

AURORA ENERGY CPP STAKEHOLDER BRIEFING



20 NOVEMBER 2019



What we want to brief you on the following

1. We launched our consultation yesterday on our preliminary estimate of the investment we need to make over the next four years (CPP consultation)

Our proposed plan:

- a) builds on the work done over the past two and half years
- b) signals the need for a step change uplift in annual line charges (+\$20 / month)
- c) takes effect from 1 April 2021 and is presented as a preliminary view
- d) will be subject to regulatory / independent scrutiny over the next 18 months (CPP)

2. Understanding the context for our plan and the process we have to follow to finalise the plan is important – our consultation will attract media coverage (local/ / national)

This short briefing covers:

- a) the context for our Customised Price Path application and some key facts
- b) the drivers / needs case for investment over the next four years and priorities
- c) the indicative impact of the plan on electricity bills / lines charges from 1 April 2021
- d) the CPP process over the next 18 months before our plan / prices are finalised



MEUG Members

- ✕ **Business NZ**
 - ✕ Cold Storage Nelson
 - ✕ **Fonterra**
 - ✕ **Lion**
 - ✕ New Zealand Steel
 - ✕ Norske Skog Tasman
 - ✕ Oceana Gold
 - ✕ O-I New Zealand
 - ✕ Oji Fibre Solutions
 - ✕ Pacific Aluminium
 - ✕ Pan Pac Forest Products
 - ✕ **Progressive Enterprises**
 - ✕ **Ravensdown Fertiliser**
 - ✕ Refining NZ
 - ✕ Whakatane Mill
 - ✕ Winstone Pulp International
 - ✕ Wood Processors & Manufacturers Association
-
- ✕ Business NZ – various (Niwa, Spark, Fulton Hogan, Westpac, Bunnings, etc)
 - ✕ Fonterra – Mosgiel store / railhead
 - ✕ Lion – Speights & Emerson's breweries / taprooms
 - ✕ Progressive Enterprises – Countdown, FreshChoice & SuperValue supermarkets
 - ✕ Ravensdown Fertiliser – Ravensbourne plant



Anticipated Areas of Interest

Aurora Energy customers who are MEUG members:

- ✧ Scale and focus of investment
- ✧ Price impact resulting from investment

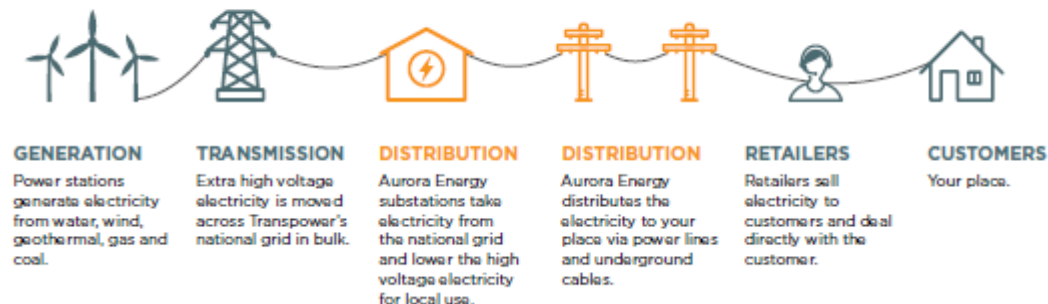
MEUG Members:

- ✧ Consistency with the regulatory CPP process
- ✧ Customer consultation
- ✧ Assessment & scrutiny (and precedent for other CPPs)
- ✧ Rate of return

Who is Aurora Energy?



YOUR ELECTRICITY SUPPLY



OUR NETWORK



We serve more than

90,000

customer connections



54,000
power poles



7,000
distribution transformers



6,575
km of network length, overhead lines and underground cables



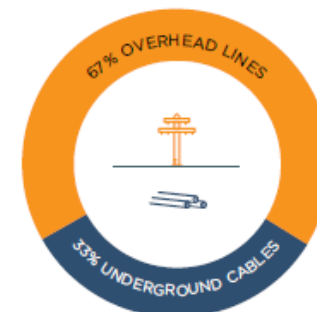
4,407
km of overhead lines



2,168
km of underground cables

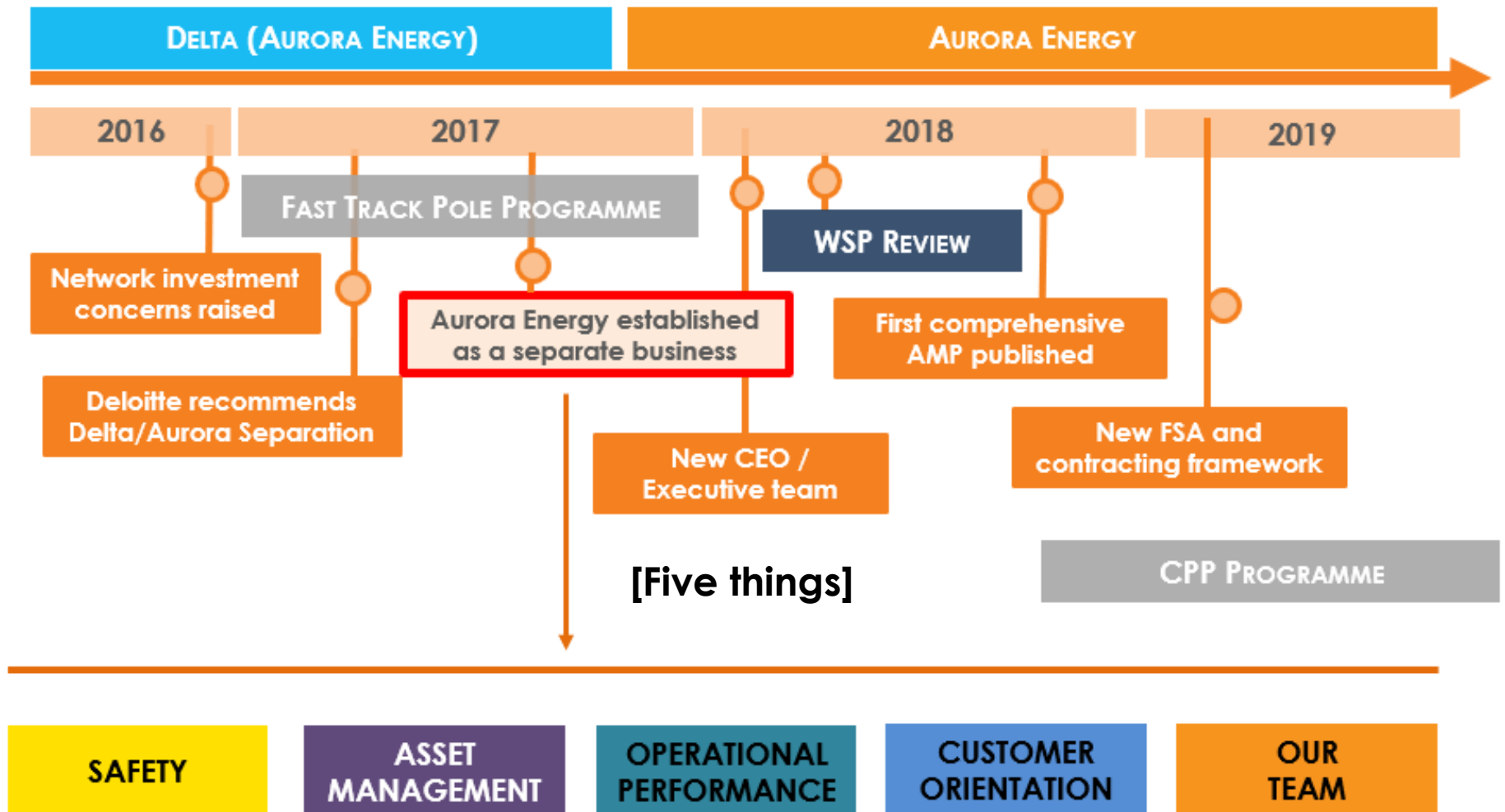


39
zone substations





Context 1: - A brief history





What we've delivered in the last two years

We've been focusing on our foundations over the past two years:

- ✦ New Board and new Management Team
- ✦ Commissioned an Independent Network Review
- ✦ Doubled annual investment on the network across a number of priority areas
- ✦ Introduced a critical risk prioritisation framework
- ✦ Replaced or reinforced more than 15% of poles on the network (8,179+ poles since 2017)
- ✦ Lifting pole inspection level to nearly 1000 pcm
- ✦ Invested in new zone substations
- ✦ Appointed two new field contractors
- ✦ Implemented new distribution management system
- ✦ Commissioned 2nd control room in Cromwell
- ✦ Updated and published a 10 year investment plan
- ✦ Established customer voice panels to better understand needs of customers

SAFETY

**ASSET
MANAGEMENT**

**OPERATIONAL
PERFORMANCE**

**CUSTOMER
ORIENTATION**

**OUR
TEAM**

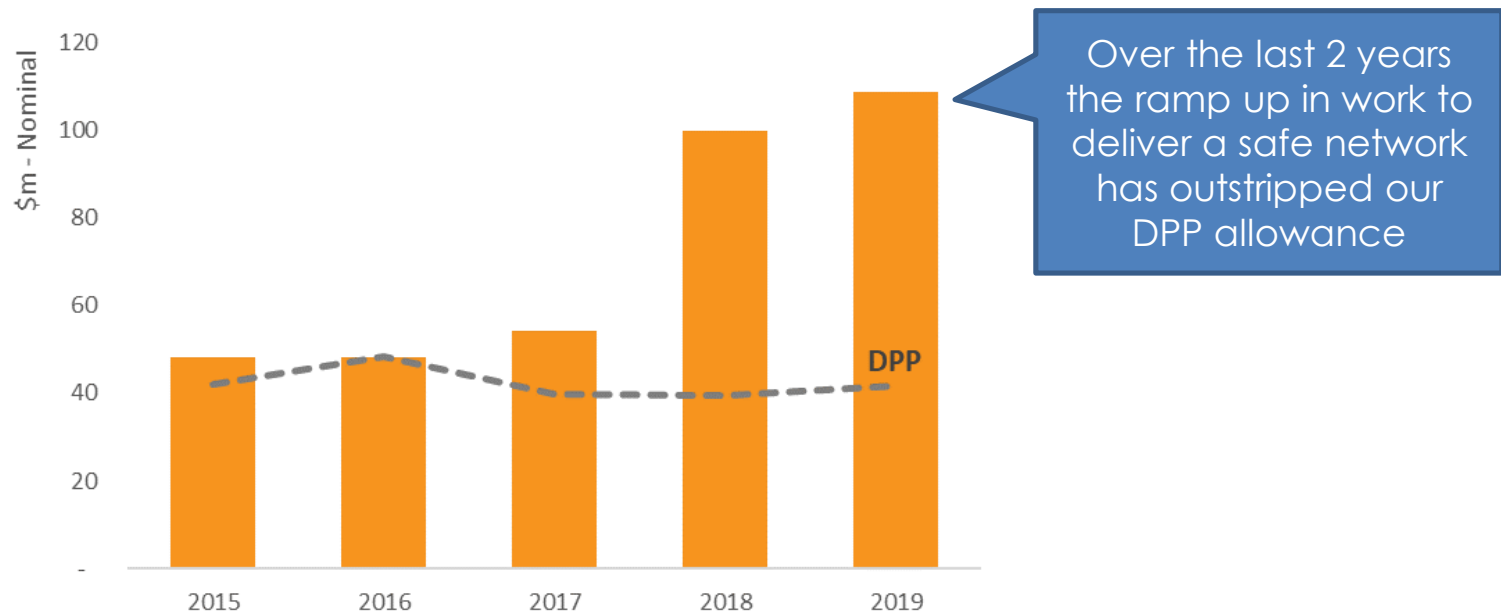
The step up in network investment requires us to apply to the Commerce Commission for a Customised Price Path



DPP (Default Price Path): Simpler regulation designed to set prices for distributors in a 'business as usual' environment with modest changes in costs and reliability

CPP (Customised Price Path): Provides distributors an opportunity to seek a customised price and quality path where the circumstances are outside business as usual

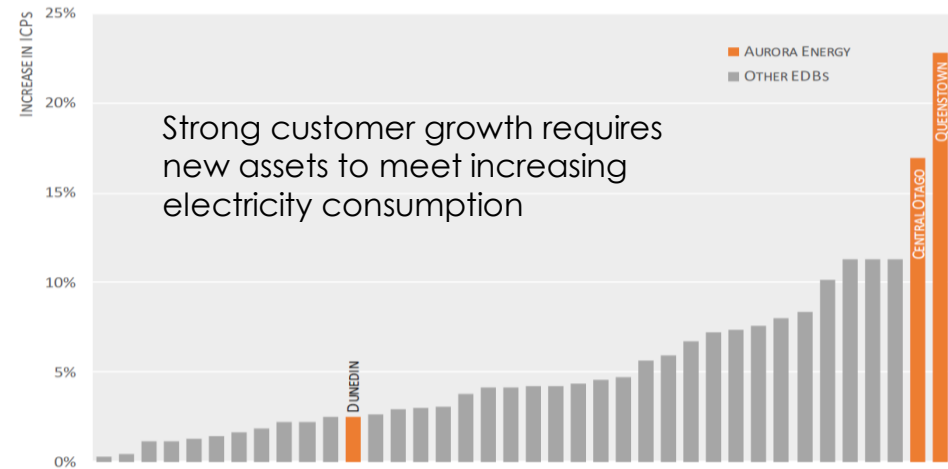
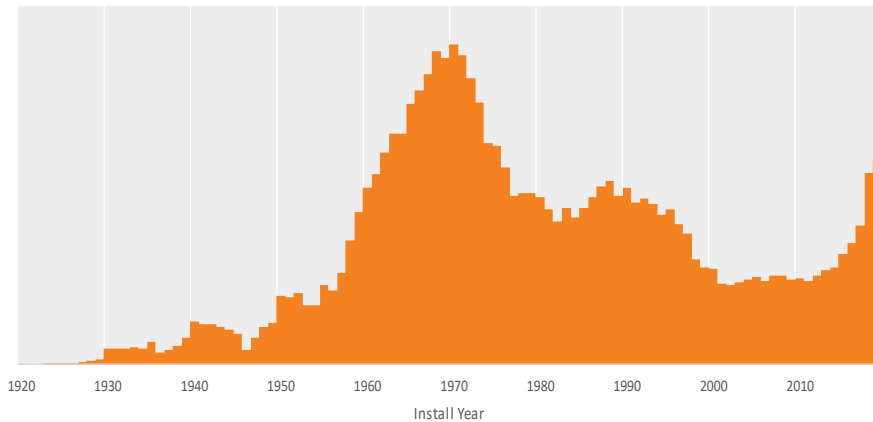
CPP timing: Ideally we would have applied for a CPP in 2015/2016 to support renewal work that needed to be undertaken immediately and position Aurora to deliver a sustained work programme through to 2024



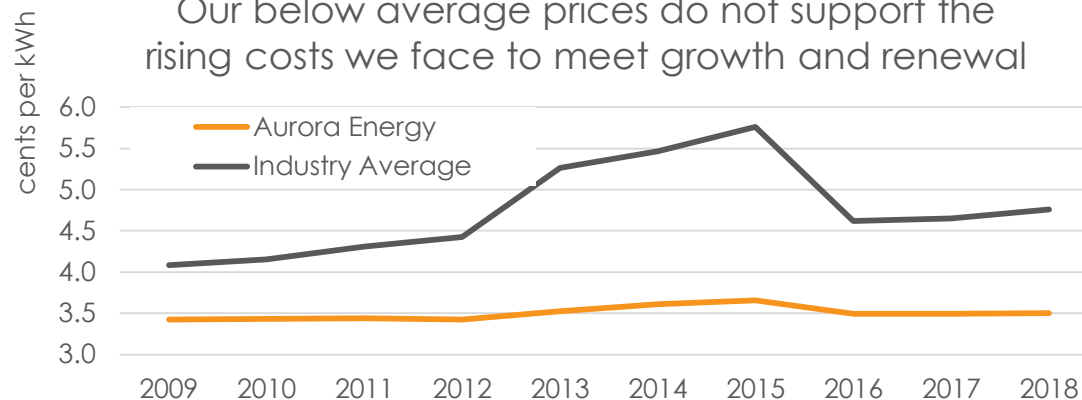
Our Needs Case for a CPP



Aging assets – for example, a large proportion of our conductor and pole fleets were installed in the 1960s and 70s and will require replacement soon



Our below average prices do not support the rising costs we face to meet growth and renewal



What do we consider when we plan to meet future needs of our communities?



Safety:

Electricity is dangerous and we need to make sure that our network equipment is safe for the public and people working on or near the network. A safe network means that you can feel confident that our services will be safe for you and your community.



Reliability:

Nobody likes a power cut. Improving the reliability of the network means you can expect fewer unexpected power cuts and the power gets back on quicker when there is a fault. When we do need to turn the power off to do planned work, you will be well informed in advance about the reason and length of these events.



Growth:

Our region is growing fast, especially in Central Otago and Queenstown Lakes. More homes, farms and businesses connecting to the network requires more capacity to get the power where it is needed, when it is needed. By planning and building for growth, we can cater for higher electricity demand and continue to service growing areas as they expand.



Resilience:

Our Otago climate is changing with more frequent adverse weather events, and more extreme weather highs and lows. Like anywhere in New Zealand, there is potential for a major earthquake in our region. A more resilient network is better able to withstand a severe storm or major natural disaster.



Future technology:

The way people access and use our network is changing thanks to the advent of technologies such as electric vehicles, solar panels and battery storage. A network that adapts to a changing future allows you, the customer, to have greater choice to make and store your own energy and power your life with sustainable choices. You will also have the confidence to know that the Aurora Energy network is future proofed and can accommodate changing demands.



Customer service:

As an electricity customer your main point of contact is with your chosen energy retailer. Most of the time, our services work quietly in the background. On occasion you will need to deal with us directly for information about power cuts, to request a new connection, get safety advice, arrange for tree trimming away from power lines or when we need to access to your property for maintenance. When you do, it's important you get the information and service you expect and need.



Pricing:

You pay the costs of electricity supply through line charges as part of your power bill. Changes in network investment ultimately flow through to you as an electricity consumer. We want to hear your feedback on investment options proposed in this document and what you think is the right balance between the services you want and the price you pay.





Our proposal delivers the network foundations to meet the future needs of our communities

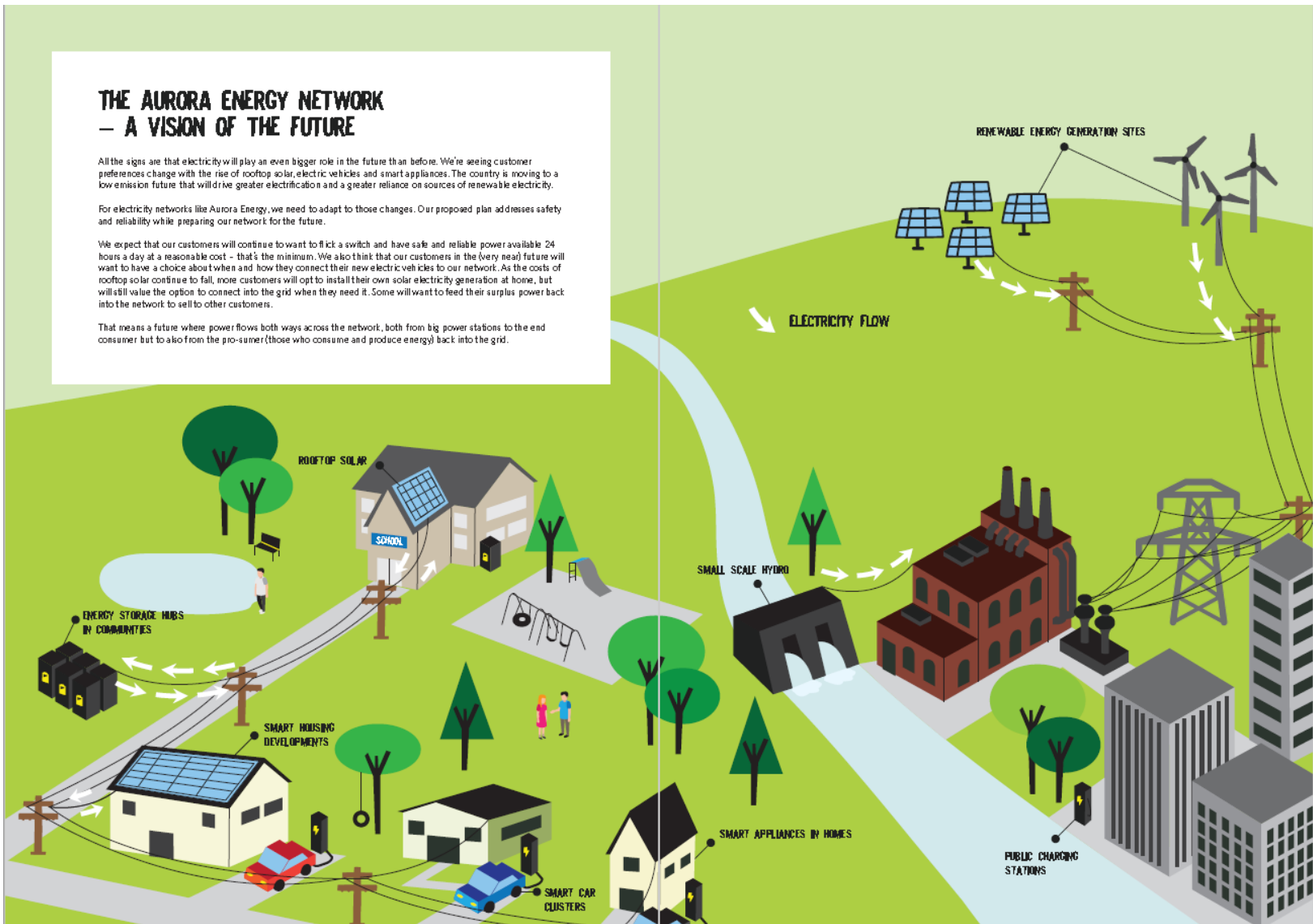
THE AURORA ENERGY NETWORK — A VISION OF THE FUTURE

All the signs are that electricity will play an even bigger role in the future than before. We're seeing customer preferences change with the rise of rooftop solar, electric vehicles and smart appliances. The country is moving to a low emission future that will drive greater electrification and a greater reliance on sources of renewable electricity.

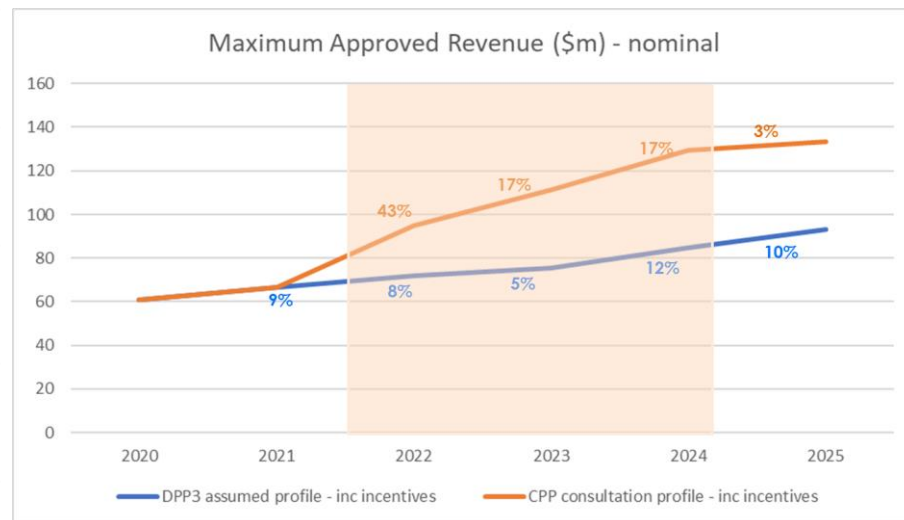
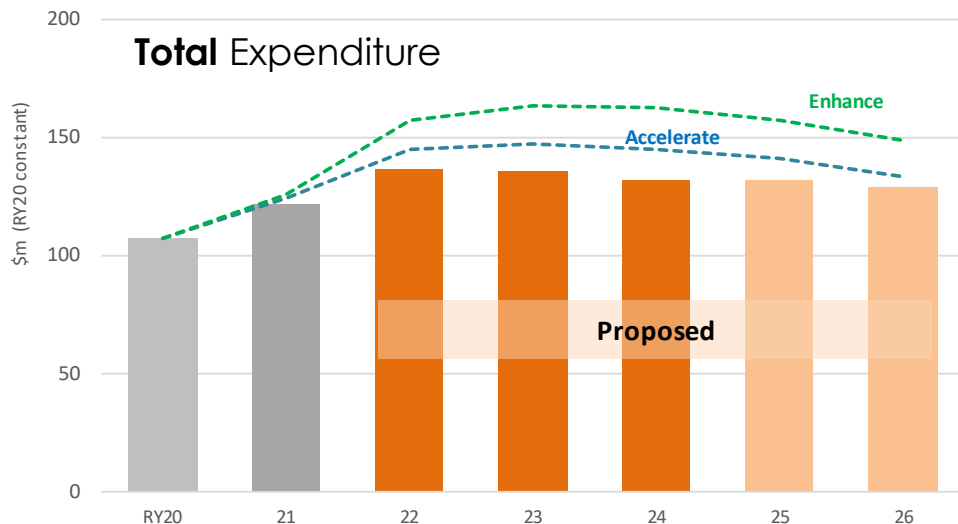
For electricity networks like Aurora Energy, we need to adapt to those changes. Our proposed plan addresses safety and reliability while preparing our network for the future.

We expect that our customers will continue to want to flick a switch and have safe and reliable power available 24 hours a day at a reasonable cost – that's the minimum. We also think that our customers in the (very near) future will want to have a choice about when and how they connect their new electric vehicles to our network. As the costs of rooftop solar continue to fall, more customers will opt to install their own solar electricity generation at home, but will still value the option to connect into the grid when they need it. Some will want to feed their surplus power back into the network to sell to other customers.

That means a future where power flows both ways across the network, both from big power stations to the end consumer but also from the prosumer (those who consume and produce energy) back into the grid.

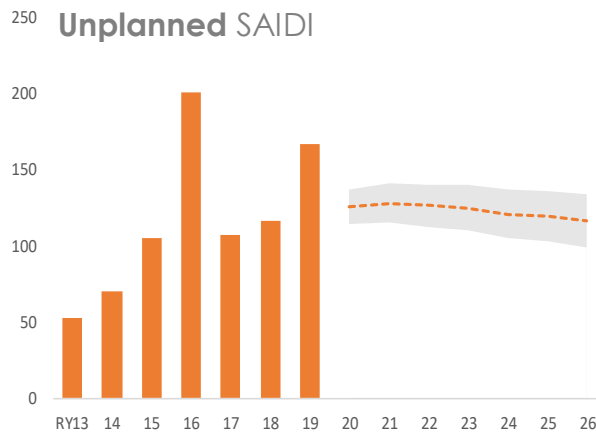


Our proposal on a page - we considered three options but discounted two options based on affordability for communities and Aurora's maturity to deliver more ambitious programmes of work.

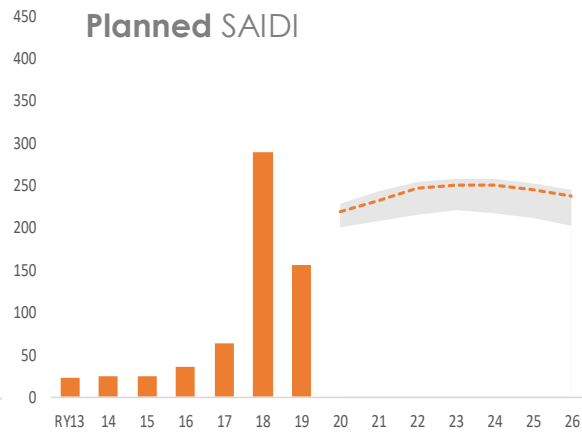


SAIDI projections – planned and unplanned (non-normalised)

Unplanned SAIDI

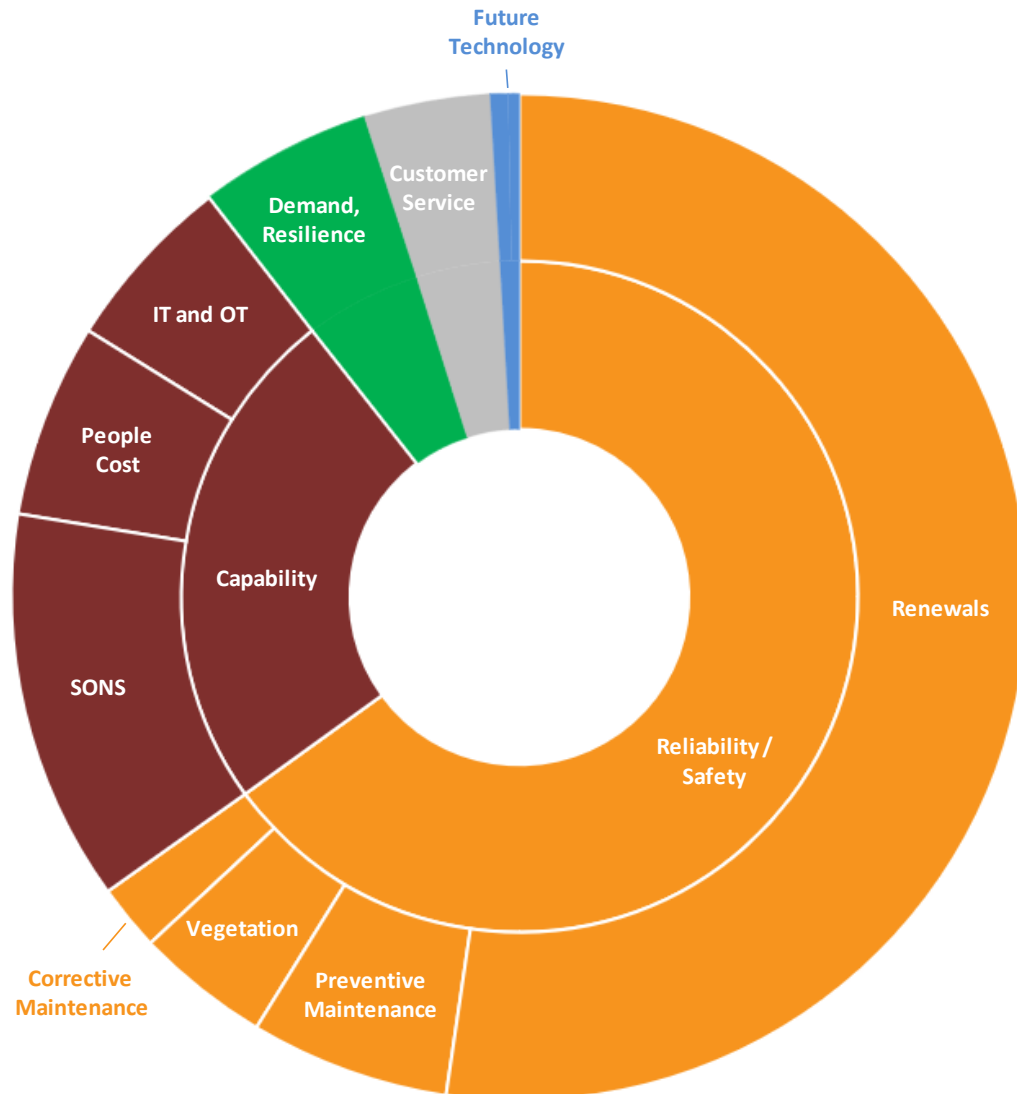


Planned SAIDI



Outages Forecasts

The foundations of a future network requires asset renewal and maintenance, and enhanced business capability to deliver a safe and reliable electricity supply



- ✧ A safe and reliable network requires a major renewal programme to address end of life assets
- ✧ To prepare for the future and to deliver our renewal programme efficiently we will continue to invest in business support systems and people
- ✧ As well as renewing existing infrastructure, we are meeting capacity growth in the fast-growing areas of Central Otago and Queenstown Lakes and preparing for a future shaped by new technology options and changing customer choices.



WHAT WE INVEST IN

Under our proposed plan, we would invest in replacing and upgrading ageing equipment on the network. Major areas of spend would be on poles, cross arms, overhead lines and underground cables, protection systems and zone substation transformers, shown in the table below.

	Total number in fleet	3-year CPP spend	% end of expected life		
			Now	After 3 years under our proposed plan	If we spent nothing at all
Poles	54,000	\$46m	6%	3%	16%
Cross arms	94,000	\$19m	14%	11%	31%
Overhead lines	4,400km	\$37m	6%	4%	13%
Protection systems*	600	\$13m	49%	20%	59%
Zone substation transformers**	65	\$13m	2%	5%***	18%

*Protection systems disconnect equipment when there is a fault to protect people and equipment.

**Zone substation transformers convert high voltage electricity to lower voltages for distribution to the surrounding area.

***The number of zone substation transformers at the end of their expected life would increase. There is lower reliability risk for these assets as they are installed in pairs, so if one has a fault the other still operates.

Additional service options and what they deliver and cost



Service Initiatives

**“ YOU GET BETTER
SERVICE, NO MATTER
WHEN YOU CALL ”**

CUSTOMER SERVICE

Make improvements:

- 24/7 contact center
- Real time outage info.
- Reduce new connection time

FORECAST SPEND FOR OPTION B: IMPROVED CUSTOMER SERVICE (CONSTANT 2020 \$MILLION)

	2022	2023	2024
Capital spend	\$0.1m	\$0.1m	\$0.1m
Operating spend	\$0.7m	\$0.7m	\$0.7m
Total	\$0.8m	\$0.8m	\$0.8m

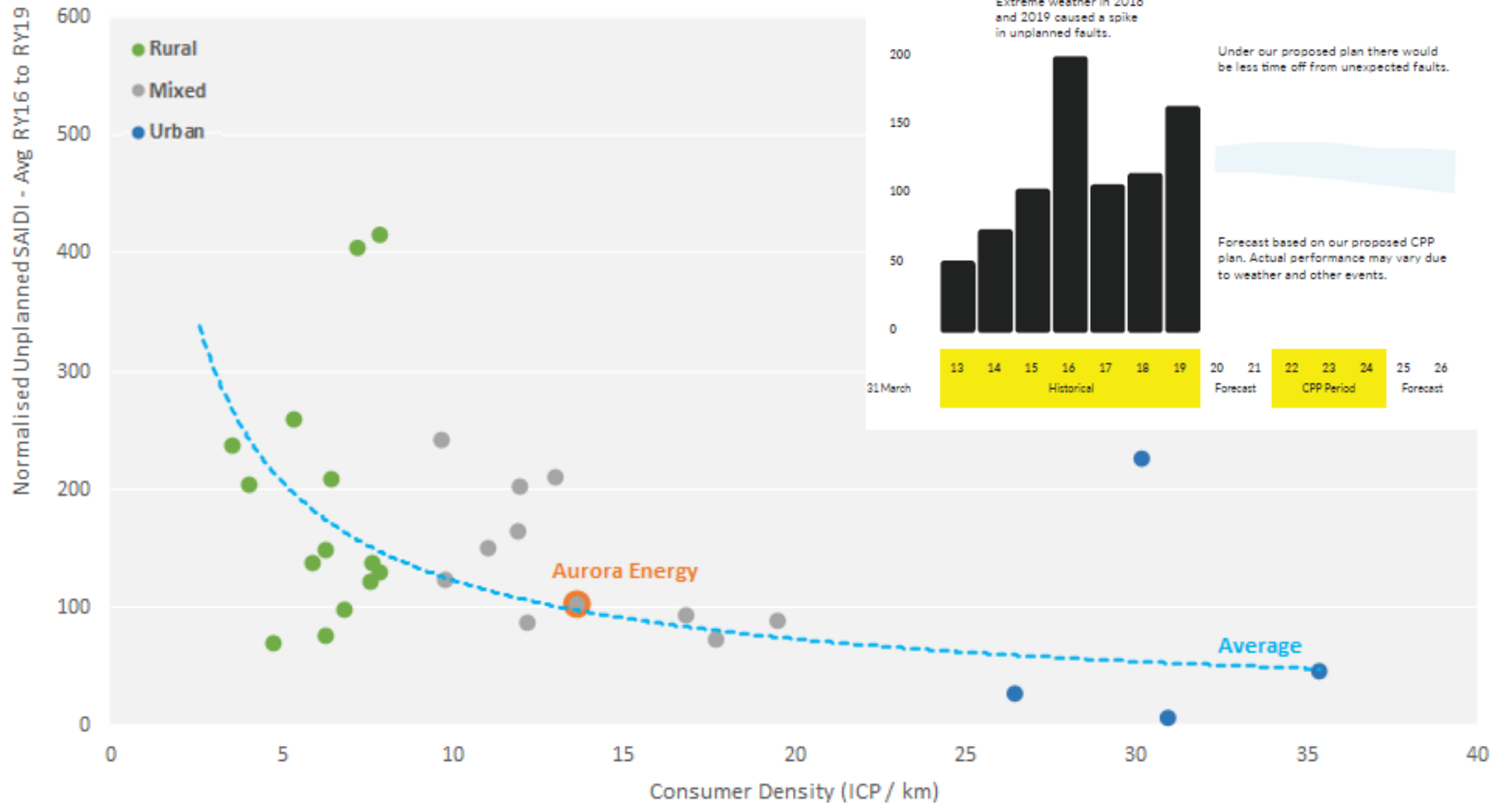
WORST SERVED CUSTOMERS

Improve reliability for worst served customers in each region.

FORECAST SPEND FOR OPTION A: IMPROVED RELIABILITY FOR WORST-SERVED CUSTOMERS (CONSTANT 2020 \$MILLION)

	2022	2023	2024
Capital spend	\$3.0m	\$3.0m	\$3.0m
Operating spend	\$0.5m	\$0.5m	\$0.5m
Total	\$3.5m	\$3.5m	\$3.5m

Our unplanned reliability performance is good but declining and our proposal to address safety will stop the decline in unplanned outage performance

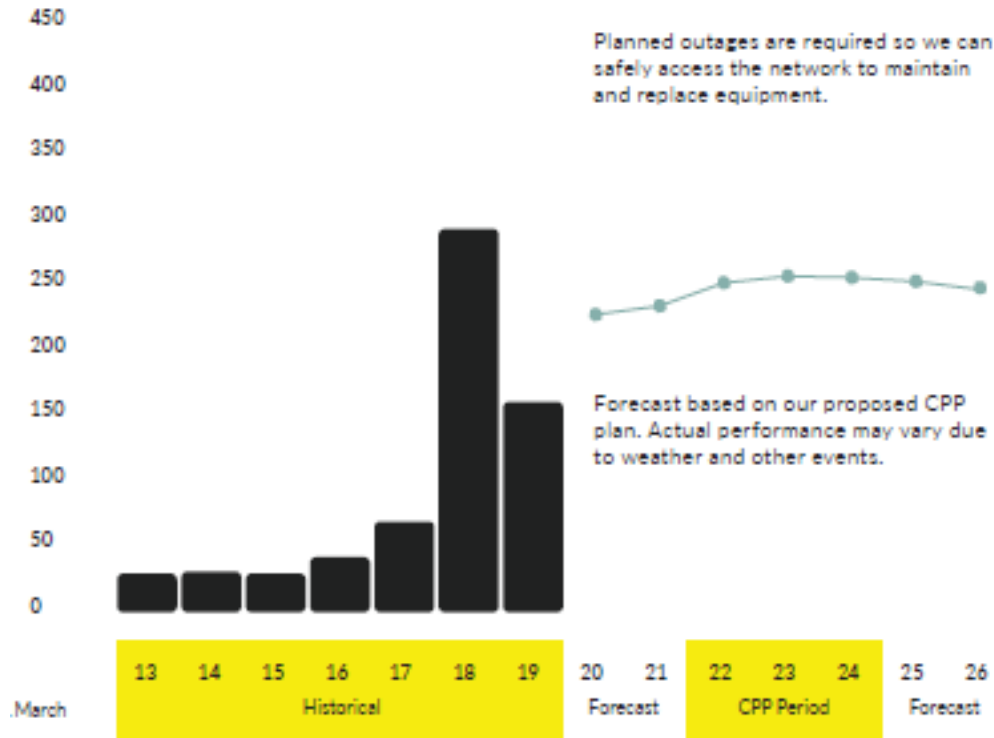


Reliability – Planned



PLANNED MINUTES OFF

Average number of minutes that customers are without electricity per customer, per year (SAIDI) years ending 31 March for planned outages



Most renewal work requires a planned power outage

To meet our communities' future needs our prices will no longer be among the lowest in the country



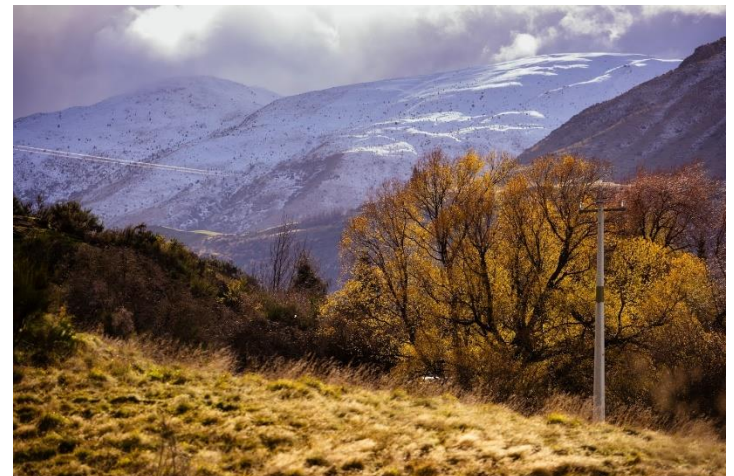
- ✧ To date, most of Aurora Energy's customers have paid some of the lowest average line charges in the country
- ✧ To deliver a safe and reliable service requires us to invest more in the network; ultimately those costs will pass onto customers through increased line charges on their power bill





Prices in the regions are different because...

	Central Otago/ Wanaka	Queenstown	Dunedin
To supply 100 customers	12km	8km	6km
Network length	2,600km	1,100km	3,100km



Indicative line charges our customers would pay from April 2021

(note these are estimates only and final prices depend on the outcome of the CPP process and Commerce Commission approval, how customers use energy and how retailers pass on our lines charges)



LINE CHARGES

Indicative average monthly distribution line charge in constant 2020 dollars.

Under our proposed CPP plan	2021	2022	2023	2024
Residential	\$33	\$46	\$52	\$59

**Total Bill Impact 16%
– Dunedin**

LINE CHARGES

Indicative average monthly distribution line charge in constant 2020 dollars.

Under our proposed CPP plan	2021	2022	2023	2024
Residential	\$45	\$62	\$70	\$79

**Total Bill Impact 16%
– Queenstown**

LINE CHARGES

Indicative average monthly distribution line charge in constant 2020 dollars.

Under our proposed CPP plan	2021	2022	2023	2024
Residential	\$59	\$81	\$90	\$101

**Total Bill Impact 23%
– Central Otago &
Wanaka**

We are mindful of energy hardship and are considering our role in supporting the community to better manage the impact of price rises



- ✧ There are a number of ways Aurora Energy could respond to rising prices and energy hardship
 - 1) Increase national involvement in energy hardship through participation in the cross-sector group
 - 2) Partner to provide information and advice to reduce energy consumption and ability for consumers to make informed choices about their energy retailer (e.g. energy mate involvement)

We would like to further explore options for addressing energy hardship which could be specifically designed to meet the needs of your communities.

This is an emerging topic for the energy sector and the role of EDBs in this area is not clear.



Consultation – What we've heard so far & what's next?

KEY DATA

 **1,000**

CUSTOMERS PARTICIPATED IN PHONE SURVEY
ON ELECTRICITY USE AND PREFERENCES

1,800

VISITS TO YOUR NETWORK,
YOUR SAY ENGAGEMENT SITE

9

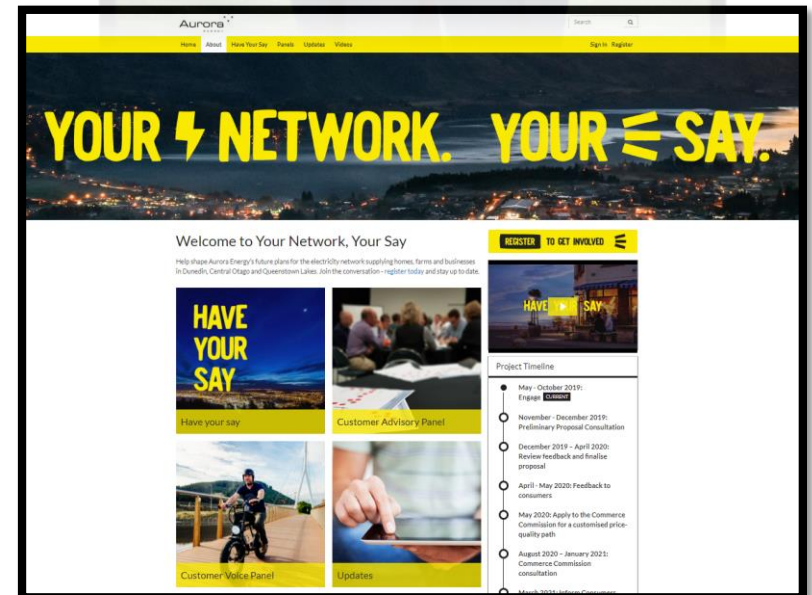
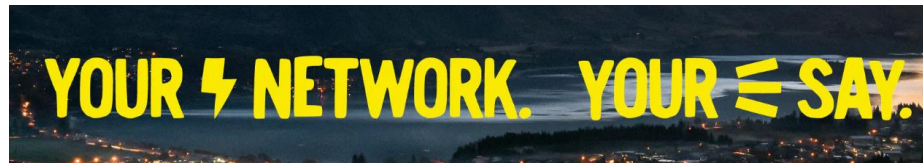
IN DEPTH
INTERVIEWS

12 ★★★★★★

CUSTOMER VOICE PANEL
FOCUS GROUP MEETINGS

 **14**

CUSTOMER ADVISORY PANEL
MEMBERS OVER 11 HOURS





Aurora Energy 1-1 Engagement with MEUG



Consultation
website



Consultation
document



Customer
advisory panel



Customer
voice panels



One-on-one
meetings



Secondary
research



Independent
CAP report

**YOUR ⚡ NETWORK
YOUR ≡ SAY**

[YOURSAY.AURORAENERGY.CO.NZ](https://yoursay.auroraenergy.co.nz)

Questions?

