



30 June 2023

INFORMATION DISCLOSURE OF NEW NARRATIVE INFORMATION

networktasman
Your consumer-owned electricity distributor



As part of the first tranche of new Information Disclosure requirements introduced by the Commerce Commission in November 2022, Network Tasman discloses the following information in accordance with clauses 17.1-17.6 of the Electricity Distribution Information Disclosure Determination 2012.

Notification of planned supply interruptions and communications during unplanned supply interruptions

Planned supply interruptions are notified to traders at least 10 working days prior to proposed date of the interruption together with an alternative date should the interruption not occur on the proposed date. Reasons for the postponement of an interruption to the alternative date may include unexpected weather events, contracting staff illness (e.g Covid) etc.

The ICP numbers affected by the planned interruptions are sent to the appropriate trader in a standard file format.

On receipt of notification from Network Tasman, traders must promptly notify those affected customers for which it is responsible of the planned supply interruption and must ensure that notice is received by affected customers at least 4 working days' prior to the planned supply interruption.

Unplanned supply interruptions are posted on the Network Tasman website. A map showing the affected area together with an expected time of restoration when known are displayed. This map is posted automatically upon the tripping of a field circuit breaker or manually by the control room operator.

Major and longer term interruptions such as during Civil emergencies are also communicated through other media in conjunction with CDEM.

The formal notification/communication obligations with respect to supply interruptions are set out in Schedule 5 of Network Tasman's Default Distributor Agreement (DDA). The current version of Network Tasman's DDA is available on our website (<https://networktasman.co.nz/information-retailers/>).

Low voltage network power quality monitoring

Network Tasman has completed a roll out of advanced electronic meters across its network. It communicates with these meters via a mesh radio network. The meters are on consumer switchboards and the coverage rate is currently 76%. Communicating meters are 95%.

Having these meters rolled out provides for a high degree of voltage quality monitoring, reporting and alarming across the network. Meters automatically send alarms if the voltage at the meter goes out of regulatory tolerance. Tools provided by Smartco Ltd and used by Network Tasman allow for

the early detection of abnormal network conditions such as hot or broken connections, providing enhanced system performance and safety.

Any non-compliances with voltage quality requirements of the Electricity Safety Regulations are promptly followed up and rectified. This may include investigations into and upgrading of network capacity in LV networks in some cases.

Consumers affected by voltage quality issues are communicated with individually and kept informed of all responses whether these are repairs (e.g. poor connections) or LV reticulation upgrades to reduce supply impedance.

More detail on the Smartco voltage monitoring tools are provided in the section discussion innovation below.

Practices and Processes for Connecting New Customers and altering existing Customer Connections

Network Tasman has a consumer connections section that manages all new and existing network extensions and individual connections on the network.

The design and construction of all network extensions and any upline works required to reticulate and connect a new subdivision or large industrial development are outsourced to Network Tasman authorised electrical reticulation service providers.

Network Tasman has a published reticulation design and construction standard, which it requires authorised service providers to work to. This standard specifies the capacity design and voltage drop allocations in the new works and also the equipment, materials and installation methods to be used in construction.

Developers planning to create new industrial installations or residential subdivisions are directed to these service providers following initial consultation with Network Tasman. The selected service provider will talk with the developer and create a reticulation design and bring this to Network Tasman for approval. At the approval stage NTL will consider the proposed reticulation design and may specify additional works related to providing added security or provision for future extension etc. Necessary easements or access requirements will also be discussed at the design approval meeting.

Project funding as to what the developer pays for and what Network Tasman pays for are specified under the Network Tasman Connection of New Loads Policy. This policy covers both urban and rural developments with differing levels of contribution from Network Tasman to projects depending on load and distance from major zone substations. In rural situations load and distance based Network Development Levies also apply. The Connection of New Loads policy is posted on the Network Tasman Website on the “New Connections, Reconnections and Alterations to Existing Connections” page.

Vesting of new works in Network Tasman is also agreed at the development approval stage. Network Tasman has a standard agreement document that covers the legal transfer of assets to vested by the developer to Network Tasman at the time of livening of the new works.

Once all of the above has been considered and agreed, the reticulation service provider can provide a quotation to construct and connect the new reticulation to the network and undertake any additional works specified by Network Tasman. A contract for the works construction and then exists between the service provider and the developer.

Prior to livening, a Network Tasman works auditor will inspect the new works for compliance with Network Tasman's standard. Any non-compliances are required to be rectified prior to the livening of the new works.

Individual customer connections are managed under a Network Connections Application (NCA) process. Connection applications must specify the standard connection capacity required (number of phases and fuse sizing). Each NCA is considered for available network capacity – whether or not it is in a pre-reticulated subdivision or a new connection to the existing network etc. ICP capacity upgrades/downgrades are handled through the NCA process as well.

Injection connections are handled separately unless they require an upgrade to the capacity of an existing ICP. The ICP capacity upgrade is then managed using the NCA process. Injection is handled in line with the requirements and processes prescribed by Part 6 of the Electricity Industry Participation Code. Each application is individually considered in terms of available hosting capacity. If network upgrades are required to provide requested hosting capacity, applicants are provided with options of undertaking the network upgrade at their cost, or alternatively restricting the amount of power injected into the grid.

Network Tasman has consciously looked to minimise the costs to consumers of making connections with the network, by setting up and fostering a competitive market of reticulation development service providers. In order to facilitate this, NTL created design and construction standards for all service providers to operate to. It also created its Connection of New Loads Policy, standard easement and vesting agreement documents.

Planning and managing communications with consumers about new or altered connections is initially facilitated by having a “New Connections, Reconnections and Alterations to Existing Connections” page on its website where the NCA process is explained and on-line forms are available. The process for developers is also explained on the page. The list and contact details of the authorised reticulation service providers is also on this page. Following that, consumers and developers are keep abreast of the progress of their new connection or alteration through contact with our new connections staff.

Delays in completing processes can arise from equipment availability delays, contractor workload delays and in small numbers of cases, delays in completing major upper network upgrade projects where these are required.

Customer service practices

Our customer service standards are included in our Default Distributor Agreement with traders. These standards include response times to outages, communication errors in planned outage notifications, water heating service standards etc. Penalties for breaches are based on penalty payments to consumers impacted by the service standard breach.

Network Tasman aims to manage and resolve all customer complaints, and it advises consumers of the independent complaints review services provided by Utilities Disputes Limited.

When a consumer makes a complaint Network Tasman:

- Will acknowledge the complaint within two working days;
- Will treat all complainants courteously and with respect showing sensitivity to any health, disability or language issues relating to the complainant;
- Will investigate the issues that led to the complaint and respond within seven working days;
- Will strive to settle complaints within 20 working days. If we cannot, we will advise the complainant of the reason and agree an extension.
- If we cannot reach a settlement within 40 working days, we will advise the complainant of their options, including referring the complaint to Utilities Disputes Limited.

Network Tasman undertakes mass market and industrial consumer satisfaction surveys bi-annually. The reports from these are appended to our publicly disclosed asset management plan (AMP) and they inform our AMP.

The latest survey was undertaken in late 2022.

Assessing the impact of new connections likely to have a significant effect on network operations or asset management

High capacity (MW scale) new industrial connections or large residential subdivision developments can impact long term AMP planning and/or network operations.

All applications for new connections are assessed by Network Tasman's consumer connections section under guidelines provided to them by the Network Manager who is responsible for network planning. If a proposed connection is expected to come under this category, then it is brought to the attention of the Network Manager for modelling in Network Tasman's network loadflow model in conjunction with all other existing and proposed load applications. This modelling takes into account the geographic and electrical locations of the proposed new load.

If there is an immediate change to the upper network required to accommodate the new load, then the necessary incremental development projects are identified and the costs of these are estimated.

Funding contributions for such developments are determined through the application of the Connection of New Loads policy. Any developments that perturb the long term AMP capital development program are brought into the next AMP update.

The timing of supply availability is negotiated with applicants particularly where large loads are involved. It is made known with developers and consultants in the district that Network Tasman needs to know at as early a stage as possible about applications coming for large loads. Generally, this advice is well heeded. Uncertainty is managed through continuous and open communication between the parties.

Financial risks to Network Tasman posed by the uncertainty around new connections are managed through the contribution commitments required by the Connection of New Loads Policy and those required of the reticulation contractors. Also the prescribed administrative processes are designed to provide a degree of risk mitigation for Network Tasman.

Innovation practices

Network Tasman established SmartCo in 2013 along with a number of other NZ EDBs with a view to increasing visibility of our LV network. "Hiko Energy Insights" is a technology initiative developed by SmartCo to improve electrical safety and network management.

The strategic objectives of the initiative were identified as:

1. Reducing the need for large capital expenditures over the next 20 years.
2. Enable monitoring and management of individual connection points from the bottom up, and a platform to identify and resolve issues more quickly and efficiently.
3. Provide end consumers with the potential for greater control over their energy usage.

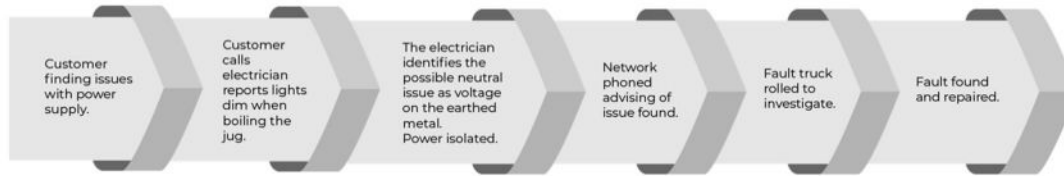
The initiative will improve the technical performance of the network by providing better asset management and network planning through the software. The initiative will also reduce costs by addressing technical risks and improving network efficiency. Customer service has been improved as has field force management with a number of historically reactionary tasks now being addressed in a planned manner.

Network Tasman is adopting Hiko Energy Insights across our business in the following areas:

Role: Maintenance Engineer

SCENARIO: Customer brown out or receiving electrical shock

Common Current Process | MONTHS



Hiko Current Process | WEEKS



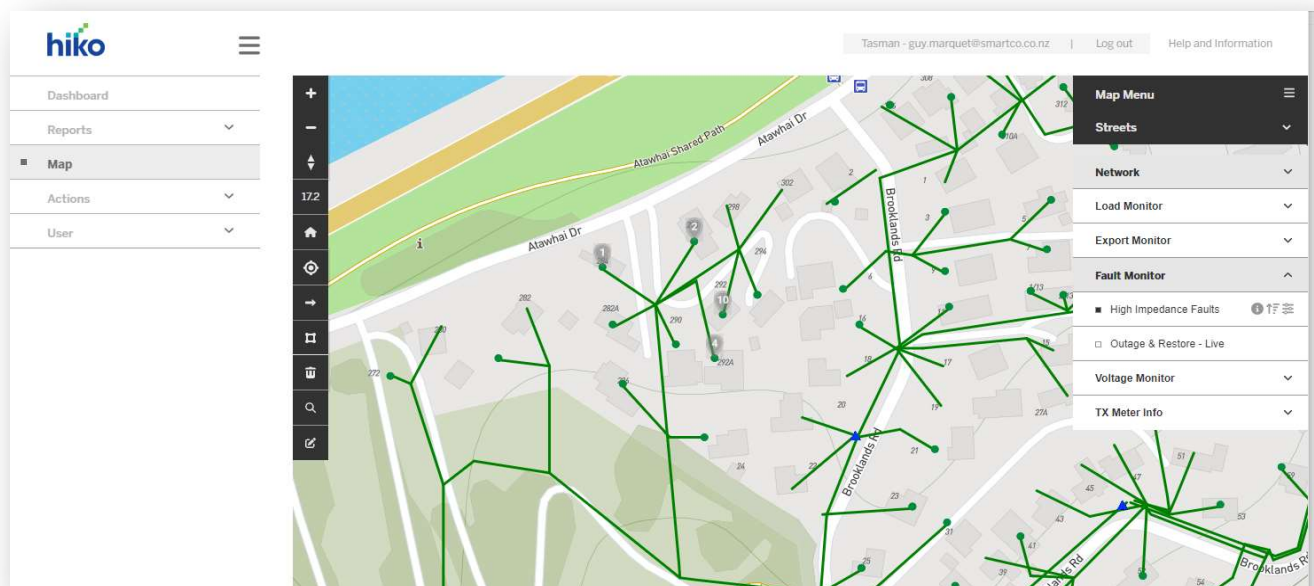
Value to Role

- Providing a customer with better service
- Reduced inbound calls from customers.
- More planned work/reaction to emergencies less
- Save a life or serious harm
- Proactive network safety management

Added Value

- Reducing high consequence risk (low incident rates)
- Response time reduced
- Save time and money by reducing fault truck jobs.
- Reduced 3rd party claims of damage (time to process)

Hiko Image



Role: Power Quality Engineer

SCENARIO: Voltage complaint

Common Current Process | HOURS - 7 DAYS



Hiko Current Process | PROACTIVE



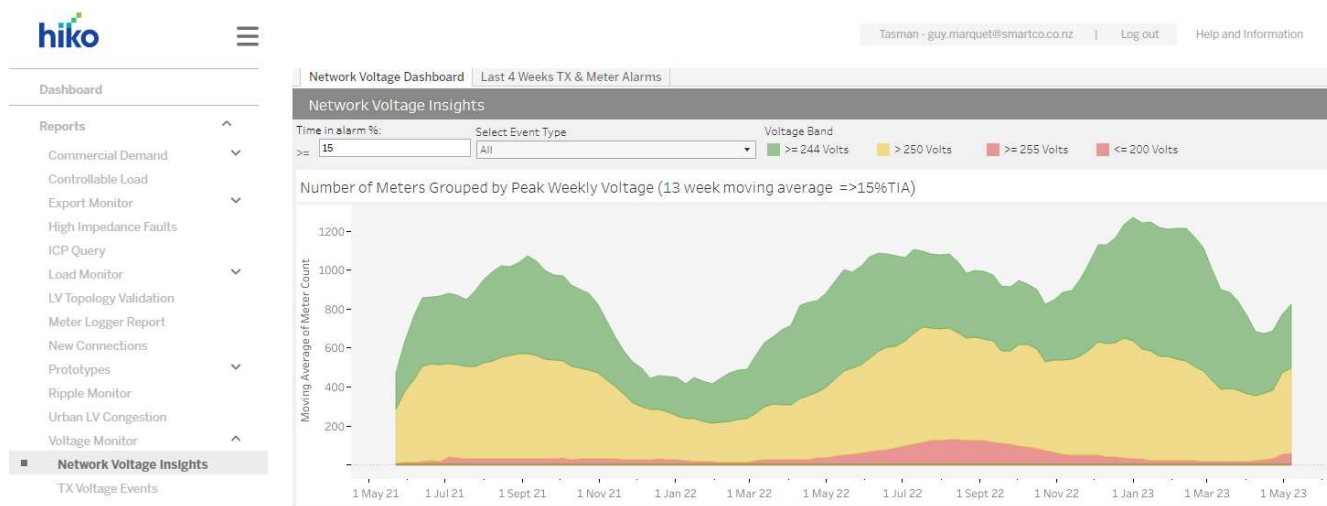
Value to Role

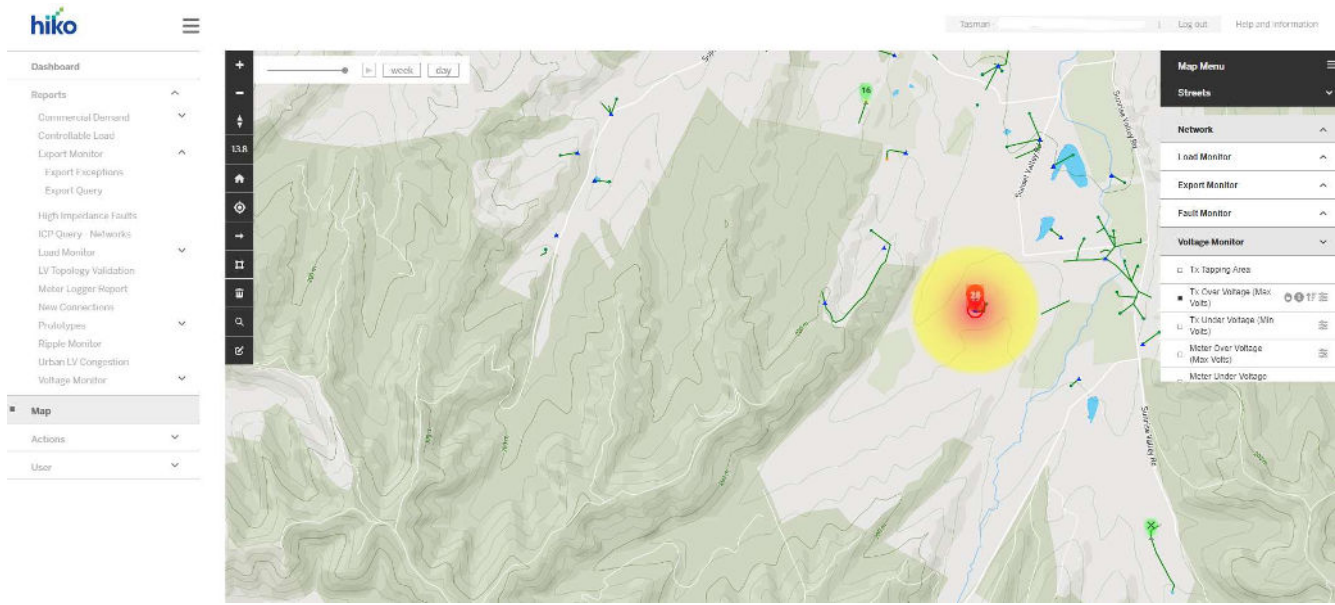
- Delivering improved customer service
- Reduced inbound calls from customers.
- More planned work/reaction to emergencies, less
- More proactive network quality management

Added Value

- Substantiates asset management planning and budgeting.
- Utility Disputes complaints reduced.
- Reduces damage to customer equipment
- Work completed is monitored

Hiko Images

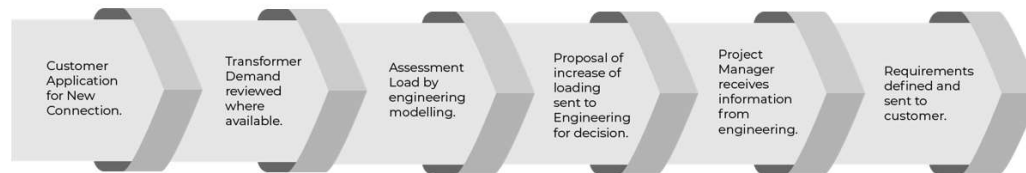




Role: Project Manager New Connections

SCENARIO: Request for increase load or new connection

Common Current Process | WEEKS



Hiko Current Process | HOURS

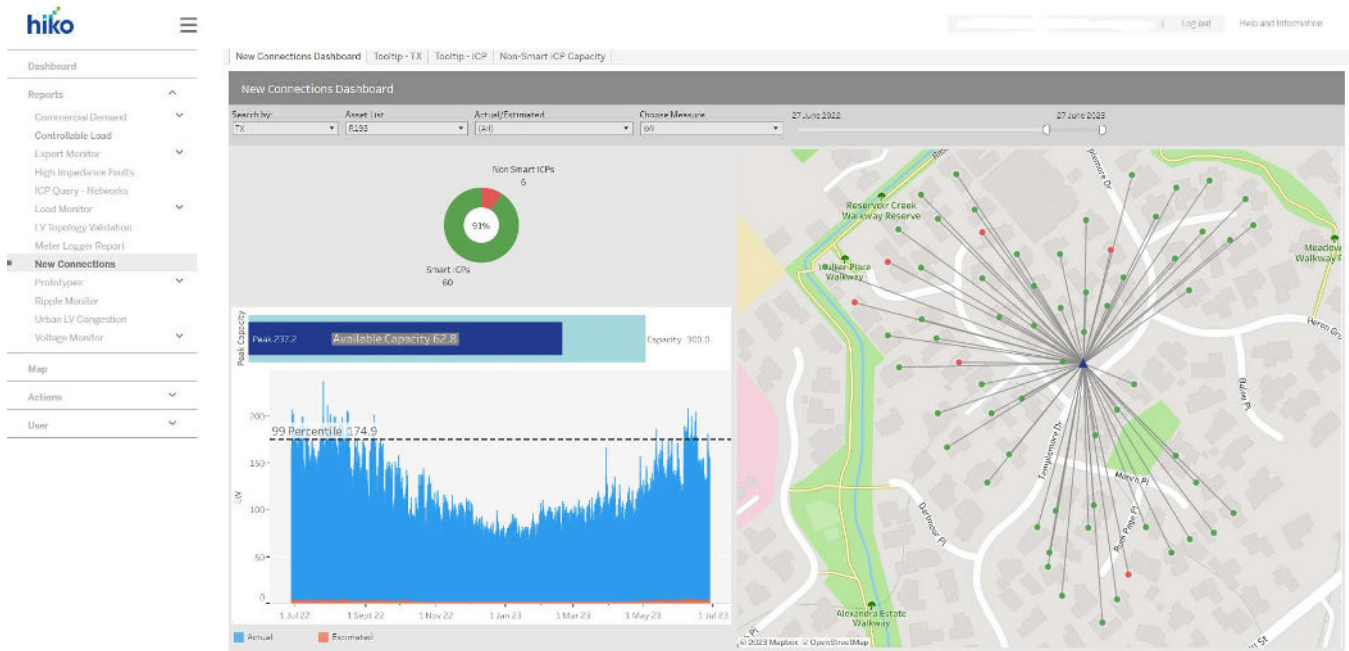


Value to Role

- Empowered to make good decisions.
- Less complication / back-log of requests pending 'engineering decisions'
- Customer satisfaction improved

Added Value

- Customer response time reduced = better service



Role: Network Faults Supervisor

SCENARIO: Rural outage (25% to 40% homeowner issues)

Common Current Process | X HOURS



Hiko Current Process | MINUTES



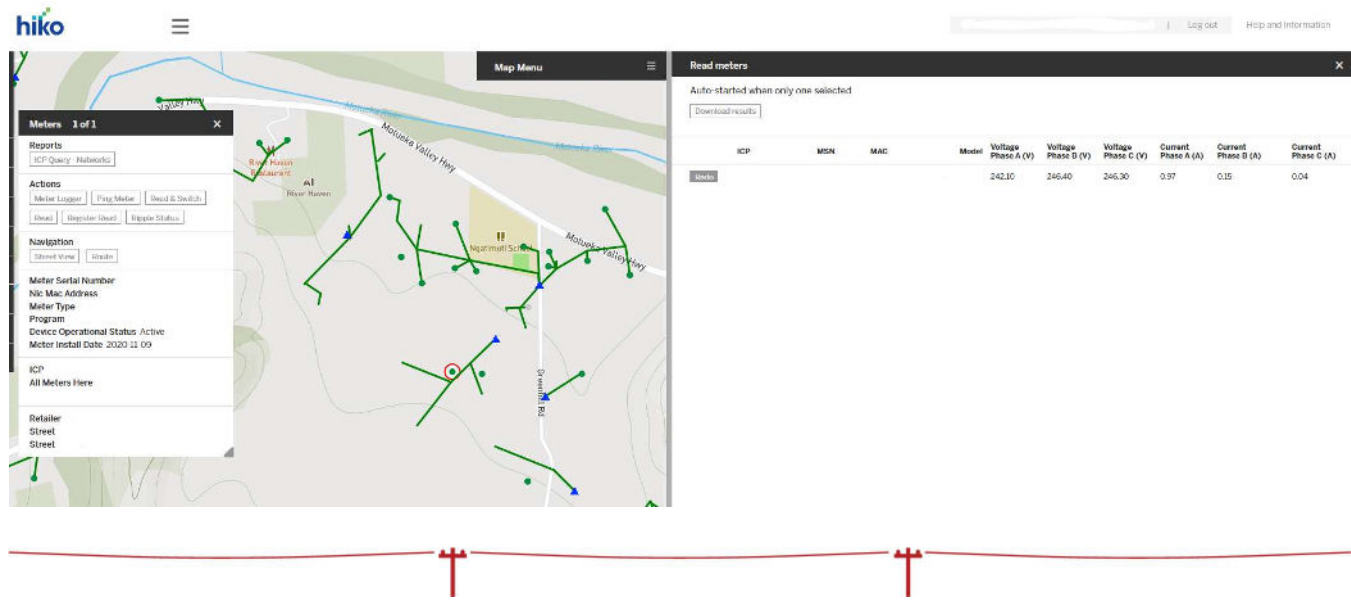
Value to Role

- No travel to the site able to assess remotely.
- No need to arrange faults person to attend

Added Value

- Decrease the cost and volume of unplanned work.
(Unplanned work 3x costlier than planned work)
- Protect planned work schedules
- Customer response time reduced = better service

Hiko Images



Role: Maintenance Engineer

SCENARIO: Distributed generation compliance

No current Process

Hiko Control Export Monitor Process



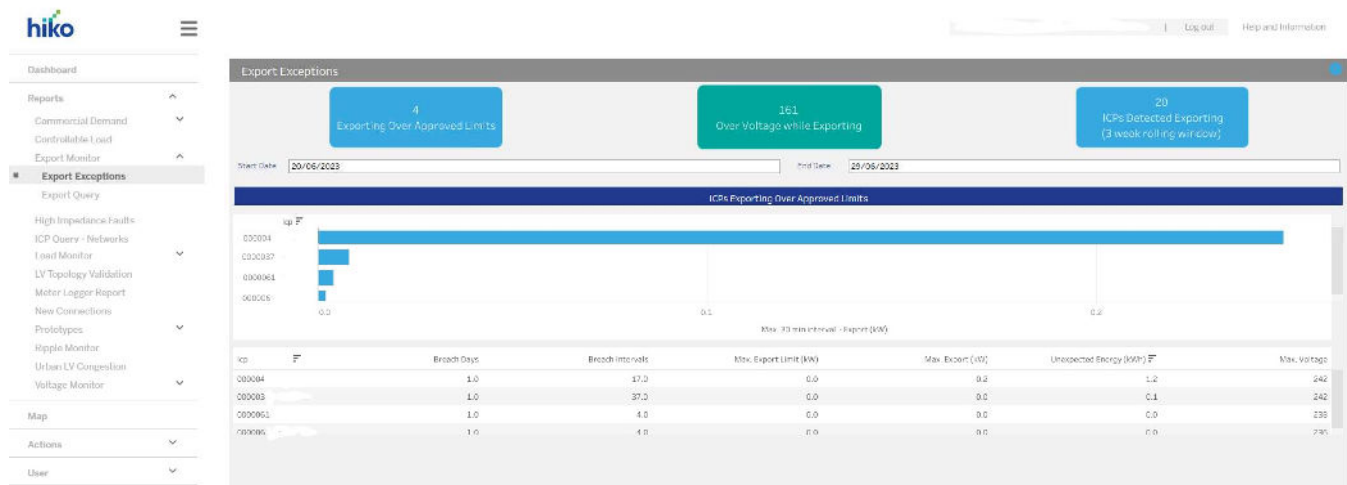
Value to Role

- Keeping the network team safe
- Reduce the number of calls

Added Value

- Reduced H&S risk of electrical shock
- Accommodate other/future customers to install solar/generating.
- Reduces voltage issue incidents for Customers

Hiko Images



Network Tasman has also established mechanisms for the direct control residential batteries through ripple control. This innovation expands on the load already under its control through its automatic load management system. It has not implemented this control to date, however, as it was discovered that the main owner of distributed battery storage was already using the batteries to suit Network Tasman's peak load profiles, by responding to price signals in its line tariffs.

The control mechanism remains an innovation for the future.

To be adopted by Network Tasman any innovation must deliver benefits that provide value for money for our end-use consumers i.e. benefits in the provision of line function services that consumers are prepared to pay for and that are cost effective when compared with other means of providing the same benefit. The innovation must also demonstrate performance in terms of reliability, safety and availability that is line with traditional network solutions.

Network Tasman is open to contracting with other companies for innovation services but any contracts must guarantee performance and companies contracted with must be "robust" from a technical support point of view and from a financial point of view.