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Electricity Authority
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## Improving Network Visibility for Low Voltage Networks

Transpower welcomes the opportunity to submit on the Electricity Authority's (Authority's) "Exploring network visibility" consultation, published 5 September 2025. We support the regulatory drive to improve low voltage (LV) network visibility for distribution networks.

We consider there are potentially significant costs associated with improving LV visibility,<sup>1</sup> but we believe investment in this area should be encouraged as a net positive outcome for access seekers and consumers. As such, regulatory design considerations need to account for how distributors can recoup these costs and remain incentivised to continue their investment in such visibility.

A collective regulatory push to increase investment in, and improvement of, LV visibility across all EDBs could support greater efficiencies for data users through standardisation, while still allowing innovation for different users to access appropriate data.-In our view, the ideal outcome is that all EDBs collect data in a standardised format and feed it into a single and secure (centralised) platform that is accessible to all parties listed in the consultation paper's use-cases section.

Network visibility data may also require supporting economic data to understand the potential value or cost signals from network conditions. For flexibility service providers, visibility of locational value through e.g. indicative constraint costs, deferral values, or tariff incentives, supports assessments of whether their engagement is worthwhile. Otherwise, the risk is that published data is technically detailed but commercially inert.

We have responded to questions posed in the consultation in the Appendix.

Yours sincerely,

Joel Cook Head of Strategy and Regulation

<sup>&</sup>lt;sup>1</sup> For example, refer Table A3 in the AER Phase 3 report <u>Update - Phase 3 | Australian Energy Regulator</u>

## Appendix – Transpower response to questions

#	EA Consultation Question	Transpower Response
1	Are stakeholders aware of the extent of the information on network visibility currently being provided by distributors (including through disclosures)?	The Commerce Commission has already introduced new disclosure requirements to improve network visibility. We are unaware of the extent to which stakeholders are aware of the information on network visibility derived from these disclosures or otherwise.
2	How do current distributor disclosures support the understanding of available capacity, constraints and opportunities on high- and low-voltage networks?	Current disclosures provide reasonable visibility at the high-voltage (HV) and zone-substation levels through the Commerce Commission's Tranche 1 <sup>2</sup> and 2 ID requirements. The publication of Schedule 12b data gives useful information on peak demand, available capacity, and forecast constraints. These disclosures are newly required so their effectiveness may need some time to be evaluated.
3	How are interested parties making use of existing disclosures to support more efficient outcomes?	We do not have a comment on this matter at this time.
4	Would changes to the type of data, format, regularity or granularity of current distributor disclosures better support decision-making? (note: the full set of relevant disclosures required by recent Commission decisions has not yet been made)	With Government recently announcing its objective to drive efficiency among EDBs, improvements in standardisation and accessibility, rather than increased data volume, could deliver greater benefits.
5	What other disclosures from distributors relating to network information would further inform choices and decisions of access seekers and other interested parties?	We do not have a comment on this matter at this time.
6	What are distributors' perspectives on the value of their work collating and publishing network visibility information for their own businesses?	We do not have a comment on this matter at this time.
7	What are distributors' perspectives on how well interested parties are using the data they already publish?	We do not have a comment on this matter at this time.
8	What are stakeholders' perspectives on recent developments regarding access to smart meter data?	The Authority's stocktake shows that most of the national smart meter fleet can technically provide voltage and current data useful for low-voltage visibility. Smart meter data will assist with the

<sup>&</sup>lt;sup>2</sup> <u>Electricity-Distribution-Information-Disclosure-Targeted-Review-2024-Amendment-Determination-</u>

#	EA Consultation	Transpower Response
	Question	transition to a more decentralised power system, DSO operations and flexibility services integration.  However, practical access requires fair commercial arrangements, interoperability, and privacy considerations. We note the recent agreement between Powerco and Bluecurrent for meter data to support LV visibility. <sup>3</sup>
9	Is the pace of distributor progress on developing the capability needed to support work on improving network visibility appropriate? If not, what are access seekers' expectations regarding timeframes?	We recognise that some EDBs have made valuable progress, as demonstrated by presentations from distributors at the EA's workshop.
10	What are the barriers and costs to distributors developing the capability needed to support work on improving network visibility faster?	In our view, the main barriers are data quality, system interoperability, and funding rather than technology availability.  1. Legacy systems: Many EDBs operate heterogeneous GIS, SCADA, and asset management systems that are not easily integrated, making data extraction and standardisation resource intensive.  2. Limited visibility below zone substations: LV topology is often incomplete or manually updated, requiring significant investment in data cleansing, monitoring, and network modelling.  3. Commercial access to smart-meter data: Transactional costs and bespoke contractual arrangements with MEPs create friction and administrative overhead.  4. Funding and incentive alignment: Visibility improvements deliver system-wide and consumer benefits but are not directly remunerated under current regulatory frameworks.  The Government's response to the Frontier report broadly reflects that the above factors may require a push for standardisation in order to be addressed. <sup>4</sup>
11	Do you agree that distributors having a better understanding of network capacity/constraints and publishing this information in an easily accessible way is in the long-term interest of consumers?	Yes. Enhanced visibility of network capacity and constraints supports more efficient use of existing infrastructure, timely investment, and better integration of distributed energy resources (DER)—all of which contribute to lower long-term system costs and improved service quality.

<sup>&</sup>lt;sup>3</sup> https://www.powerco.co.nz/news/media/powerco-signs-network-operations-data-service-agreement-withbluecurrent

4 Key Frontier recommendations and the Government's response

#	EA Consultation	Transpower Response
	Question	
		However, benefits depend on data being accurate, consistent, and interpretable by users. Publishing data without sufficient context or standardisation may not produce the intended efficiencies and could risk misinterpretation. In all connections enquiries the relationship between the enquiring party and the Distributor is paramount. Long term interests of consumers will be better served by good information being accessed and conveyed by access seekers qualified to understand it.
12	Is there a case for further regulatory intervention to further improve progress and the quality (e.g. timeliness, granularity, format standardisation) of disclosures that improve network visibility?	The Commerce Commission's recent Targeted ID Review has only recently expanded disclosure requirements <sup>5</sup> (Tranches 1 and 2), and distributors are still implementing those changes. The Authority and the Commission could first evaluate the effectiveness of current and recently implemented measures, and voluntary initiatives.  Facilitating standardisation should be prioritised as an outcome ahead of further regulatory intervention. At this time, the case for additional regulation is not yet compelling.
13	Is there a need for measures to improve awareness of, and encourage the use of network visibility disclosures by interested parties?	We consider genuinely interested parties could use an AI tool to locate relevant information.
14	If further work is required to support the development of network visibility, which of the three regulatory approaches outlined above do you prefer to improve network visibility, or do you prefer another approach?	Please refer to our response to question 12.
15	Do you support an approach that focuses on high-voltage networks first, or do you have another preference?	From our perspective, yes.
16	What other aspects of international developments relating to network visibility should we be looking at for lessons that could be considered in the New Zealand context?	The Australian Energy Regulator (AER) recently completed its LV Visibility project, and highlight some key areas for consideration:  "(3.3.1 Measuring network utilisation) As we consider new ways of incentivising network visibility and DER deployment, we may consider new ways of measuring network utilisation. We currently report on network utilisation in annual network

<sup>&</sup>lt;sup>5</sup> <u>Electricity-Distribution-Information-Disclosure-amendments-related-to-IM-Review-2023-Amendment-</u> Determination-2024-red-lined-version-27-November-2024.pdf

6 Update - Phase 3 | Australian Energy Regulator (AER)

#	EA Consultation Question	Transpower Response
		performance report. Our current measure of utilisation uses a calculation based on "non-coincident peak demand", resulting in a metric that reflects how close to capacity a typical zone substation is during peak periods. The average utilisation of distribution networks was reported as 43% in our 2024 network performance report."  Also, on 16 October 2025, the Australian Energy Market Commission (AEMC) published a directions paper <sup>7</sup> on setting out three different approaches to improve distribution planning in the National Electricity Rules (NER). Part of this rule change involves consideration of its proposed approach to improve reporting of distribution network data.
17	Should metering equipment providers be required to publish schedules of available data and prices to improve transparency and reduce transaction costs?	However, the Authority's own stocktake indicates that the market for power-quality data remains nascent and heterogeneous. Mandating publication requirements at this stage could impose compliance costs and may not reflect genuine differences in data capability or service scope across meter equipment providers (MEPs).
18	What elements of Part 12A of the Code relating to default distributor agreements should be reinforced or extended to ensure consistent access to both consumption data and other types of data e.g. power quality data from smart meters or other devices (such as inverters)?	We do not have a comment on this particular matter at this time.

<sup>&</sup>lt;sup>7</sup> AEMC - <u>Integrated Distribution System Planning - Directions Paper</u>