




YOUR NETWORK, YOUR NEWS.

Aurora Energy's customer update about the electricity network in Dunedin, Central Otago/Wānaka, and Queenstown Lakes.

We are investing \$563 million over five years to improve the electricity network in Dunedin, Central Otago/Wānaka and Queenstown Lakes, and we're excited to share our progress with you. We've done a lot to upgrade the electricity network, improve our systems and processes, and to engage with customers.

In the last regulatory year* we replaced:


 MORE THAN
1,400 POWER POLES

56 

74 KM OF HIGH VOLTAGE LINES


OVER
1,200 CROSSARMS 

DISTRIBUTION
TRANSFORMERS

 **88** CAST IRON POTHEADS
(THE HIGHEST NUMBER
IN A SINGLE YEAR TO DATE)

We also:

 INSPECTED ALMOST **12,000** OF THE
53,674 POLES ON THE NETWORK

COMPLETED SCHEDULED
MAINTENANCE AT **NINE** OF
OUR 39 ZONE SUBSTATIONS 

INSPECTED VEGETATION ON **51%** OF THE NETWORK
(1,953 KM) AND **MAINTAINED VEGETATION ON 26%**
OF THE NETWORK (983 KM) 




**Regulatory year is from 1 April 2021 – 31 March 2022*

You can read more about our achievements in our Annual Delivery Report, which is on our website at: yoursay.auroraenergy.co.nz

COMMUNITY DROP-INS

Speak to the Experts

In October, we will hold community drop-in events so we can share with you what we've done to progress:

-  Upgrades to the electricity network
-  Improvements to our systems and processes to benefit our customers
-  Engaging with customers on our customer charter, pricing methodology and notifying customers on outages



We'll have information relevant to your community and experts in the room to answer any questions you might have. Join us for a coffee or tea and find out what work has been completed (and what's coming up) in your area.

Drop in between 4-7pm on the following dates:

Monday 17 October
Alexandra Community House
14/20 Centennial Avenue, Alexandra

Tuesday 18 October
Queenstown Resort College
7 Coronation Drive, Queenstown

Wednesday 19 October
Wānaka Community Hub
34 McDougall Street, Wānaka

Tuesday 25 October
Dunedin Community House
301 Moray Place, Dunedin

We are happy to answer any queries you might have if you can't make it to one of the meetings. For more information and to read our Annual Delivery Report head to yoursay.auroraenergy.co.nz

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Aurora Energy team celebrating two award wins at the New Zealand Energy Excellence Awards



Upgrades along Letts-Gully-Springvale Road (Clyde)



Replacements on Conroys Road (Alexandra)



Replacements on Conroys Road (Alexandra)

UPDATE FROM OUR CEO

It was a proud moment to receive two awards at the New Zealand Energy Excellence Awards earlier this year. The ‘Network Initiative of the Year’ and ‘Community Initiative of the Year’ awards were won for our Harbour Crossing project, where six lattice towers and overhead lines between Port Chalmers and Portobello were replaced with new submarine cables. We share these awards with the community because their support helped make this project successful, and we enjoyed celebrating the awards with community members on Quarantine Island/ Kamau Taurua in July.

During the winter months, customers rightly asked why we undertake planned work that means their power is out when the weather is cold. In the past, Aurora Energy was criticised for not investing in the network. The new team at Aurora Energy was established in 2018 and made a commitment to bring the network back to a fit state of health. It’s also important to make sure we have the capacity to support the future needs of our customers as we shift to increased electrification and a low carbon energy future.

The size of our work programme means we can’t defer work to only the summer months, however during winter we review planned work more closely, and cancel/reschedule planned outages if the weather is very bad and the work can be safely deferred. It’s important to note that every cancelled job has a cost; the work needs to be rescheduled and this has a knock-on effect by pushing out other work.

We know it’s frustrating when any essential service is not available when we need it and we thank you for understanding that the planned outages are necessary so we can improve the network and provide you with a more reliable electricity supply.

We want to continually improve the way we work and are pleased to let you know that over 18 months from 1 January 2021 until 30 June 2022, we reduced the number of planned outages that either ran over or under the scheduled time from 6.4% to 3.8%. Accurate information about how long the power will be out means you can plan your day more easily, and we will continue to work hard on this as we know it makes a difference to you.

In this issue of ‘Your Network, Your News’ you can read about work we’re doing across the network, learn what it’s like to work at Aurora Energy from one of our team members, and find out about major projects we’ve completed to date.

We’re holding events around Otago this month to share our progress and demonstrate that we are doing what we said we would do to upgrade the electricity network; you can find more information about this on the front page. You can find more information on the front page. If you’re able to head along, we’d love to meet you and answer any questions you may have.

Richard Fletcher
Chief Executive

SNAPSHOT OF MAJOR UPGRADES TO THE ELECTRICITY NETWORK

Letts Gully-Springvale Road (Clyde)

We’ve replaced a section of the network along Letts Gully and Springvale Road, which is part of a number of projects to reinforce the Clyde-Earnsclough power supply. This also gives the Clyde and Earnsclough areas an additional backup supply to cater for future demand growth. We installed a new 11 kV circuit, extended the overhead network, and replaced some of the existing overhead power lines. These upgrades will minimise the length of time power will be out during any future planned or unplanned outages, and provide another back up supply from the Alexandra zone substation. Thanks to our contractors Unison and ElectroNet for doing this work.

Conroys Road (Alexandra)

We replaced 31 poles, 23 cross arms, and 3.8 km of power lines along Conroys Road and surrounding areas during April and May. Our original schedule required eight full day outages to do the work, however thanks to using a helicopter we were able to halve this to four full day outages over a 2-month period. Thanks to our contractors Delta for completing this work for us.

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Halfway Bush (Dunedin)

Our contractors Unison worked in frosty conditions to replace 10 power poles, 35 cross arms, and 2.3 km of power lines along Wakari Road in Halfway Bush during June. Crews were able to restore power for our customers a couple of hours early on a number of occasions – thank you! This work will improve the reliability of supply to the area.

Arrowtown

We have been replacing a large number of assets on the line that supplies Arrowtown and surrounding areas throughout September and October 2022. This includes replacing 50 power poles, 60 cross arms, approximately 2 km of power lines, and upgrading the voltage regulator site in Gibbston Valley.

UPGRADES CONTINUED...



Omakau zone substation replacement

Omakau

There has been a lot of work happening in the Omakau area this year. We have a number of projects underway that will improve the electricity supply to the Omakau area, the largest of which is building a new zone substation. The build started in February and we've made good progress. Constructing new electrical equipment and a switch room is underway and due to be completed later this year. Following this, the final stage (installing equipment) will be ongoing until mid-2023. We installed a new diesel generator in May this year, which is about to be commissioned onto the network. This will provide emergency power supply for most of the community if a major fault occurs on the line from Alexandra, or at the Omakau substation transformer.

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Final testing of new underground cable in Cardrona

Cardrona

A big thanks to our crews who work in all conditions to keep the power on for our customers! Pictured is the Delta crew carrying out the final testing of a new 11 kV underground cable in the Cardrona Valley. The new cable was installed between Cardrona Zone Substation and an existing switch adjacent to Cardrona Valley Road, and will greatly improve the security of power supply to the area.

If you would like to see more photos and footage of these projects, head to:

Aurora Energy Major Projects Webpage
www.auroraenergy.co.nz/about/major-projects/

Aurora Energy YouTube Channel



We also have upcoming projects in the following areas:

- Cromwell
- Green Island, Dunedin
- Andersons Bay, Dunedin
- Brighton, Dunedin

A DAY IN THE LIFE OF...

We had a chat with Michelle from the Programming Team. She shared her career journey with us and why she likes working at Aurora Energy.

What influenced you to choose this career path?

I studied construction and project management at university, and spent years managing construction projects. Then one day I came across 'managing electrical projects', which sounded like an exciting new challenge.

I initially spent five years as a project manager, before an opportunity came up where I could be part of a new team to help programme and plan the work. This would help streamline the process by getting work out to contractors so they had more time to plan and do the work, and was exactly what I wanted to be part of.

What does a typical day in the office look like for you?

It's a busy and exciting role, where we make sure we get the work out the door, set up the projects, and get them ready for the project managers to issue to the contractors. During reporting weeks, we pull together information to make sure we are doing what we've said we will do.



Michelle from our Programming Team

What's your proudest or most memorable moment at Aurora Energy?

Our contractors telling us they had six months' work in front of them. For years, we struggled to get more than three months ahead, so hearing this was very satisfying, knowing all our hard work had finally paid off.

What do you enjoy most about your job/working for Aurora Energy?

The people I work with! Although the work environment is very busy, it's often filled with laughter and banter.

Do you want to work for Aurora Energy?

Head to our website for current vacancies: www.auroraenergy.co.nz/careers/

FROM THE ARCHIVES - ELECTRICITY IN THE MODERN AGE!



(Left) Dunedin Electricity Department's superb festival floats representing the 'modern age' of electricity (1959 & 1961 respectively). Photos courtesy of Dunedin City Council Archives.

COMMUNITY SUPPORT

St Bathans

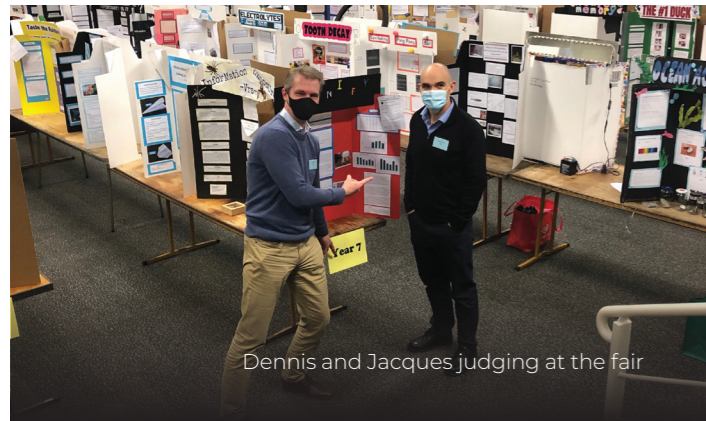
To say thank you to the St Bathans community for their support while we carried out work in the area, we engaged with the St Bathans Area Community Association (SBACA) and sponsored their new noticeboard. Team members from Aurora Energy and Connetics headed along to check it out.



St Bathans

Science & Technology Fair

Aurora Energy was proud to once again be the premier sponsor of the 2022 Aurora Energy Otago Science and Technology Fair. A big thanks to our very own Dennis Pushenko and Jacques Brown for volunteering to be involved on the judging panel. They were impressed by the range of different topics on display, and loved the opportunity to support the future of science and technology.



Dennis and Jacques judging at the fair

Makarora

Earlier in the year, severe weather and snow conditions caused disruptions to the Makarora community's power supply. During this time, we were able to install six temporary generators so customers could have power. A big thank you to Nigel and Rhian Nicholl (Principal at Makarora School and his wife) for helping to spread the word and get our messages out to the wider community during this time. We were thrilled to see the children enjoying this small thank you package we sent them!

Harbour Crossing community celebration

We had the pleasure of celebrating our Harbour Crossing awards win with whānau from Te Rūnanga o Ōtākou, Kamau Taurua community members, our contractors, and other project stakeholders in July. A warm thank you to the community and everyone who attended. With the Harbour Crossing project now complete and the pylons removed from Kamau Taurua, we are excited to work alongside the community to replant the Island with help from Aurora Energy team members.



Celebrating awards win on Kamau Taurua

Community engagement events

A big thank you to everyone who attended our community drop-in sessions around Otago during May. The team enjoyed sharing our 5-year plans with our customers, and are looking forward to hosting more events around the region during October so we can share progress on these plans (see the front cover for more information).



Community event in Alexandra



Thank you packages for Makarora students

SUSTAINABILITY

Electric digger

Jonno Daley is on a mission to prove to the construction industry that going electric is a viable option.

In 2018, he jumped in boots and all and his company Born Electric became a zero emissions business - this included purchasing a 1.9 ton electric digger! Jonno's electric digger is just one of three working in the country, and he wants to change that. When asked why the uptake of EVs in the construction industry wasn't higher, Jonno suggests most people aren't aware it is even an option.

"Our main goal is to prove to people that you can."

The benefits are significant. The biggest driver from Jonno's perspective is the positive impact on health. It is estimated that over 8 million people each year die from breathing polluted air containing fine particular emissions. Switching to electric can help reduce respiratory problems and, more importantly, unnecessary deaths.

Other benefits include:

- Running costs are drastically lower – as little as \$2 per day for fuel (current standard rates)
- Very little maintenance required
- Noise and vibration are significantly reduced, making the worksite safer

Plus the long-term benefits: Savings in fuel and maintenance, the opportunity to participate in low carbon projects, and improved health and safety.

The stats

- 1.9 ton
- 15 kw hours of battery
- 48 volts
- spikes to the equivalent of 30 horsepower

What are the misconceptions for using an electric digger?

- That is weak, but its power is identical to diesel models. It uses the same hydraulic power plant, accumulator and generator
- Questions about battery life. The average task time is 5.5 hours with a charge time of about 1.5 hours with the JCB fast charger, making it easy to charge over a lunch break

"We want to put the digger in as many sets of hands as we can so they can see for themselves the benefits."

Find out more at www.bornelectric.kiwi



Jonno and his electric digger

Preparing for a decarbonised future?

The electricity industry is changing, and with the drive for decarbonisation and a more sustainable way of life, we need to position ourselves well to service our future communities.

Here are some of the innovations we are undertaking to support decarbonised communities.

- A NZ-first project working with solar energy specialist solarZero to develop a system that stores energy from home solar units to use during periods of peak demand. The partnership provides our Wānaka and Upper Clutha customers with an affordable option to install solar panels and a smart battery to homes, enables Aurora Energy to defer spending of up to \$25 million upgrading power lines from Cromwell to Wānaka, and fast tracks the use of technology that is critical to achieving New Zealand's climate change goals.
- Supporting initiatives like NZ's first horticulture business using no fossil fuels, Forest Lodge cherry orchard, to assess a range of capacity and pricing options to best meet its needs.
- Introducing a simplified pricing model that will help our customers meet their own decarbonisation goals.
- Exploring more non-network opportunities (solutions outside of the usual poles and lines) by inviting distributed energy resource providers, owners, flexibility traders and new market entrants to submit expressions of interest on contributing to a decarbonised energy future.
- Taking a lead role in the South Island Distribution Group's work to research and develop a roadmap toward innovative planning and operations systems and practices to enable a new energy future, including local distributed energy resources.

Solar stats



The demand for solar power systems is on the rise in New Zealand. In June 2022, there were 40,803 solar residential connections (representing an 1.814% uptake), with 2,448 solar residential connections in Otago.

From www.emi.ea.govt.nz provided by the Electricity Authority (New Zealand) Source: <https://www.emi.ea.govt.nz/All/Reports/Tagged/solar>

Public Safety – Tree trimming

Did you know?

Vegetation is a major contributor to unplanned outages on the network. Trees growing into power lines cause outages, damage equipment, and prevent our crews from repairing equipment quickly, delaying getting the power back on to customers.

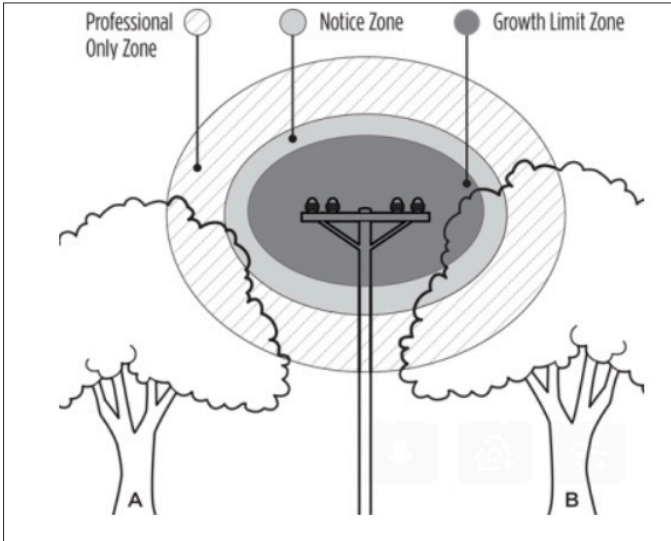
Managing trees is a community responsibility

In the last 12 months, approximately 10% of faults were caused by vegetation, and we need your help to achieve a safe and reliable network. If you have trees on your property, you are responsible for keeping them clear of power lines. Working together, we can keep trees clear of powerlines, reduce the number of unexpected power outages, and keep everyone safe.

Need a cut? Always use a professional!

Be a good neighbour – get an approved Aurora Energy arboriculture contractor to safely trim or cut down trees growing within 4 metres of power lines.

For more information on safety around trees and power lines, please visit our website page www.auroraenergy.co.nz/safety/trees-and-power-lines/



Join the team!

Offices in Dunedin, Central Otago & Christchurch

- Flexible working policy
- Extra KiwiSaver
- Community projects
- Volunteering opportunities
- Graduate recruitment & career progression programmes

Roles in engineering, operations, project management, finance, data, IT, customer experience and more!

Check out our vacancies!
www.auroraenergy.co.nz/careers/



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