172 Carnarvon Street
Gisborne 4040
New Zealand
firstlightnetwork.co.nz

Firstlight Network

Electricity Distribution Information Disclosure

Introduction to Firstlight Network

Firstlight Network own and operate the electricity distribution assets that supply Gisborne and Wairoa including substations, poles, conductor, and underground cabling that connect customers to the national transmission grid. Energy retailers use our network to supply customers with electricity.

Under clause 17.2.2 of the Information Disclosure Determination 2012, EDBs (Electricity Distribution Businesses) are required to provide detailed disclosures on their practices for monitoring load and injection constraints on their low voltage (LV) networks. EDBs are also required to provide information on the challenges and progress associated with collecting or procuring the necessary data to understand current and future constraints on their LV networks. This includes providing a comprehensive overview of their efforts to gather historical consumption data, highlighting any obstacles they encounter and the steps they have taken to overcome them.

In addition to data collection, Clause 17.2.2 also requires EDBs to describe any analysis and modelling they undertake or plan to undertake using the collected data. This involves detailing the methods and processes used in their analysis, including any assumptions and limitations that may impact the results.

Clause 2.6.1B

This clause requires each EDB to publicly disclose qualitative information in narrative form that describes its practices in a manner that complies with clause 17.2.2 of Attachment A by 31 August 2024 in a standalone document (where Attachment A refers to Asset Management Plans).

Clause 17.2.2 Monitoring load and injection constraints, including:

Table 1

2.6.1B A description of any policies or practices for providing sufficient information on current and forecast constraints (including LV network constraints where known) to inform the decision-making of potential consumers connecting to the network and potential providers of non-network solutions	Firstlight Network (Firstlight) operate the 110KV transmission from the Tuai grid exit point to Gisborne and Wairoa. Firstlight engaged Tesla Consulting in October 2019 to carry out a study on the capacity constraints of the supply from Tuai and subsequent transmission to Gisborne and Wairoa. This study included the forecast growth for the region and determined the constraints on the transmission supply. Tesla provided recommended solutions to increase the capacity which are in progress of being implemented. A further study (Regional Energy Transition Accelerator Electricity Capacity Availability) has been completed by ElectroNet in October 2023 into the capacity of the feeders across the network, which provides input when modelling any changes to the network. The practice followed by Firstlight for any requests for connection, or non-network solutions, including on our LV network, is for our Engineering team to review the capacity of the particular location / or feeder against our model to determine if the connection would create any constraints. External consultants are engaged where the request is of significant size or complexity.

	The Engineering assessment for smaller / non–complex connection requests is a two-stage process with an initial enquiry that will identify any constraints, which will be advised to the requestor and the second stage being a formal approval of the application. Where the application is larger and more complex, information will be shared in the form of letters or reports, and often meetings held with the customer to discuss requirements and constraints, prior to a formal response.

17.2.2 (a) Any challenges, and progress, towards collecting or procuring data required to inform the EDB of current and forecast constraints on its LV network, including historical consumption data	Firstlight utilise asset data, consisting of customer connections attached to the supply point with a model of recommended maximum connections to determine any constraints. Data loggers will be used to collect the actual load profile where constraints may be forecasted. We are also monitoring the progress of larger EDBs in accessing smart meter data. The challenges involved in collecting or procuring smart meter data include the ability to store and analyse the sheer volume of data and the cost of acquiring the data. We will consider engaging further when the service is better understood.

17.2.2 (b) Any analysis and modelling (including limitations and assumptions) the EDB undertakes, or intends to undertake, with that constraint-related data	The current practice is to use our model, with assumed customer connection maximum load, to determine customer connection count against the installed capacity. We also utilise a data logger to monitor specific loads, where perceived constraints are emerging. Thisdetermines if a capacity increase is required to meet increased load.A limitation in this approach is the variation in demand between commercial and residential properties, however our experience is that this can be managed through the process.

17.4.5 FNL's approach to sharing information on current and forecast constraints (both load and injection) with potential new consumers. This must include any information on low voltage network constraints, including the constraint information the EDB derives from the data specified under clause 17.2.2(a) of Attachment A.	Customers can access the Firstlight website to gain access to our Connection Agreement for a new solar connection and our Application for Service (AFS) to request a new or existing connection increase or decrease in capacity. Once received by Firstlight, our engineering team reviews the proposed generation or load profile and confirms the ability to connect based on existing capacity or any network constraints that may need to be resolved as part of the approval process. https://www.firstlightnetwork.co.nz/i-want-to/get-connected/residential-and-commercial-connections/

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Firstlight undertake the actions outlined in table 1 to pre-empt any future network constraints. Firstlight's existing systems and processes are sufficient to meet our network growth profile which is relatively static from a load demand perspective particularly across the Low Voltage systems. Firstlight has not experienced or identified any current or future constraints around the network as outlined in clause 17.2.2. that would necessitate change from our current methodologies.

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Schedule 18 Certification for Disclosures

Clauses 2.9.2 and 2.9.5

We, Mark Adrian Ratcliffe and Fiona Ann Oliver, being directors of Firstlight Network Limited certify that, having made all reasonable enquiries, to the best of our knowledge. The information prepared for the purposes of clause 2.6.1B and 2.7.2 of the Electricity Distribution Information Disclosure Determination 2012 in all material respects complies with that determination.

Director: Mark Ratcliffe
14 August 2024

Director: Fiona Oliver
14 August 2024