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NETWORK RELIABILITY STRATEGY

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EXECUTIVE SUMMARY

Aurora is licensed by the Regulator under the Electricity Supply Industry Act 1995 as a provider of distribution network services on mainland Tasmania. As a licensed electricity entity, Aurora must manage its distribution network to comply with the performance standards given in section 8.6.11 of the Tasmanian Electricity Code.

The aim of the Network Reliability Strategy is to:

- prevent outages from occurring;
- minimise the number of customers affected; and
- restore supply as quickly as possible.

The Network Reliability Strategy is implemented through three programs:

- a Remote Control Program;
- a Targeted Reliability Improvement Program (TRIP) ; and
- a Local Reliability Program.

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1	2010	Original Issue	Prepared by	AF
			Reviewed by	MG
			Approved by	BA

1 PURPOSE

This document is the Aurora Network Reliability Strategy, the strategy guiding Aurora's approach to managing its distribution network to achieve compliance with the mandated jurisdictional reliability performance standards.

2 BACKGROUND

Aurora is licensed by the Regulator under the Electricity Supply Industry Act 1995 as a provider of distribution network services on mainland Tasmania. As a licensed electricity entity, Aurora must comply with the jurisdictional performance standards set out in section 8.6.11 of the Tasmanian Electricity Code (the "Performance Standards").

Aurora's distribution business, comprising the Network and Network Services divisions, uses a "thread management" approach to asset and service obligation management, whereby staff associated with all aspects of an obligation or asset's life cycle, from compliance, planning to installation and maintenance and disposal, can be considered as an organisational unit. The Reliability thread of Aurora's Network division is responsible for improving and managing Aurora's distribution network to comply with the jurisdictional performance standards.

3 POLICY STATEMENT

Aurora Energy will comply section 8.6.11 of the Tasmania Electricity Code:

"A Distribution Network Service Provider must use reasonable endeavours to ensure that the average number and duration of planned and unplanned interruptions per annum to the supply of electricity due to interruptions on the distribution system, calculated using the methodology outlined in Schedule 8.1, does not exceed the frequency and duration figures..." outlined in the section 8.6.11 of the TEC.

4 OBJECTIVE/STRATEGIC ALIGNMENT

Reliability Improvement is a key strategic objective of the Network Management Strategy:

"To achieve these business imperatives in managing and operating the distribution system, Network has the following network management objective:

To minimise cost of supply to the customer whilst:

- a. Maintaining network performance;*
- b. Managing business operating risks; and*
- c. Complying with regulatory, contractual and legal responsibilities.*

The Reliability Strategy delivers these objectives by meeting the regulatory obligations for Reliability Performance under the Tasmanian Electricity Code, and maintains reliability in areas with existing suitable performance.

5 SCOPE

This strategy applies to Aurora's HV distribution network operating at 11 kV, 22 kV across Tasmania.

The LV network is excluded as few customers are impacted from individual LV network faults. General asset management is expected to maintain the reliability on the LV network.

6 KEY STRATEGIC OBJECTIVES

The key strategic objectives are:

- compliance with the distribution network performance standards given in the Tasmanian Electricity Code; and
- minimisation of GSL liability.

These objectives will be delivered by addressing the following areas.

6.1 Preventing outages from occurring

The most effective method of improving reliability is to address the root cause of network faults that can result in customer outages. By preventing the outage occurring in the first place, other mitigation measures are avoided, and the customer receives the highest level of performance. Methods for preventing faults occurring include asset condition monitoring, asset replacement and vegetation management.

6.2 Minimising the number of customers affected

Despite the measures above to prevent the occurrence of faults, outages will occur, and impact customers. The next effective measure for improving reliability is to use protection design to minimise the number of customers affected when outages do occur. This is achieved using appropriate electrical protection devices and ensuring accurate protection coordination.

6.3 Restoring supply as quickly as possible

The third response is to restore customers that have been affected by a permanent outage as quickly as possible. This is a function of Fault and Operations level of awareness and control, as well as Network Services' level of response. Tools available to address this are SCADA, remote control and monitoring, distribution automation, incident management, and Network Services' processes and resourcing.

7 KEY EXPENDITURE PROGRAMS

The following programs are intended to implement the Network Reliability Strategy.

7.1 Targeted Reliability Improvement Program

The TRIP aims to enhance the performance of individual communities as defined by the Performance Standards.

It does this by targeting each community with a range of options to address the issues of each particular community.

An ongoing TRIP maintenance program is also employed to ensure that Reliability performance is maintained in these communities.

7.2 Remote Control Program

The Remote Control and Fault Indication Program aims to enhance will address performance of Urban Category as defined by the Performance Standards. Urban category duration has continued to performance poorly against the Performance Standard.

It does this by introducing remote control and remote fault indication into Urban areas to allow faster restoration to affected customers.

7.3 Local Reliability Program

The Local Reliability Program will address specific localised reliability issues within Communities. These specific issues contribute to poor community performance, GSL payments and represent the 'worst' customer service performance.

It does this by identifying and responding to localised issues through minor network upgrades.

More information on the implementation of these programs can be found in the [NW-#30160638-Reliability Management Plan](#)