabilities, systems and the extent to which distributed energy resources are creating new operational requirements. The development and implementation of common arrangements should recognise these differences. Requirements should be driven by demonstrated operational needs, with the level of information, its granularity and the frequency of exchange proportionate to the decisions it is intended to support. Aggregated information, for example at grid exit point (GXP) or portfolio level, should generally be the starting point where

sufficient, with more granular or real-time information required only where justified by a clearly identified operational need.

We support building on existing capabilities and arrangements wherever practicable, and avoiding unnecessary duplication or investment ahead of a clearly established need. The costs, benefits and implementation responsibilities associated with any proposed new obligations will need to be carefully considered as the work progresses.

Two-way information exchange and clear responsibilities

ENA welcomes Transpower's recognition that information will increasingly need to flow in both directions between the SO and EDBs. Information about transmission conditions, constraints, operational events and the activities of other parties may be important to EDBs' ability to operate their networks safely and efficiently. In particular, EDBs may need timely visibility of SO instructions, dispatch decisions or other actions affecting material resources connected to their networks. This is especially important where both the SO and an EDB may have grounds to constrain the same resource, to avoid conflicting operational actions.

It will also be important to clearly establish which parties are best placed to provide and maintain different categories of information. For example, asset owners are generally the primary source of information about equipment capabilities and settings, retailers and aggregators about the flexibility resources they control, and EDBs about their own network characteristics, constraints and operational activities. While EDBs may hold secondary copies of information provided by other parties, or produce estimates based on available information, they should not be expected to verify or certify the accuracy of information that they cannot independently confirm. These distinctions will need to be reflected in the design of any information exchange requirements.

Information exchange between multiple parties

As the number of parties controlling distribution-connected resources increases, it will become important to establish efficient and consistent arrangements for exchanging information between retailers, aggregators, EDBs and the SO.

Existing obligations under Default Distributor Agreements, including arrangements for load management protocols, already provide a foundation for information sharing between traders and EDBs in relation to controllable load. However, further consideration is needed as to how information required by both the SO and EDB should be exchanged. For example, should retailers and aggregators provide information directly to both parties, or should information required by the SO be obtained through the relevant distributor?

Each approach raises practical considerations, including the potential duplication of reporting obligations, the need to ensure EDBs have reliable access to information about resources operating on their networks, and the risk of inconsistencies between information held by different parties.

The arrangements should also accommodate different models of distribution system operation. Some EDBs may directly operate or contract for flexibility resources, while others may primarily communicate network operating limits or other signals to which retailers, aggregators and customers respond. Information exchange requirements should not assume that EDBs have direct control over, or can reliably

predict the actions of, all resources connected to their networks. Where information about third-party control actions is required, this should generally be obtained from the party undertaking those actions.

ENA considers that future arrangements should seek to minimise duplicated reporting, establish clear responsibilities for the accuracy and maintenance of information, and ensure that both the SO and EDB have access to the information necessary to fulfil their respective operational responsibilities. Where practicable, information should be provided and maintained once, with appropriate access arrangements for authorised parties. This will require agreement on common data definitions, information quality, sharing rights and access controls, including appropriate protection of commercially sensitive and customer information. Existing information exchange channels should be used wherever they are fit for purpose, rather than establishing new systems unnecessarily.

We encourage Transpower and the Electricity Authority to explore these issues with industry as part of the further development of the proposed operational requirements, particularly those relating to minimum static and dynamic information and interoperable information exchange. This would be a useful practical issue for the proposed working group to consider.

Alignment with existing industry arrangements and initiatives

We encourage Transpower to ensure this work is coordinated with the Electricity Authority's DSO Roadmap and related industry initiatives, including activities being progressed through ENA's Future Networks Forum.

There are also existing operational arrangements and industry initiatives, including work on load management protocols and emergency demand management, that may provide useful foundations for further coordination requirements. These should be considered as part of identifying existing capabilities and potential gaps, avoiding duplication of work and ensuring that any new arrangements are consistent with the wider development of DSO capabilities and responsibilities.

An important part of this work will be identifying which information exchanges can already be supported through existing Code and contractual arrangements, and where gaps remain. The existing arrangements for obtaining information and ensuring technical compliance differ between larger connected assets, smaller customer-owned resources and third parties such as retailers and aggregators. Where additional obligations are considered necessary, these should be developed with the Electricity Authority and directed towards the parties best placed to fulfil them, rather than assuming EDBs can obtain or verify information that they do not control.

Prioritisation and next steps

ENA broadly agrees that the five initial use cases identified in the discussion document provide a useful basis for further exploration. In particular, coordination of controllable load during emergency events and the exchange of relevant SO information with EDBs appear to offer practical opportunities to define and test information requirements.

We support an approach that begins by identifying existing information exchanges and capabilities, determining where material gaps exist, and selecting a manageable number of priority use cases for further development or testing. This should help ensure subsequent work is targeted at genuine operational needs and produces practical, implementable outcomes.

Ongoing industry engagement

ENA supports Transpower's proposal to establish a working group with interested stakeholders and the Electricity Authority to progress these matters.

We would welcome the opportunity to participate in further discussions, alongside representatives of our member EDBs, and to help facilitate distribution-sector input into the development and testing of proposed arrangements.

We thank Transpower for initiating this important conversation and look forward to working collaboratively with the SO and other industry participants as the proposals develop.

If you have any questions about ENA's submission please contact Richard Le Gros, Policy and Innovation Manager (richard@electricity.org.nz).

Yours sincerely



Richard Le Gros

Policy and Innovation Manager

Appendix A: ENA Members

Electricity Networks Aotearoa makes this submission along with the support of its members. Listed below are the lines companies represented by ENA:

- Alpine Energy
- Aurora Energy
- Buller Electricity
- Centralines
- Counties Energy
- EA Networks
- Electra
- Electricity Invercargill
- Firstlight Network
- Horizon Networks
- MainPower
- Marlborough Lines
- Network Tasman Limited
- Network Waitaki
- Northpower
- Orion New Zealand
- OtagoNet – represented by PowerNet
- Powerco
- Scanpower
- The Power Company – represented by PowerNet
- Top Energy
- The Lines Company
- Unison Networks
- Vector
- Waipa Networks
- WEL Networks
- Wellington Electricity
- Westpower