



# YOUR NETWORK, YOUR NEWS.



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## ONCE-IN-A-LIFETIME PROJECT BENEFITS HARBOUR RESIDENTS

At Aurora Energy, we see our electricity network as central to enabling customers to uptake and optimise emerging green technology, as we move to a low carbon future. We're also focused on providing a safe and reliable electricity network. One project to upgrade the network got a lot of attention earlier this year. It's not often that boats, helicopters and cheese rolls are all part of the same project but this one had them all.

### What are the benefits of this project?

Aurora Energy replaced six old lattice towers and overhead lines across the Otago Harbour between Port Chalmers and Portobello, and an old electricity submarine cable, with new submarine cables.

This project has significantly increased the supply of electricity to the Portobello community and the wider Peninsula. It also has wider benefits for shipping, tourism and wildlife.

### Installing submarine cables

May/June 2021

New submarine cables were laid on the harbour floor between Port Chalmers and Portobello.

### Removing old lines and towers

September 2021

The first of the six towers was removed from Clive Matthewson's garden in Port Chalmers. He enjoyed a ceremonial afternoon tea (thank you for the cheese rolls!) to celebrate his much-improved view.

Over the next two weeks the other towers on Quarantine Island Kamau Taurua, Goat Island Rakiriri and in Portobello, were removed in pieces by helicopter. We also used the helicopter to deliver a new water tank and gravel to make paths for Kamau Taurua Island Keeper Meghan Hughes.

### What's next?

We will work with community groups to replant the areas with native plants and restore the natural beauty where the towers were removed from.



The Patiki Barge was custom fitted and transported from Picton especially for this project.



Clive Matthewson saying farewell to his 'ugly friend' with the crew who removed the tower from his garden.



"It's more in keeping with the kaupapa of the community to have the island restored to its natural state." Kamau Taurua Island Keeper Meghan Hughes

#### IN THIS ISSUE:

Pages 3 -4 - Upgrades to the electricity network | Page 5 - Have your say on proposed pricing changes  
Page 6 - Community support | Page 7 - Sustainability – from EVs to unicycles | Page 8 - Better customer experience.



Aurora Energy Chief Executive Richard Fletcher

## WE'RE WORKING HARD, FOR YOU

As your electricity distribution company, we're working hard to keep the lights on. Making sure you have a safe and reliable electricity supply is our priority, and we do this through managing the poles, lines and equipment that distribute electricity from Transpower's national grid to more than 92,000 homes, schools, farms and businesses.

At the same time, it's also important that we position our network for the future, enabling customers to make 'green' choices and making sure our network is capable of delivering what is needed to allow for this. We're looking at ways we can actively support a decarbonised future through our network.

In the New Zealand context, energy networks have a central role to play in enabling a greener future and we continue to work on how we can play an active role in this.

It's been a big year and I'd like to share some highlights with you.

- We invested \$96.3 million in renewing, maintaining and building our network, which is \$25 million more than in the previous year.

- We progressed a number of major projects to upgrade the electricity network in Dunedin, Central Otago and Queenstown Lakes (see more on pages 3 & 4).
- The Commerce Commission approved our customised price-quality path (CPP) investment of \$563 million over five years, providing us with some much-needed future revenue certainty.
- Financially, we turned a corner and Aurora Energy recorded a small net profit after tax of \$681,000, compared with a forecast loss of \$9.1 million. This profit will be reinvested into our network maintenance and renewal programme.
- In preparation for a zero-carbon future, we are working with a solar energy specialist to develop a system that stores energy from home solar units to use during periods of peak demand (read more on page 7).

I hope you enjoy this issue of 'Your Network, Your News'.

**Richard Fletcher**  
Chief Executive



Outram zone substation upgrade



Clyde backup electricity supply



Etrick zone substation upgrade

## UPGRADES TO THE ELECTRICITY NETWORK

### Outram upgrade adding extra capacity

Outram has been a hive of activity thanks to the Waipori line upgrade from Berwick to Outram. The Outram zone substation was also upgraded this year. The existing transformers and associated equipment, which had reached their end of life, have been replaced with larger and higher-capacity transformer and equipment. The upgrades will strengthen the electricity supply to Outram and the Taieri plain and cater to future growth in the area. Shout out to the Delta Utility Services crews for their hard work on this project!

### Backup supply for Clyde up and running

There has been significant headway with the alternative supply route for Clyde township and surrounding areas.

The new 11kV line between Alexandra and Clyde was installed in July, allowing the Alexandra network to take on Clyde township power when required. This means, if there was a fault at the Clyde Earnsclough zone substation, the mobile substation will no longer be required to restore power. Contractors Network Waitaki also replaced 5.3km of power lines and upgraded 40 pole structures including 19 on the overhead line from Airport Road to Sunderland Street in June. An upgrade along Fache Street is also underway and will create a ring within the Clyde township and provide a backup supply to the Dairy Creek irrigation scheme.

### More protection for Etrick

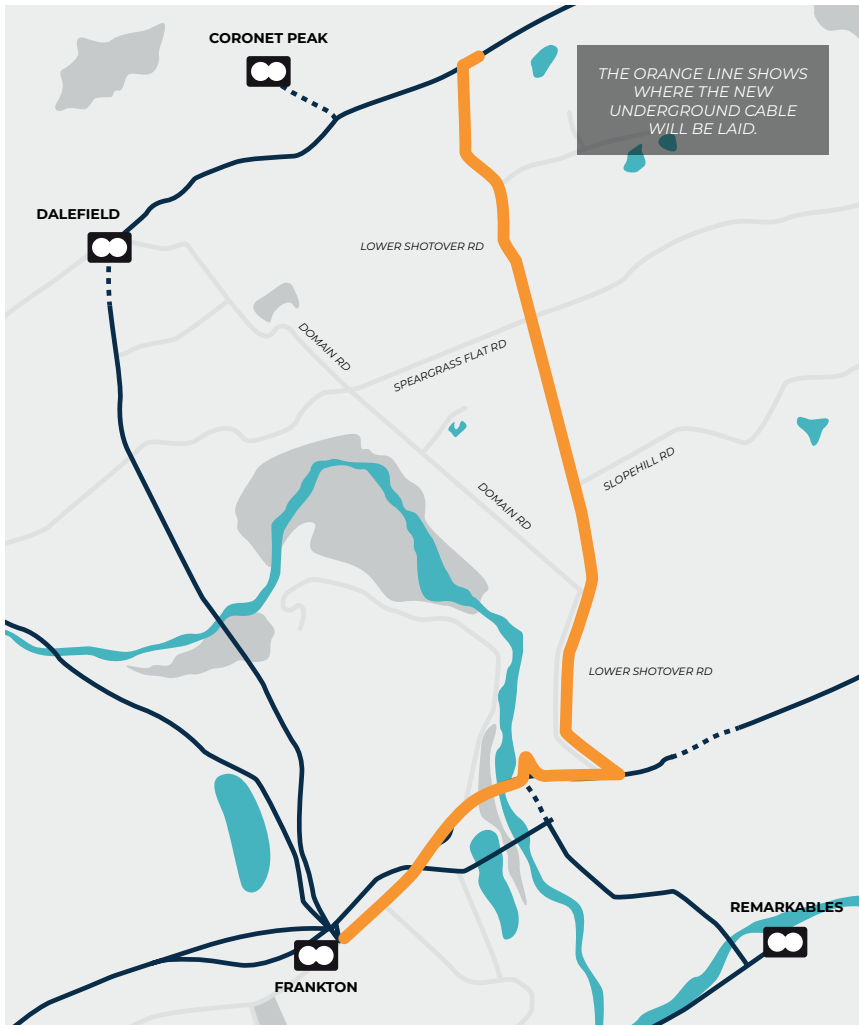
Etrick zone substation got a brand-new set of switchgear and protection equipment in September/October. Cromwell-based Project Manager Kelvin Hanson said it was an enormous collaborative effort between contractors Connetics and the Aurora Energy team.

The addition of 33kv switchgear, replacement of 11kv switchgear and the upgrade of the substation's pole structures and protection systems, has improved the security of electricity supply to the community.

It was a complex project to coordinate, with small windows for work to be completed and a confined space to work in. We would like to thank a neighbouring orchard, Millers Flat School and the wider Etrick and Millers Flat community for their goodwill during the construction.

*“...it was an enormous collaborative effort between contractors Connetics and the Aurora Energy team.”*

*Kelvin Hanson - Project Manager*



### Arrowtown ring network ahead

Work on the \$6 million Arrowtown Ring Upgrade - the 9km new cable route - is progressing well and ahead of schedule.

Currently, Arrowtown, Coronet Peak, Dalefield and Remarkables are supplied by two power lines that share the load between them, with limited access to an alternative electricity supply if a fault occurs. These planned improvements include a new 33 kV underground cable to run from Frankton, over the Shotover Bridge to Malaghans Road (shown as the orange line in the map), which will enhance security and reliability of our services to Arrowtown. This is because the new cable can support the entire Arrowtown area load and allow any faults to be isolated and repaired with minimal power outages.

Project Manager Ben Bosustow said construction is scheduled to commence in April 2022 and orders for over \$1million worth of cable are already underway to ensure construction can commence on time. Aurora Energy is also working with Transpower and will be in a position to commission this vital element of new infrastructure a year ahead of our original target of 2024.

### What's coming up?

Aurora Energy has a lot of work coming up to help improve the safety and reliability of electricity supply in Dunedin, Queenstown and Central Otago. We're working hard to improve the way we plan our work. By bundling our work programmes by area, we will be able to reduce costs and customer impact, with fewer times the power needs to be turned off.

We have previously been tied to a reactive work programme to catch up with the historic underinvestment on the network, which meant we might have returned to the same community a number of times over a short period to replace different assets. Our goal is to change this approach and to be on the front foot.

Upcoming projects where we are planning to work smarter are in the following areas:

- Lake Hawea and surrounding areas
- Glenorchy and surrounding areas
- Arrowtown
- Otago Peninsula



**(Left to right):** Marcus Beale, Kaleb Groen and Gordon Hamlin from Unison – part of the team who replaced 2km of power lines, 6 power poles and 28 crossarms near Blackhead, Dunedin in July.

# THE FUTURE OF DISTRIBUTION PRICING AND THE PRICES WE CHARGE

**1** FOR OVER 100 YEARS OUR RESIDENTIAL PRICES HAVE LARGELY BEEN BASED ON THE AMOUNT OF ELECTRICITY YOU CONSUME, REGARDLESS OF WHEN YOU USE IT

**2** TYPICALLY, THOSE TIMES WHEN YOU'RE COOKING YOUR BREAKFAST IN THE MORNING, OR HEATING YOUR HOME IN THE EVENINGS

**3** BUT, WE NEED TO BUILD OUR NETWORK TO MEET THOSE TIMES OF DAY WHEN EVERYONE NEEDS ELECTRICITY THE MOST

**4** BUT, THE FUTURE OF ENERGY IS CHANGING... I WANT TO HELP CREATE A ZERO-CARBON FUTURE...

**5** EMERGING TECHNOLOGIES AND THE CHOICES CUSTOMERS MAKE WILL HAVE AN IMPACT ON THE WAY WE MANAGE OUR NETWORK & THE INVESTMENT DECISIONS WE MAKE

**6** SO RATHER THAN JUST BUILD MORE POLES AND WIRES TO MEET DEMAND, WE'RE PROPOSING PRICING INCENTIVES FOR YOU BASED ON THE TIME OF DAY YOU USE ELECTRICITY. BECAUSE LOWERING PEAK DEMAND WILL DELAY NETWORK INVESTMENT!

**7** MY HOT WATER IS ALREADY ON A CONTROLLED PRICE! SO IF I CHARGE MY EV WHILE I SLEEP & SET THE DISHWASHER FOR TONIGHT, I'LL SAVE MORE...

**8** THERE WILL BE OPTIONS TO PAY LESS IF YOU USE POWER AT OFF-PEAK TIMES, OR PAY MORE WHEN YOU USE IT DURING PEAK TIMES

**9** AND BECAUSE WE STILL HAVE TO OPERATE AND MAINTAIN THE ASSETS WE HAVE NOW, WE'LL RECOVER THE REST OF OUR COSTS THROUGH FIXED CHARGES. THAT WILL MEAN EVERYONE PAYS THEIR FAIR SHARE.

**WE'RE PROPOSING SOME CHANGES THAT, PROVIDED THEY ARE SHOWN TRANSPARENTLY ON YOUR RETAIL BILL, WILL SEND YOU BETTER PRICE SIGNALS IN THE FUTURE, SO YOU'RE IN CONTROL OF THE CHOICES YOU MAKE!**

**WE WANT YOUR FEEDBACK ON OUR FUTURE PRICING PROPOSAL**  
A mix of time-of-use prices, fixed prices and controlled supply discounts for residential customers, shared overhead costs across pricing regions, and a new option for how we allocate capital investment-related costs are all part of what we are proposing in our Consultation with you.

For details on each new aspect proposed to the way distribution prices could be structured in the future, and to provide feedback, take a look at our full Pricing Consultation document available at: yoursay.auoraenergy.co.nz

## Have your say on future pricing

Aurora Energy is proposing changes to how electricity distribution prices are set, to improve transparency and fairness of how costs are allocated, and to reform our pricing approach so it supports New Zealand's drive towards electrification and decarbonisation.

### The proposed changes we'd like your feedback on are:

- Phasing in a mix of prices depending on the time of day you use electricity
- Changing the proportion of fixed charges so the costs are more uniform
- Looking at a new option for how capital investment costs are allocated

### Have your say!

Head online to [yoursay.auoraenergy.co.nz](https://yoursay.auoraenergy.co.nz) by 3rd December to find out more and to tell us what you think, or if you'd like a paper copy posted out please call our helpful customer experience team on 0800 22 00 05.

## FROM THE ARCHIVES



- 1.** A child looks on as workers construct the lattice tower at Bellevue Place in Port Chalmers in the late 1950s (photo credit: Aurora Energy collection)
- 2.** Workers constructing the lattice tower at Bellevue Place in Port Chalmers in the late 1950s (photo credit: Aurora Energy collection)
- 3.** Workers on the barge pay out the submarine cable as it is laid across Otago Harbour from Port Chalmers to Portobello. 1947. (Photo credit: DCC Archives)

## COMMUNITY SUPPORT

### Solar panel project wins Best in Fair

A big congratulations to Satoshi Tomita from John McGlashan College, for taking out the Aurora Energy Best in Fair Prize at the 2021 Aurora Energy Otago Science & Technology Fair for his entry 'Investigating solar panel efficiency with shading'. He also took home an Aurora Excellence in Energy Prize. The fair attracted 224 entries from 262 students representing 22 schools in Dunedin and across Central Otago. Well done to Satoshi and all the other award winners!

We're big fans of students studying STEM (science, technology, engineering and maths) and continue to work on ways to attract new talent to work with us at Aurora Energy.

### Donation to the Dunedin Fire Brigade Restoration Society

In June we re-gifted an old converted Land Rover fire appliance from the Waipori village to the Dunedin Fire Brigade Restoration Society. It was originally given to Toitū Otago Settlers Museum but is no longer required for their collection. In its heyday, this icon was used by the Waipori Falls Volunteer Fire Brigade for the power-scheme village, once run by Aurora Energy's predecessor Dunedin Electricity Ltd. We wonder how many fires she fought?



Pictured: (L-R) Richard Fletcher, CE Aurora Energy and Gerald Newbury, President Dunedin Fire Brigade Restoration Society

### High winds hit Central Otago

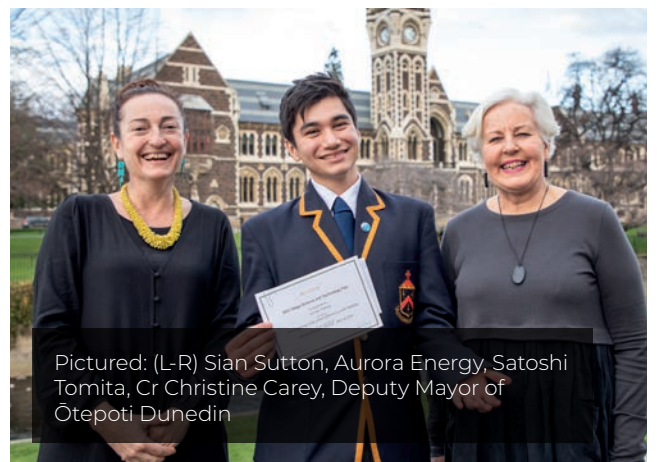
In July, Central Otago was hit by high winds, causing outages to customers in and around Roxburgh, Ettrick and Clyde. The network stood up well and the majority of customers had power restored the same day, but there was a lot of work to be done removing vegetation and debris from lines.

We generated Millers Flat Hall to provide warmth, tea, coffee, toilets, water and cooking facilities to residents who remained without power into the evening, and the community hub remained in place until all power was restored the next day.

A special thanks to Miller's Flat School Principal Hilary Spedding, who assisted with the hall set up, and our contractors who worked tirelessly to restore the power.

### Clyde Planting Group

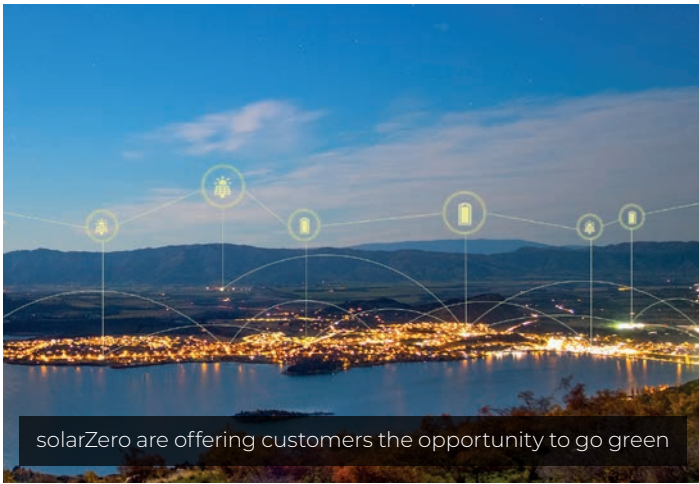
Aurora Energy has come on board as a friend of the Haehaeata Natural Heritage Trust – a local planting group in Clyde. We have lots of work happening in the Clyde area and it's important to restore and conserve natural landscapes where possible. Haehaeata help to reintroduce native plants into local sites and support local community groups and their planting projects.



Pictured: (L-R) Sian Sutton, Aurora Energy, Satoshi Tomita, Cr Christine Carey, Deputy Mayor of Ōtepoti Dunedin



High winds in Central Otago - photo taken on 6 July 2021



## SUSTAINABILITY

### **Drive for Wānaka and Upper Clutha residents to go solar**

Residents of Wānaka and Upper Clutha have a unique opportunity to be part of a New Zealand-first initiative that will not only reduce the cost of their power bills but could influence the direction of country's response to climate change.

Aurora Energy has partnered with solarZero to support our customers with an affordable option to install solar panels and a smart battery to homes in the region. Customers who sign up with solarZero will be part of a "virtual power plant" that will also help make the supply of power more reliable and cheaper for their communities in the future.

The drive to install solar panels and batteries on more than 150 households in the region during the first year of the project is an important one. Not only will it enable Aurora Energy to defer spending of up to \$25 million upgrading power lines from Cromwell to Wanaka, it will also fast track the use of technology that is critical to achieving New Zealand's climate change goals.

### **Investment in solar panels can be expensive – what makes the solarZero/Aurora Energy offering more affordable?**

Customers sign up to pay a fixed monthly fee, which will not increase. solarZero's 20-year service agreement helps ensure the combined monthly cost of the solar panel and battery system and power bill charges will be less than their customer's existing power bills. solarZero provide a guarantee that customers will save on their power bills from year one.

#### *Interested in finding out more?*

If you live in Wānaka and Upper Clutha and are interested being part of this NZ-first initiative (and securing cheaper and cleaner energy for your household) find out more at [solarzero.co.nz/upperclutha](https://solarzero.co.nz/upperclutha).

### **Dennis goes electric**

You've heard of EVs and e-bikes, but have you heard of an electric unicycle? Not only does Dennis, who is the Strategy and Reliability Performance Manager at Aurora Energy, ride his e-unicycle to work on a regular basis, he's even taken on the steepest street in the world and done it with ease. His theory is that if it can make it up Baldwin Street, it can handle anything.

An eight-hour charge gives Dennis enough power to travel for approximately 100 kilometres around the hilly streets of Dunedin.

"This is the most compact micro-mobility device that exists. The upfront investment and learning how to ride it is more than paid off with freedom!" said Dennis.

### **Preparing for Customers of the Future**

NZ has a goal of being carbon zero by 2050. Glenn Coates from Aurora Energy attended Business South's Energy Committee in September to discuss our role in the electrification of the economy, what customer behaviour might look like in the future, and what we need to do now to service our future communities.

Glenn, who is the General Manager Asset Management & Planning, said that as new technologies emerge and become more popular, such as electric vehicles, battery storage, and smarter appliances and hot water management, accurate data and analytics will be vital. This information will help to inform our plans for future investment and what we can do to support growing electricity demand.



Our new contact centre, Telnet

### Better customer experience

We've launched a series of customer-focused improvements this year, including moving to a new contact centre to help people find information about power cuts and planned outages after hours and at weekends.

Telnet understand the electricity industry through having other clients in this sector and are large enough to handle surges in the volume of calls if there is a major event. With Telnet being based outside of Otago, it also provides resilience through less chance of a single major weather event, for example, affecting both the Aurora Energy network and Telnet services at the same time.

We have also made improvements to our website by having outage information on our homepage. Telnet, who are based in New Zealand, also update our social media with information on power cuts overnight and at weekends.

### Public Safety – travelling with high loads

Did you know that if you're travelling with something higher than 4.25 metres, such as a large boat, you need to get approval? With summer around the corner, make sure you're safe by checking the height of your boat or any other large items you might be transporting.

Before you move any tall structure that's more than 4.25 metres in height, you must first apply for a high load approval to make sure your load doesn't come into contact with overhead power lines.

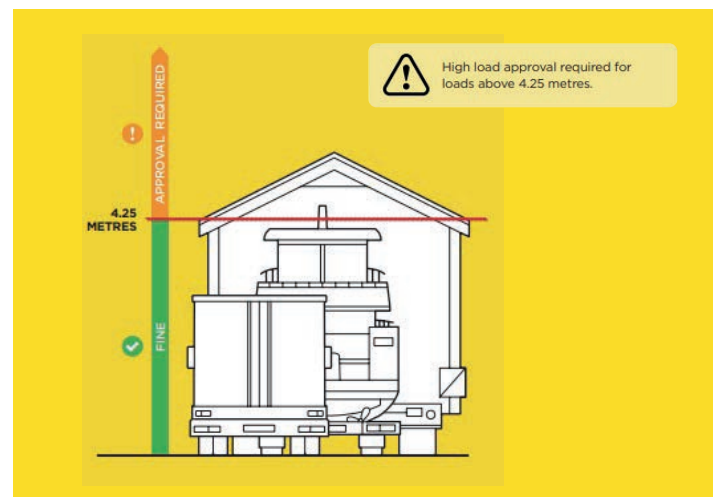
You can request approval online at [www.powerline.co.nz](http://www.powerline.co.nz) (for anywhere in the South Island).

For loads between 4.3 and 5.3 metres high:

- We will check the proposed route
- If the route is clear to the height required, an approval will be issued
- If there are low lines we will arrange to escort the load at no cost

There are different requirements for loads over 5.3 meters high – head to our website or give us a call to find out more.

Check out our website to find out more about travelling with high loads and other ways to stay safe around electricity. [auroraenergy.co.nz/safety/](http://auroraenergy.co.nz/safety/)



[auroraenergy.co.nz](http://auroraenergy.co.nz)



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