

## AURORA ENERGY – CASE STUDY

## SECURITY AND RELIABILITY COUNCIL

This paper provides the SRC with information by way of case study about Aurora Energy's approach to asset management, including developments on their network as part of their 2021-2026 customised price-quality pathway, recent storm event experiences, how they worked with their communities and learned from these events.

**Note:** This paper has been prepared for the purpose of the Security and Reliability Council (SRC). Content should not be interpreted as representing the views or policy of the Electricity Authority.

## Case Study – Aurora Energy

- 1.1.1 As part of its theme of asset management and risk, the SRC has asked the secretariat to provide information, by way of a case study, illustrating distributor asset management in practice.
- 1.1.2 The aim is to give members a sense of some of the various issues distributors consider when asset planning, what learnings they get from issues potentially unique to their location, how they collaborate with others for efficiency, and the impact of supply-chain and other issues related to the Covid-19 global pandemic.
- 1.1.3 Aurora Energy operates the electricity distribution network across Dunedin, Central Otago and Queenstown Lakes. Aurora's network had significantly deteriorated over a number of years as prolonged underinvestment in both growth and lifecycle maintenance was not keeping pace with the need.
- 1.1.4 As a result of the subsequent reviews, Aurora developed an accelerated asset renewal plan to improve the safety and reliability of the network and applied to the Commerce Commission for a customised price-quality path (CPP). The details were well publicised at the time and is covered in the first section of Aurora's presentation.
- 1.1.5 Over the next five-year period Aurora is investing \$563 million in its network. As part of its CPP, Aurora Energy will report annually to the Commerce Commission and keep consumers up to date via its website. Further information is available: [Delivering our CPP | Your Network Your Say \(auroraenergy.co.nz\)](https://www.auroraenergy.co.nz/delivering-our-cpp-your-network-your-say)
- 1.1.6 This paper complements the MartinJenkins report on distributor asset management and risk and the paper on grid owner asset management being presented at this meeting.
- 1.1.7 Appendix A is the Aurora Case study presentation.

### Questions for the SRC to consider

The SRC is asked to consider the following general questions.

- Q1. What further information, if any, does the SRC wish to have provided to it by the secretariat?**
- Q2. What advice, if any, does the SRC wish to provide to the Authority?**

## **Appendix A: Case Study – Managing and accelerating the Aurora Network investment programme**

# AURORA ENERGY

ACCELERATING OUR NETWORK INVESTMENT PROGRAMME AND  
TAKING CUSTOMERS ON THE JOURNEY WITH US



Aurora  
ENERGY



- ✧ Our Vision
- ✧ Our story so far
- ✧ Customised price-quality path (CPP)
  - a) Customer engagement
  - b) The Determination
- ✧ Future state
  - a) Accelerated work programme / bundled work
  - b) Customer-centric business
  - c) Enabling future energy choices

## **FROM THIS**

A RESPECTED LOCAL PARTNER RECOGNISED FOR PROVIDING ESSENTIAL ELECTRICITY SERVICES TO SUPPORT THE FUTURE GROWTH AND WELLBEING OF OUR COMMUNITIES.

## **TO THIS**

## **OUR VISION**

**“ENABLING THE ENERGY FUTURE OF OUR  
COMMUNITIES”**



# OUR STORY SO FAR



Aurora  
ENERGY



- ✧ **The Aurora Energy (formerly Delta) network had a prolonged period of under investment:**
  - a) Low levels of asset renewal and maintenance expenditure led to deterioration of aging assets
  - b) The level of investment in assets for growth was insufficient to maintain or achieve appropriate levels of security or reliability of supply
- ✧ **Customer reliability experience/service was deteriorating:**
  - a) Increased asset failures and vegetation encroachment was leading to an increased number of outages
  - b) The duration of outages was increasing due to insufficient security of supply
  - c) Large range of customer reliability experience from 1 to 20 outages per annum, depending on location
- ✧ **Prices were low as regulated revenue was linked to low levels of expenditure:**
  - a) Dunedin prices were amongst the lowest in NZ
  - b) Central Otago prices were approximately average in NZ for what is one of the most expensive areas to supply
- ✧ **Safety risks were a growing concern**, with 'pole failures' and 'lines down' events emerging, and aging protection systems at risk of maloperation.
- ✧ At this time there was no public acknowledgement by Aurora Energy/Delta of the historic under investment, **customer satisfaction and trust were low, and our license to operate was at risk**





✧ **A number of reviews led to:**

- a) A ramp up of expenditure (above regulated allowances), including the fast track pole programme
- b) The splitting of Delta contracting from Aurora Energy as the network asset owner and manager
- c) The appointment of a new CEO in 2018

✧ **Preparation for a Customised price-quality path (CPP) Application** (June 2020):

- a) Data gathering and cleansing to enable risk quantification, including an independent risk review
- b) 2018 Asset Management Plan (AMP) deferred to capture and address the risk quantification work
- c) Security of supply standard created, and security gap identification began

✧ **CPP Determination** (March 2021):

- a) Created a safety-focussed plan with consequential reliability improvements captured in a reliability forecast/target
- b) Critical security of supply projects were included, e.g. Clyde back-up supplies

# CUSTOMISED PRICE-QUALITY PATH (CPP) APPLICATION

## CUSTOMER ENGAGEMENT



We had specified requirements to consult with our customers before submitting our CPP application. We chose to go above and beyond these because we wanted to build enduring, two-way relationships with our customers. Consultation was phased so we could build awareness of Aurora Energy before consulting on specific plans.

## **Consultation included:**

- ✦ Customer survey (n=1000) to measure awareness, favourability, knowledge and preferred communications channels
- ✦ Focus groups - Customer Advisory Panel and Customer Voice Panels
  - a) Multiple workshops held (x 7 between June 2019 and April 2021)
- ✦ Variety of engagement techniques to suit different customer needs
  - a) Materials written in plain English
  - b) Online consultation hub, explainer videos, road show, meetings
  - c) Extensive promotion of the consultation (print, online and radio advertising, mailouts, media statements)

## **Key Customer feedback:**

- ✦ Concern about higher prices and regional cost allocations
- ✦ Agreed that network investment is required to achieve a safe network for the public and workers
- ✦ Accepted that deferring reliability improvement initiatives to manage price was appropriate

## **Aurora Energy observations:**

- ✦ Relatively low level of customer awareness and engagement
- ✦ Misunderstanding that prices are currently low and underinvestment in the past is not the cause of forecast higher prices
- ✦ Some distrust in Central Otago associated with Dunedin City Council ownership – relatively high Central Otago prices



# CUSTOMISED PRICE-QUALITY PATH (CPP) APPLICATION

## THE DETERMINATION





- ✧ The Commerce Commission broadly agreed with our plan but wanted price shock to be managed:
  - a) A five year revenue path was set, with revenue increase limited each year to 10%
  - b) \$69m of revenue deferral to beyond the CPP period
  - c) Reduced capex allowance to reflect COVID-19 related growth uncertainty
  - d) Reliability target and limit set lower (better service) than CPP Application
  - e) Requirement for a Project and Programme Delivery Plan and Safety Plan
  - f) Requirement for a Development/Improvement Plan
  - g) Requirement to share our Plans publicly
  
- ✧ Revised AMP and CPP Plan (March 2022) taking into account the CPP Determination:
  - a) Increased growth has led to a need to invest in capacity and security of supply
  - b) Capacity Event reopener sought
  - c) Reliability target refined (improved/updated data)
  - d) Increasing focus on decarbonisation growth scenarios and associated investment and actions

# OUR FOCUS AND FUTURE STATE







- ✧ Efficient Delivery
- ✧ Our people, Our place
- ✧ Our Communities
- ✧ Enabling Decarbonisation
- ✧ License to Operate





## **Accelerated work programme / bundled work:**

- ✗ Greater work volume leads to an increased number of planned outages
- ✗ Transition from spot risk work to coordinated (bundled) work packs is helping to mitigate planned outages and disruptions for customers
- ✗ Unplanned outages/reliability stabilising – possibly improving slightly in some areas

## **Customer-centric business:**

- ✗ Community relations framework
- ✗ Customer satisfaction surveys
- ✗ Customer commitments
- ✗ Annual Delivery Report engagement
- ✗ Goal is to improve our social license to operate and reputation

## **Future ready:**

- ✗ Delivering our pricing strategy
- ✗ Decarbonisation on track
- ✗ Lead industry collaboration
- ✗ Customer participation – solarZero



# THANK YOU



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