Demand Capacity Methodology

Overview

Spare load capacity indicates the additional load that our existing high-voltage (11kV) network may be able to support.

This methodology is based on our current data quality, modelling, and system capabilities. We continue to refine this approach in collaboration with other lines companies through the ENA Future Networks Forum.

At the core of the method is a power flow modelling system that analyses our high-voltage feeders. The model incrementally adds load (in 1 kW steps) at each location until a network limit is reached. The amount of load that can be added before reaching a network limit is estimated as the spare load capacity.

Network limits are defined as follows:

- Thermal limits: 100% of asset rating
- Voltage limits: -6% to +6% from nominal voltage (at transformer low-voltage terminals)

Important Considerations

Please note: The spare load capacity data is indicative only and represents a snapshot in time. It does not reflect real-time network conditions, and new customer connections may be added at any time, potentially reducing actual available capacity. The model also assumes normal network configuration and does not account for outages, planned maintenance, or concurrent generation/load changes.

If the map shows less capacity than your project requires, that doesn't necessarily mean we can't support your connection. This should be seen as a starting point for a conversation. We may be able to reconfigure the network, explore flexible solutions, or plan upgrades to help meet your needs. Likewise, even if capacity appears available, further assessment may be required to ensure we can safely and reliably accommodate your load.

This information is intended for medium to large load connection customers. It is not applicable to residential or small business customers, who connect via our low-voltage (LV) networks.

Network Waitaki Limited
10 Chelmer Street
PO Box 147,
Oamaru 9444

Telephone 03 433 0065
service@networkwaitaki.co.nz
www.networkwaitaki.co.nz