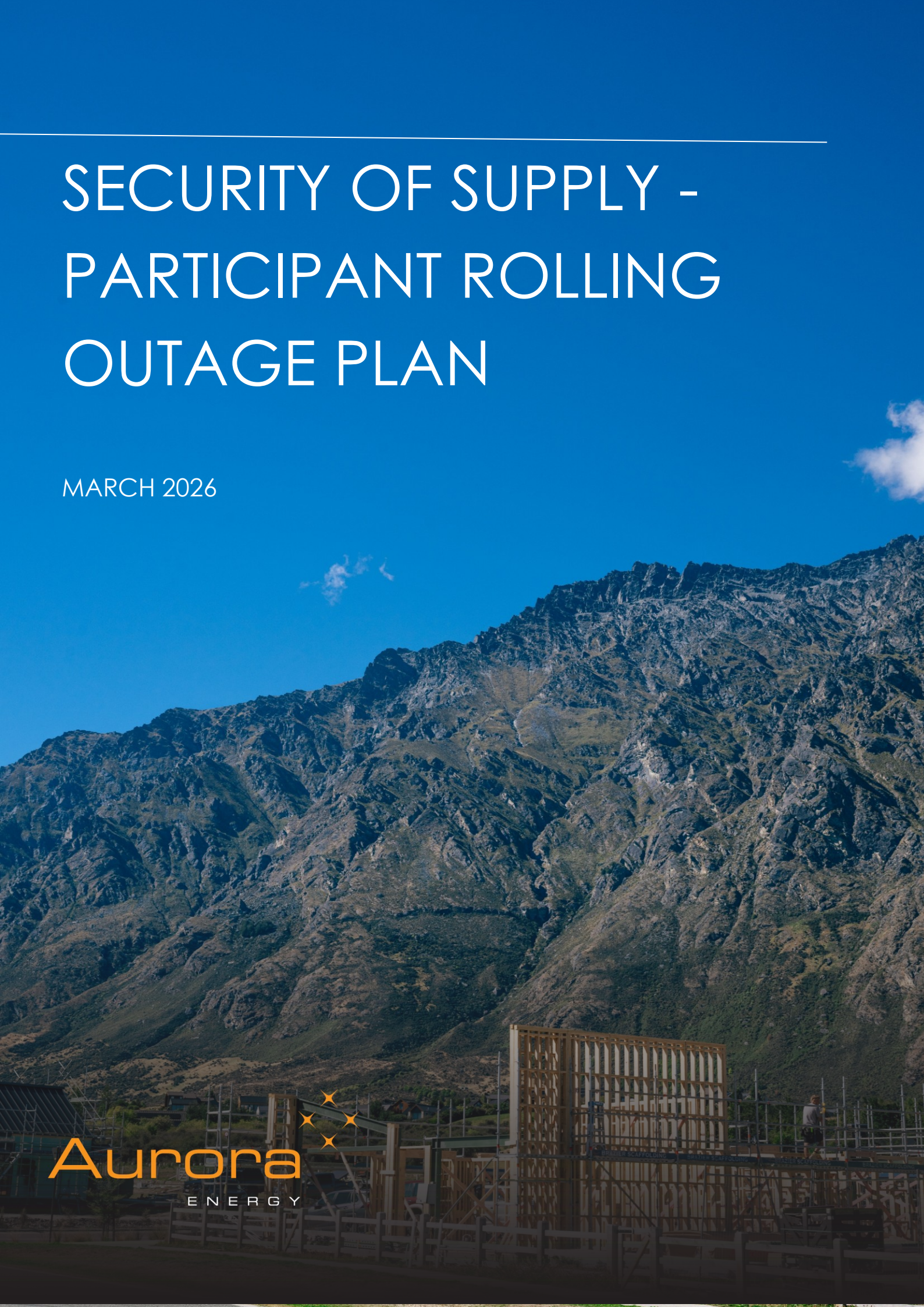
SECURITY OF SUPPLY - PARTICIPANT ROLLING OUTAGE PLAN

MARCH 2026



Aurora ENERGY

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Revision history

Version	Date	Revision notes	Section/s
1.0	18/01/2022	Initial Document	
2.0	23/02/2024	Change to Aurora Energy contact person for System Operator, section 4.3. Internal reference to draft document AE-OO08-S removed, section 6. Addition of supply restoration detail, section 7.4.	4.3, 6, 7.4
3.0	26/03/2026	Removal of Category A / Category B event classification – now described as Developing or Immediate event.	3, 4.2, 5
		Update to role titles and incumbents based on team/role changes. Restructure of document to align with SOROP structure. New template style applied.	Various All

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1 Introduction

1.1 Purpose

This standard provides information for:

- Aurora Energy Network Operations to reduce electricity consumption when a supply shortage is declared by the System Operator under the requirements of the Transpower System Operator Rolling Outage Plan (SOROP).
- Aurora Energy as a participant in the Electricity Industry Participation Code 2010 (the Code) to comply with specifically clauses 9.6 to 9.13 of Part 9 of the code.
- Aurora Energy to comply with the Electricity Authority Te Mana Hiko requirements to prepare a Participant Rolling Outage Plan (this Plan). This plan is published in the disclosures section of the Aurora Energy website.
- the Aurora Energy Participant Rolling Outage Plan to be up-to-date, as required by the Transpower System Operator.

1.2 Scope

This standard applies to the Aurora Energy Network Operations procedures to reduce electricity demand as directed by the System operator.

The procedures outlined are in response to:

- major transmission equipment outages, or
- major generation shortages including dry year scenarios.

This covers:

- How an event is declared
- How the System Operator should communicate its requests.
- How rolling outages (the main energy saving measure) are structured and implemented.

Reducing demand by disconnecting supply to consumers would be a last resort after all other forms of savings, including voluntary savings, had been employed.

Aurora Energy will always endeavour to keep consumers supplied.
Aurora Energy will only disconnect consumers when directed to by the System Operator.

1.3 Accountabilities

Role	Accountable for
General Manager Future Network & Operations	Accountable for ensuring the Participant Rolling Outage Plan (PROP) (this plan) is current, fit for purpose, and operable.
Network Operation Centre Manager (NOC Manager)	Accountable for ensuring the specified communications are in place and the Network Coordination Team can enact the PROP.

Role	Accountable for
Network Operations Team Lead	Accountable for ensuring the Network Co-ordinators understand the PROP and that the Advanced Distribution Management System (ADMS) can be operated to comply with the plan as stated.
Operational Performance & Safety Manager	Accountable for ensuring the PROP is reviewed and updated and then communicated to and approved by Transpower. Accountable for making the PROP publicly available via the Aurora Energy website. Accountable for regular reporting to the System Operator regarding compliance with savings targets.

1.4 Glossary and abbreviations

Abbreviation	Term	Definition
ADMS	Advanced Distribution Management System	A system used by some networks (including Aurora Energy) to automate outage restoration and optimise the performance of the distribution grid.
AUFLS	Automatic under-frequency load shedding	A System Operator scheme to maintain the stability of New Zealand's power system during severe under frequency events.
Conforming GXP	Conforming Grid Exit Point	A conforming grid exit point has a predictable demand pattern. The demand at a conforming GXP is forecast by the system operator.
EA	Electricity Authority Te Mana Hiko (formerly Electricity Commission)	The Electricity Authority is established under the Electricity Act 1992 to oversee the governance, operation and development of the New Zealand electricity industry.
Code (the Code)	Electricity Industry Participation Code 2010	The set of rules that governs nearly every aspect of the electricity industry and may be the basis of rules, practices and requirements our network or retailers have e.g. for connections or metering.
—	Feeder	A high voltage circuit typically supplying up to 2000 consumers.
GEN	Grid emergency notice	A type of formal notice issued by the System Operator for an energy or reserve shortfall within one hour of real time.
GXP	Grid exit point	A point where the local network is connected to Transpower's transmission network and where electricity flows out of the national grid to our network.
IMT	Incident Management Team	The designated group of skilled and experienced staff trained in the national Co-ordinated Incident Management System CIMS framework. This team is led by the Incident Controller who gives direction for the response activities.
MW	Megawatt	One million watts. This is a measure of the amount of power flowing.
NGOC	National Grid Operating Centre	Referring to Transpower's National Grid Operating Centre.

Abbreviation	Term	Definition
Non-conforming GXP	Non-conforming Grid Exit Point	A non-conforming grid exit point (GXP) does not follow a predictable daily demand pattern. Purchasers are to prepare their own forecasts of electricity usage at those GXPs for market scheduling purposes in the form of nominated bids.
PROP	Participant Rolling Outage Plan	(This plan) A plan that provides for the management and co-ordination of planned outages as an emergency during energy shortages aligned to the System Operator Rolling Outage Plan and other requirements of the Code. Aurora Energy is required to prepare and publish this plan under the Electricity Industry Participation Code 2010.
—	Rolling outages	Planned electricity disconnections spread over different parts of the network at differing times to avoid prolonged outages at any one location.
—	Security Co-ordinator	Person responsible for system security at the System Operator.
—	Supply Shortage Declaration	Declaration made by the System Operator under clause 9.14 of the Code.
SOROP	System Operator Rolling Outage Plan	A plan that provides for the management and co-ordination of planned outages as an emergency during energy shortages. The System Operator is required to prepare and publish this plan under the Electricity Industry Participation Code 2010.

1.5 Normative references

Reference code/Type	Title
NZ Legislation	Electricity Act (1992)
NZ Legislation	Electricity Industry Act 2010
NZ Legislation	Electricity Industry Participant Code 2010
NZ Legislation	Transpower's System Operator Rolling Outage Plan, 1st September 2024

1.6 External references

Reference code	Title
718239-2	Electricity Authority Te Mana Hiko List of Non-conforming and Conforming GXPs, 6th August 2025.

1.7 Internal references

Reference code	Title
[redacted]	Business Continuity and Emergency Response Plan

2 Background

2.1 Electricity Authority Te Mana Hiko

The Electricity Authority Te Mana Hiko (EA) is a Crown entity set up under the Electricity Industry Act 2010 and responsible for the efficient operation of the New Zealand electricity market.

The core functions of the EA are to:

- make and administer the Electricity Industry Participation Code 2010 (Code) governing the New Zealand electricity market,
- undertake market-facilitation measures (such as providing education, guidelines, information, and model arrangements),
- monitor the operation and effectiveness of market-facilitation measures,
- monitor and enforce compliance with the Code, various regulations, and the Act,
- proactively monitor the performance of the electricity industry regarding competition, reliable supply and efficient operation,
- and contract service providers to operate the New Zealand electricity system and market in accordance with the Code.

2.2 Transpower (System Operator)

Transpower is a state-owned enterprise that owns and operates New Zealand's national grid which consists of high voltage (HV) transmission lines and substations that transports bulk electricity from generators to local electricity distribution companies, such as Aurora Energy, as well as some large industrial users.

Transpower is also contracted by the EA to perform the role of System Operator. In this role, Transpower operates the wholesale electricity market and manages the real-time operation of New Zealand's electricity power system. The System Operator function is regulated by the EA under the Electricity Industry Participation Code 2010 and is required to operate independently from Transpower's role as the National Grid owner.

As System Operator, Transpower ensures that electricity supply from generators is continuously balanced with demand from electricity users. This real-time operation maintains system security by managing the flow of electricity across the transmission network and ensuring that voltage and frequency remain within acceptable limits at all times.

Constraints on the ability to manage generation with demand may be caused by:

- Low lake levels reducing hydro generation
- Failure of a large generator
- A fault on a critical transmission circuit.

The first two causes could lead to an energy shortage, while the third could lead to a shortage of transmission capacity.

The System Operator has various other security-of-supply responsibilities under the Code, including forecasting supply and demand, calculating, and publishing hydro risk curves, and implementing the SOROP under certain conditions.

2.3 Aurora Energy

Aurora Energy is the electricity network company that owns, operates, and maintains the electricity lines, cables and substations that deliver electricity from Transpower Grid Exit Points (GXPs) to over 96,000 connections in the Dunedin, Central Otago and Queenstown Lakes regions.

Aurora Energy has some ability to control load by turning off domestic water and storage heaters, via ripple control. Further load reductions would require disconnecting consumers.

3 Range of Events

Events that could lead the System Operator to make a supply shortage declaration can in general terms be categorised as:

Developing Events:	Events that evolve over time; for example, low hydro lake or fuel levels.
Immediate Events:	Events that occur with little or no warning, usually because of a transmission circuit or major generation failure.

3.1 Significant Incident

A **Developing** or **Immediate** event will be classed by Aurora Energy as a significant incident and Aurora Energy's management team will activate the appropriate contingency plan as provided for in the *Business Continuity and Emergency Response Plan* [redacted] to manage the event accordingly.

Communication with electricity retailers, civil defence, media, and other stakeholders will be [redacted].

4 Communications

4.1 General

Upon receipt of direction from the System Operator to Save Energy and prepare for rolling outages, the NOC Manager will acknowledge this receipt by email.

The NOC Manager will also inform Aurora Energy's management and commence specific rolling outage plan preparations. Final authorisation to commence a programme of rolling outages will be made by Aurora Energy's Chief Executive.

Prior to notifying and implementing rolling outages, the NOC Manager will co-ordinate rolling outages with the System Operator using the contact details specified in Section 4.3. The Aurora Energy rolling outage plan will use best endeavours to:

- not increase or decrease its demand by more than 25 MW (in aggregate across all Auroa Energy GXPs) in any five-minute period without the System Operator's prior approval,
- minimise the impact on frequency and voltage stability,
- minimise the disconnection of its demand during times when demand is typically ramping down and restoration of its demand when demand is typically ramping up in the region affected by the supply shortage (for example, either side of morning and evening peaks).

Aurora Energy will keep media and consumers informed of planned interruptions to supply both before and during the outages. Media will be informed as per Aurora Energy's standard communications procedure, and the electricity retailers will be responsible for consumer notification.

Aurora Energy will provide the System Operator with daily, rolling week-ahead forecast of half-hourly load at each GXP, considering the impact of the planned rolling outages.

4.2 Aurora Energy staff responsibilities

Within one day of declaration of a Developing Event, the NOC Manager will notify the System Operator of any updated contact details including telephone numbers and email address for each of the positions named in Table 1 below.

Table 1: Aurora Energy PROP staff responsibilities

Role	Aurora Energy Person Responsible
Receive communication from System Operator	CEO, GM Future Network & Operations, Network Operation Centre Manager
Implement this plan	Network Operation Centre Manager
Preparation of load shedding schedules	Network Operation Centre Manager
Retailer notification	Network Access Team Lead
Communicate with emergency services (including Civil Defence) and local authorities	Customer & Communications Manager
Reporting to media, public agencies	Customer & Communications Manager
Weekly savings reporting	Operational Performance & Safety Manager
Revoking rolling outages	Network Operation Centre Manager

If the listed Aurora Energy staff member in Table 1 is unavailable, an appropriate alternate must be appointed.

It is likely an Aurora Energy Incident Management Team (IMT) will also be stood up to work alongside the PROP specific roles listed above (this is in line with Aurora Energy significant incident protocols).

The Aurora Energy IMT Incident Controller will appoint a role to interface between those enacting this plan and the IMT—this is usually the GM Future Network & Operations.

4.3 Communication with the System Operator

The System Operator will contact Aurora Energy for operational purposes using the following details:

Aurora Energy Network Operation Centre

Duty Network Co-ordinator

Email: [redacted]

Phone: [redacted]

The following contact can be used for administrative matters and escalation:

Network Operation Centre (NOC) Manager

[redacted]

Email: [redacted]

Phone: [redacted]

Aurora Energy will contact the System Operator for operational purposes using normal communication protocols and systems via Transpower's National Grid Operating Centre (NGOC).

For administration purposes, Aurora Energy will contact the System Operator using the following details:

Email: [redacted]

Phone: [redacted]

Administration purposes can include:

- supply shortage declarations
- directions to save energy
- acknowledgement of receipt of a direction to save energy
- rolling outage monitoring
- distributor load, load shedding schedules
- media/public communications

5 Declaration of a supply shortage

Under clause 9.14(1) of the **Code** the System Operator has discretion to make a **supply shortage declaration** when there is a supply shortage.

If a supply shortage is caused by a power system event, it is likely any **supply shortage declaration** will be preceded by a grid emergency caused by a shortfall of energy or instantaneous reserve. If the grid emergency is likely to persist for a sustained period, the system operator will make a **supply shortage declaration** if it considers the supply shortage would be more appropriately managed by rolling outages.

During a **developing event** the system operator will endeavour to provide at least 14 days' notice to specified participants in the region affected by the supply shortage of a supply shortage declaration, including the time and date the supply shortage declaration is likely to be made. If it is not reasonably practicable to provide 14 days' notice, the system operator will provide as much prior notice as reasonably practicable.

During an **immediate event** the system operator will provide as much prior notice as reasonably practicable to specified participants in the region affected by the supply shortage of a supply shortage declaration, including the time and date the supply shortage declaration is likely to be made. However, it is likely a supply shortage declaration for an **immediate event** will need to be made without prior notice.

If the System Operator requests a load reduction for a **developing event**, Aurora Energy must reduce demand to meet the System Operator's targets. The targets are expected to take the form of an energy savings target, reviewed weekly. To reduce energy usage, Aurora Energy would disconnect HV feeders (rolling outages), in a controlled manner, to enable targets to be reached. The shedding of water heating load is not a viable option for energy savings, as this only defers usage and would not save energy over a **developing event**.

5.1 Directions

The System Operator will issue a savings target direction to Aurora Energy. The energy savings target will be set as a percentage of Aurora Energy's forecast electricity consumption over the next 35 days.

Aurora Energy will endeavour to provide feedback by email to the System Operator on the 35-day forecast electricity consumption within 48 hours if it is believed the forecast is incorrect, or if there are any other factors for the System Operator to consider.

A savings target will typically be an energy savings target per week, updated weekly on a rolling basis. In some cases, a capacity savings target may be applied for particular peak periods in addition to, or instead of, an energy savings target.

The System Operator may amend the savings target if it considers there are circumstances that justify it.

5.1.1 Direction notice periods

During a **developing event** the system operator will endeavour to provide at least nine days' notice to relevant specified participants of a direction containing a savings target, including the times and dates the savings target will apply. If it is not reasonably practicable to provide nine days' notice, the system operator will provide as much prior notice as reasonably practicable.

During an **immediate event** the system operator will provide as much prior notice as reasonably practicable to relevant specified participants of a direction containing a savings target, including the times and dates the savings target will likely apply. However, it is likely a direction for an **immediate event** will need to be given without prior notice.

5.1.2 Direction acknowledgement

As required by the SOROP clause 6.13(a) Aurora Energy will acknowledge the receipt of an energy savings or capacity savings target by return email to the System Operator using contact details in Section 4.3 within 48 hours.

6 Implementation of savings targets

Rolling outages will be utilised to meet the savings target direction issued by the System Operator. Rolling outages will be implemented by disconnection of specific HV feeders.

6.1 Criteria for rolling outages

To ensure public health and safety is preserved, and costs to economy are minimised, Table 2 shows a desired criteria for selecting feeders to be included in rolling outages. The higher the load priority the less likely the load will be shed as part of rolling outages.

Table 2: Priority loads[1]

Priority	Priority concern	Maintain supply to:
1	Critical public health and safety	Critical health and disability services e.g., major hospitals, air traffic control centres, emergency operation centres.
2	Important public services	Lifelines infrastructure e.g., energy control centres, communication networks, water and sewage pumping, fuel delivery systems, major ports, public passenger transport, major supermarkets.
3	Public health and safety	Vulnerable sectors e.g., rest homes, prisons, medical centres, schools, street lighting.
4	Animal health and food production/storage	Dairy farms, milk production facilities, chicken sheds, cool stores.
5	Domestic production	Central business districts, commercial and industrial premises.
6	Disruption to consumers	Residential premises

These priorities are intended as guidelines only. As rolling outages will be implemented on a feeder-by-feeder basis, it is not possible to discriminate between individual consumers on the same feeder. For example, a predominantly residential feeder may also have small pockets of commercial or industrial consumers.

6.2 Automatic Under Frequency Load Shedding (AUFLS) criteria

Currently, the same criteria for rolling outages (as shown in Table 2) are also used to select 33 kV feeders (zone substations) for AUFLS tripping. Thus, AUFLS load blocks are predominantly from lower priority load categories; however, some higher priority consumers would also be affected.

To maintain equity, as far as practical, Aurora Energy may include AUFLS feeders as part of rolling outage plans. However, Aurora Energy will ensure that the 16% capacity requirements of load shed from feeders in each AUFLS block is maintained.

[1] Table from Section 6.8 of SOROP, 1 September 2024

To minimise the effect of potential AUFLS exclusion during extended rolling outages, Aurora Energy will continue to review the allocation of AUFLS feeders and look for opportunities to shift the AUFLS to high priority zone substations.

When a **developing event** is declared, Aurora Energy may engage with Transpower to change the AUFLS blocks to alternative feeders. It is considered prudent to expose high priority consumers to a low-probability short-term event, such as AUFLS, rather than have them included in rolling outages.

6.3 Retailer agreements

Aurora Energy does not have any agreements with retailers or consumers which would adversely affect Aurora Energy's ability to comply with System Operator directions, as required under Section 6.10 of the SOROP.

6.4 Outage notification

With the wide-scale impact of rolling outages, it is not feasible to use our standard planned outage notification process. When implementing a rolling outage plan, Aurora Energy will notify the outages in several ways:

- **Aurora Energy website:** We will publish the approximate rolling outage timetable on our website with as much accuracy as possible.
- **Online social media and radio:** We will use social media and radio communication as appropriate.
- **Customer Engagement team**: The Aurora Energy C&E team will have direct communication with customers as appropriate.
- **Retailer notification:** Aurora Energy will provide the published rolling outage timetable to all electricity retailers together with a schedule showing the rolling outage group for all Installation Control Points (ICPs).

Where possible, Aurora Energy will provide up to 7 days' notice of all rolling outage plans.

6.5 Vulnerable consumers and priority sites

It is not possible for Aurora Energy to prevent rolling outages affecting individual vulnerable customers and priority sites. In addition to the prioritisation of rolling outage feeders Aurora Energy will:

- Provide information in its public notices and on its website alerting vulnerable customers to the risks, and
- Request that retailers consider individually notifying their vulnerable customers.

6.6 Grid emergency during developing event

If the System Operator declares a grid emergency in addition to a **supply shortage declaration** event, the grid emergency will take priority.

As water heating load generally would not be used to reduce load under a supply shortage, Aurora Energy would have the water heating load available for load reduction when required for the grid emergency. If water heating load is insufficient, the rolling outage feeders may have to be rearranged to comply with the Grid Emergency Notice (GEN). After the grid emergency is over, the rolling outages pattern would continue.

7 Rolling outages strategy and methodology

7.1 Rolling outage planning

When directed to implement savings targets by the System Operator following a supply shortage declaration, rolling outages will be instigated by the NOC Manager, in accordance with this plan. The NOC Manager will ensure:

- load shedding schedules are prepared
- Network Co-ordinator rosters are adjusted as required
- and load is controlled and monitored to meet desired targets.

Schedules of estimated load shedding quantities—including start and restore times per GXP—will be forwarded to the System Operator on a rolling daily basis for at least the week ahead

If significant load shedding variation is noticed, or expected, from the schedules provided to the System Operator, then Aurora Energy shall advise the System Operator of this change.

As all Aurora Energy GXPs are **conforming GXPs**, the schedule supplied to the System Operator via email will also include a best endeavours forecast of half hourly GXP-level demand in Megawatts (MW).

The System Operator will advise if any changes are required to the timing and location of rolling outages.

Aurora Energy will endeavour to comply with the criteria stated in Table 2 to select feeders for rolling outages. Aurora Energy will attempt to keep rolling outages to any consumer no longer than 5 hours per day, for a 5% savings target. For savings more than 5%, longer outages may be necessary.

Aurora Energy will, to the extent possible endeavour to program rolling outages between 0800 and 1700 on all days to achieve the required savings. The specific timing of outages will be approximate and could vary daily due to network or System Operator constraints.

The duty Aurora Energy Network Co-ordinator will be responsible for enacting (disconnecting and restoration) the rolling outage plan in real time.

Table 3 and Table 4 below show the planned cut duration for each specified savings level. Cuts are based on five-to-seven days per week, and the listed priorities are the highest priority loads expected to be cut as per Table 2. The savings levels in this table are in addition to any savings made through voluntary or other means.

7.2 Monitoring and reporting

The Operational Performance & Safety Manager will compile reports demonstrating how Aurora Energy is complying with the savings direction. Reports will be provided to the System Operator via email on a weekly basis on:

- the nature and extend of rolling outages
- and the savings achieved compared to the target that was directed.

Additional information requested by the System Operator can be supplied as part of this reporting if required to assess performance against savings targets.

Table 3: GXP details

GXP name	GXP code	Rolling outages may occur	Conforming / Non-conforming GXP[2]
Halfway Bush	HWB0331	Yes	Conforming
South Dunedin	SDN0331	Yes	Conforming
Frankton	FKN0331	Yes	Conforming
Cromwell	CML0331	Yes	Conforming
Clyde	CYD0331	Yes	Conforming

Table 4: Expected highest priority load subject to outage by savings level

Savings level	Highest priority load schedule	Maximum duration	Days per week
5%	5	5 hrs	5
10%	5	8 hrs	6
15%	4	8 hrs	7
20%	3	10 hrs	7
25%	3	10 hrs	7

7.3 Feeder selection

Feeders to be disconnected will be on a planned basis to ensure applicable feeders are rotated to minimise repeated outages.

Calculation of the expected saving is complicated by two factors:

1. The daytime load of feeders is significantly higher than the night-time load, therefore the saving from a feeder outage of, for example, 6hrs per day will be greater than 25%.
2. On restoration of a feeder, there will be some additional load due to "cold load pickup" (e.g., home heating, water heating, and refrigeration load returning to their temperature settings). This will reduce the expected savings.

To a certain extent, these two factors will cancel each other out.

The tables below are an estimate of expected savings. The actual outages will have to be modified from this plan, based on measured results, to meet weekly savings targets.

Because rolling outages will be implemented on a feeder-by-feeder basis, it is not possible to discriminate between individual consumers on the same feeder. For example, a predominantly residential feeder may also have small pockets of commercial or industrial consumers.

[2] List of Non-conforming and Conforming GXPs: https://www.ea.govt.nz/documents/162/List_of_non-conforming_and_conforming_GXPs.pdf

Table 5: Estimated duration of daily outages per consumer group for 5% savings

Consumer Group Priority	Outage Duration	Days per week	Percentage System Winter Energy	Expected Energy Savings
1			12%	0.0%
2			14%	0.0%
3			16%	0.0%
4			18%	0.0%
5	4 Hr	5	18%	2.1%
6	5 Hr	5	22%	3.3%
			100%	5.4%[3]

Table 6: Estimated duration of daily outages per consumer group for 10% savings

Consumer Group Priority	Outage Duration	Days per week	Percentage System Winter Energy	Expected Energy Savings
1			12%	0.0%
2			14%	0.0%
3			16%	0.0%
4			18%	0.0%
5	6 Hr	6	18%	3.9%
6	8 Hr	6	22%	6.3%
			100%	10.1%[3]

Table 7: Estimated duration of daily outages per consumer group for 15% savings

Consumer Group Priority	Outage Duration	Days per week	Percentage System Winter Energy	Expected Energy Savings
1			12%	0.0%
2			14%	0.0%
3			16%	0.0%
4	3 Hr	7	18%	2.3%
5	8 Hr	7	18%	6.0%
6	8 Hr	7	22%	7.3%
			100%	15.6%[3]

[3] % Total Energy Savings may not appear to add up due to rounding.

Table 8: Estimated duration of daily outages per consumer group for 20% savings

Consumer Group Priority	Outage Duration	Days per week	Percentage System Winter Energy	Expected Energy Savings
1			12%	0.0%
2			14%	0.0%
3	2 Hr	7	16%	1.3%
4	4 Hr	7	18%	3.0%
5	10 Hr	7	18%	7.5%
6	10 Hr	7	22%	9.2%
			100%	21.0%[3]

Table 9: Estimated duration of daily outages per consumer group for 25% savings

Consumer Group Priority	Outage Duration	Days per week	Percentage System Winter Energy	Expected Energy Savings
1			12%	0.0%
2			14%	0.0%
3	4 Hr	7	16%	2.7%
4	8 Hr	7	18%	6.0%
5	10 Hr	7	18%	7.5%
6	10 Hr	7	22%	9.2%
			100%	25.3%[3]

The outage durations tabled above are indicative only and will be reviewed daily to achieve the specified targets.

7.4 Contingent events

If an unplanned event occurs that could alter the planned rolling outages, such as a Civil Defence emergency, the NOC Manager will be responsible for communicating any changes to the advertised program to:

- electricity retailers
- and the System Operator.

7.5 Supply disconnection and restoration

Load disconnection and restoration must be achieved in line with the guidance from the System Operator. This is to prevent overloading the transmission network and creating instability. The System Operator has advised that load changes of less than 25 MW in any five minutes may be implemented by a network without their prior approval.

The supply disconnection and restoration method must use best endeavours to:

- minimise the impact on frequency and voltage stability
- and minimise disconnection and restoration during times when demand is typically ramping up or down in the region (for instance either side of morning and evening peaks).