



YOUR NETWORK, YOUR NEWS.

AURORA ENERGY'S SIX-MONTHLY CUSTOMER UPDATE ABOUT THE ELECTRICITY NETWORK IN DUNEDIN, CENTRAL OTAGO AND QUEENSTOWN LAKES.

Thomas Green Photography

CHERRIES THAT ARE AS GREEN AS THEY ARE RED

Biting into a cherry is a taste of sunshine and even though winter is around the corner, it's a lasting memory for Mike Casey, who harvested his first cherry crop last summer.

Mike's cherries were produced with zero fossil fuels. A New Zealand first, Forest Lodge Orchard just outside Cromwell is run fully on electricity.

Aurora Energy helped Mike achieve his goal by giving advice when he was setting up his orchard, which transformed the bare paddocks he purchased into a six-hectare cherry orchard with 9,500 trees.

The orchard has electric frost-fighting fans, uses electric golf carts to transport the picked cherries to the shed, runs the irrigation pump on electricity and has solar panels and batteries.

Mike's background in software technology gave him the skills to install a high-tech computer system to monitor the operation by seeing when he uses solar energy versus electricity from the grid, as well as pick the best times to feed solar energy back into the grid.

"I didn't set out to not use fossil fuels," said Mike, "but the good advice I got from Aurora Energy helped me realise how achievable it was. I do everything I can to run my business and live sustainably, and am pleased my business is helping combat climate change."

The good advice came from Glenn Coates, who is Aurora Energy's General Manager Asset Management. "Mike needed an upgraded electricity connection for his frost-fighting fans," said Glenn, "which is when we started discussing the best way to utilise renewable energy from solar panels and battery storage to reduce capacity requirements and cost, and optimise the role of grid energy to support on-site electricity sources. "All electricity in Otago is renewable and I'm pleased Aurora Energy could support a business like Mike's, which operates on clean energy," said Glenn.

"Electricity networks have an important role in planning for a decarbonised future and we're proud to be contributing to this."



Mike Casey and his cherries

9,500

CHERRY TREES PLANTED ACROSS SIX HECTARES



FIVE VARIETIES OF CHERRIES TO ALLOW A LONGER GROWING SEASON

THE TREES ARE GROWING IN

2D

(SIMILAR TO HOW GRAPES GROW IN A VINEYARD), MAKING THEM MORE PRODUCTIVE AS THEY GET MORE LIGHT AND ARE ALSO EASIER TO PICK

2 TONNES OF CARBON NITROGEN USED TO FERTILISE THE TREES, WHICH REMOVES CLOSE TO 3.5 TONNES OF CO² FROM THE ATMOSPHERE



ENERGY EFFICIENCY AND CONSERVATION AUTHORITY (ECCA) GRANTED

50%

OF THE SOFTWARE COSTS THAT MONITOR THE ELECTRICITY INPUTS AND USE

IN THIS ISSUE:

Page 2 - CEO update | Page 3 - Upgrades to the electricity network | Page 4 - Projects coming up | Page 5 - A day in the life of &... From the archives | Page 6 - Community support | Page 7 - Sustainability | Page 8 - Public meetings & safety information



Aurora Energy Chief Executive Richard Fletcher

UPDATE FROM AURORA ENERGY'S CHIEF EXECUTIVE

We have over 92,000 customers across the electricity network in Dunedin, Central Otago and Queenstown Lakes, and it's important to us that we continue to work hard so you have electricity whenever you need it. We never forget there is a customer at the end of our electricity infrastructure. Here's a brief operational update.

We have a major programme of work underway to upgrade the network after past under-investment, and later this month we're having meetings in Dunedin, Alexandra, Wānaka and Queenstown to share our progress and update you on our future work plans, including:

- How we're improving our systems and processes to benefit our customers
- Details of our specific work projects and programmes from now until the start of 2026
- How these projects and programmes will stabilise network reliability, improve the health of our assets and reduce network safety risks

To find out when these meetings are, please see the back page of this newsletter. We know not everyone will be able to travel to the meetings (and might not want to with COVID-19 still in the community) so we'll also share the plans on our website, and we're happy to answer any queries you might have if you can't make it to one of the meetings.

Down the track, we'll continue to make updates available on how we're progressing with our plans – keep an eye out for the first update later this year.

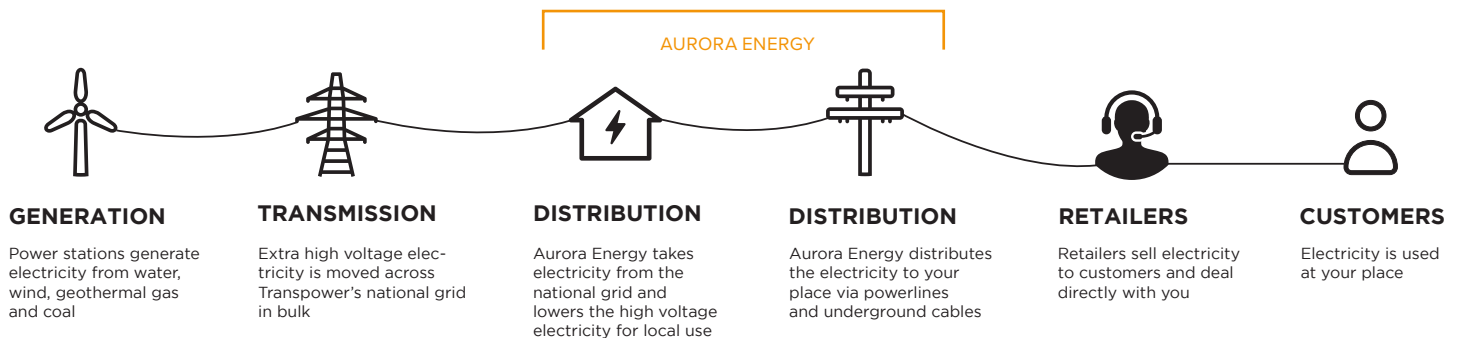
We've completed some major projects recently and you can read more about these on the next couple of pages. Minimising disruption to you, our customers, during work is important and I'm pleased to say we're doing a better job of planning work by bundling jobs in the same area. This might mean some more planned power outages over a shorter timeframe but far fewer than if we'd done each job separately.

We've had good feedback about this new approach and I'd like to thank you for your support, especially at the moment when we know many people are working from home and it's inconvenient to have the power out.

In this issue of 'Your Network, Your News' you can also read about what it's like to work in our 24/7 control room, read about a cherry orchard that's run solely on electricity and the role Aurora Energy played in contributing to make this happen, and get some energy-saving tips on how you can save on your power bill as we head into winter.

We often get queries about the difference between Aurora Energy and electricity retailers (who send you your power bill). The below diagram helps explain where we fit in, as an electricity distribution company.

I hope you enjoy this issue of 'Your Network, Your News'. In the next issue, I'll focus on how we're planning for the future so we can support our customers and communities transition to a low carbon energy future.



SNAPSHOT OF MAJOR UPGRADES TO THE ELECTRICITY NETWORK



Big Day Out

Big Day Out – Lake Hāwea

The first day of summer was a busy one on the network in Lake Hāwea and Albert Town. We replaced 29 power poles and 21 cross arms, and carried out maintenance work in the area.

To minimise impact to customers, work was bundled together and multiple contractors and crews were engaged for the day. The Lake Hāwea Community Centre was generated during the outage and was a hive of activity, with volunteers preparing 200 lunch packs for contractors, and customers using the Wi-Fi to work remotely. Aurora Energy's Customer and Engagement Team was at the hall for the day and we were joined by the local Civil Defence Emergency Management Team, who also enjoyed saying hi to people who popped in to use the facilities.



Glenorchy

Glenorchy gets an upgrade

ElectroNet crews have been working on our behalf in and around the Glenorchy township since November. We have a large programme of ongoing work on the line that supplies Glenorchy and surrounding areas. This work programme includes replacing 110 power poles and 25 cross arms, realigning power poles in Mid Rivers, rebuilding the network across Dart River Crossing, through Lake Diamond and into Paradise, as well as installing two new 11kV air break switches (used for switching the network). We attended a community meeting in November, and engaged with residents early on about the upcoming work programme.



Otago Peninsula

New power lines and poles for the Otago Peninsula

Over six weeks in January and February, Network Waitaki worked on our behalf to replace 36 power poles and upgrade 6km of power lines in the Harwood and Harrington Point area. This was part of an ongoing programme of much-needed network investment to improve the safety and reliability of the power supply to our customers on the Otago Peninsula.

Electricity generation was installed at various points to reduce the number of customers impacted by the unavoidable outages.

“We have found the experience very positive, and the use of generators throughout the project has been fantastic.”

Otago Peninsula Community Board

SNAPSHOT OF MAJOR UPGRADES CONTINUED

Aramoana generation and Port Chalmers support

February and March were busy months for our customers in the Deborah Bay and Aramoana areas. We bundled a large programme of work together, completing three months' worth of work within three weeks, using three of our contractors (Delta, Unison, and Connetics).

We replaced 48 power poles, 77 cross arms, and 7.7km of power lines. We installed generators in the township during the first two weeks of outages. During the final week, we partnered with the Aramoana League to provide community support, generating the Aramoana Hall and part of the township for four full day outages. A member of our Customer and Engagement Team was stationed at the hall during the week, with plenty of friendly locals stopping by to say hello and chat.



Building starts for Omakau zone substation

Omakau residents may have noticed some extra activity happening near the stockyards. The location on State Highway 85 is the new site of the upgraded Omakau zone substation.

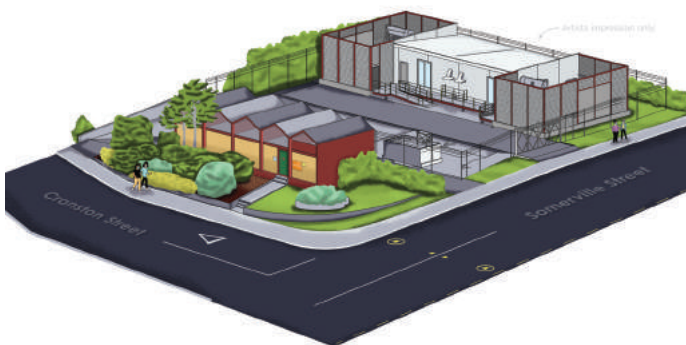
This project will not only replace ageing equipment but also strengthen and increase the reliability of electricity supply for Omakau, doubling the capacity of the substation to ensure it is adequate to meet the growing community. A new generator is also being installed for emergency power supply, and our customers will benefit from this and the new substation providing more options during maintenance and unplanned outages.



PROJECTS COMING UP

Andersons Bay zone substation

The Andersons Bay zone substation is getting upgraded. We are future-proofing the network and strengthening the electricity supply for customers in Andersons Bay and the Otago Peninsula by replacing the existing transformers and ageing equipment, and building a new switchroom. Here is an artist's impression of what the new zone substation will look like.



Cardrona

We have started a project that will increase the security of electricity supply to the Cardrona area. This involves the installation of a new cable from the Cardrona substation and the removal of some overhead assets. Aurora Energy's contractors will be installing a new cable trench and reconfiguring the existing network, which will provide better protection in the event of a power outage. We will also be undergrounding part of an existing overhead line, and installing a new circuit breaker in the substation that will provide additional flexibility to the network. This project is planned to start in May, and will be finished in July.

A DAY IN THE LIFE OF...

We had a chat with Adam to find out what it's like to work in our control room, which operates 24/7 to manage the electricity network in Dunedin, Central Otago and Queenstown. We have control rooms in Dunedin and Cromwell.

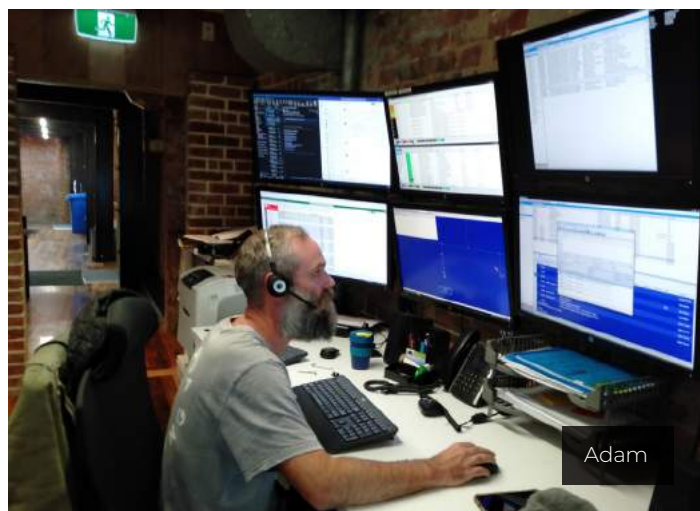
What does a typical day in the office look like for you?

Every shift starts with a handover, to make sure any network changes or job information can continue smoothly. Then we look at the day ahead – what are the planned jobs and how many there are. We typically spend 2-3 hours each morning issuing switching instructions and associated permits to provide safe work zones for our contractors. This is important because of the danger working around electricity.

This is all mirrored at the end of day, when we cancel permits and restore the network to its “normal state” once jobs are completed. In between those times we plan ahead for upcoming work and also respond to events such as faults and accidents, such as cars hitting power poles.

It can be a high-pressure job – what gets you through the day?

I see the control room as a treadmill that is in control of situations and events – you never know the pace of it before you enter the room but once you enter, you must adjust to that pace. We have a great team where everyone has your back and is open to teach and learn. Also, I know we have an important role to play for the business.



Adam

What's your proudest moment at Aurora Energy?

Commissioning long-standing assets that we've been involved with from start to finish is always a proud moment. Contributing to something that provides so much to so many people is pretty cool.

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

Great team, great people, and good coffee is within walking distance.

Do you want to work for Aurora Energy?

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

FROM THE ARCHIVES



Image 1: All you need is a sturdy ladder, right? Times sure have changed!



Image 2: Lines crews undertaking extra high-tension line repairs in Port Chalmers in 1937



Image 3: An early photo of the Port Chalmers substation.

Photo Credit DCC Archives

COMMUNITY SUPPORT

Street art in Wānaka

Local Wānaka artist Chrissy Wickes transformed one of our transformers into a work of art on Lakeside Road, Wānaka earlier this year. Funded by the Upper Clutha Community Arts Council, the design features the Australasian Crested Grebe that nests nearby on the lake. The birds are nationally vulnerable, so locals are lucky to have a thriving colony on Lake Wānaka thanks to marina grebes project founder John Darby. Chrissy hopes the mural will alert passers-by to their presence. A big thanks to Chrissy for her time and efforts!

Brighton Gala Day

A big thanks to the Brighton Gala Day committee for a fantastic event in January. It was a beautiful day with plenty of sun, fun, friendly faces, and positive conversations with our customers and local community. We had a great time and are looking forward to attending again in 2023. Congratulations to Anna and Maya, who won a hamper of locally sourced Otago goodies by completing our customer survey. This was one of the last events able to take place this summer, with COVID-19 Red traffic light settings coming into place later this same day!



Chrissy and John in Wānaka

Cancelled events (shout-out to organisers)

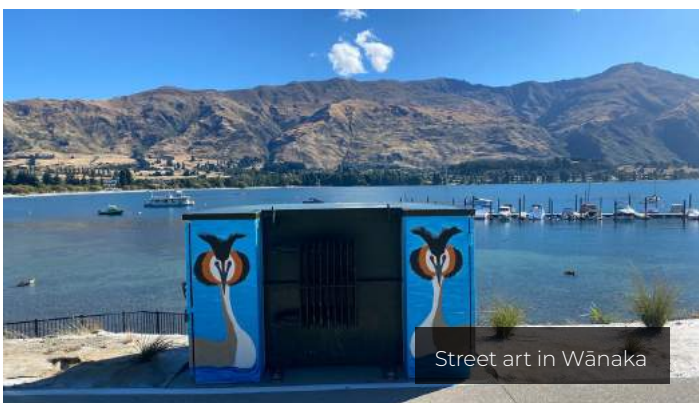
Aurora Energy's Customer and Engagement Team were scheduled to attend numerous A&P Shows around the region this summer, but unfortunately COVID-19 had other plans. We would like to still acknowledge and give a big shout out to all the event organisers and volunteer committees. To the Central Otago A&P Association, the Mt Benger A&P Society, and the Upper Clutha A&P Society – thank you for your hard work and for giving hours of your time, dedication and passion. We look forward to seeing you and some big crowds in 2023!

Emerald Bay fires

Well done and thanks to everyone involved in getting power back on for customers after a scrub fire near Wānaka in January. Seventy-eight customers were either supplied by a generator or on a temporary supply while complex repair work was carried out on challenging terrain to replace seven power poles that were destroyed. While doing the repair work, we did additional work to future proof the network in the area and prevent the need to disrupt the rejuvenation of vegetation once it started growing back. It was a team effort and we'd like to thank FENZ for their hard work putting the fire out, our contractor Delta for working long days in the heat, and the Department of Conservation and local landowners for giving us access to their land. And of course, a big thanks to our customers for your patience while we carried out the repair work.



Repairs underway at Emerald Bay



Street art in Wānaka



Brighton Gala Day winners

SUSTAINABILITY

Fast chargers

The popularity of electric vehicles (EVs) is growing, with one in ten new light vehicles imported into New Zealand last December being electric*. And with petrol prices continuing to rise, more people are looking at switching to EVs.

Through our partnership with ChargeNet, Aurora Energy has supported the installation of rapid EV chargers at key driving locations across our network.

There are now fast chargers at 12 locations on the Aurora Energy network:

- University of Otago, 362 Leith Street, North Dunedin
- 25 Water Street, Dunedin Central
- Pak n Save, 86 Hillside Road, South Dunedin
- Mosgiel New World, 10 Hartstonge Avenue, Mosgiel
- 22 Jedburgh Street, Roxburgh
- 9 Thompson Street, Bridge Hill, Alexandra
- 2 The Mall, Cromwell
- 42 Ardmore Street, Wānaka
- 1 Harvey Street, Omakau
- 45 Mull Street, Glenorchy
- 9 Athol Street, Queenstown
- 302 Hawthorne Drive, Queenstown (Frankton)

**Data source: Ministry of Transport*

Energy saving tips

As we head into the colder months, we wanted to share some tips on how you can save money on your electricity bills.

- Ceiling and underfloor insulation can help reduce heat loss by over 50%. A well-insulated home costs less to heat.
- Draw your curtains 30 minutes before sundown to conserve heat, and close doors to the rooms that you don't need to heat.
- LED light bulbs use 85% less power and can last 15 times longer than incandescent bulbs.
- Make sure your laundry is well ventilated, otherwise your dryer is forced to use the damp air it has just expelled, which means drying takes longer and your power bill increases.
- Fridges, freezers and ovens with worn door seals use unnecessary power. Most appliance centres supply and fit replacement seals.
- One leaking hot tap can use around \$40 in unnecessary power throughout the year. This can be easily solved by replacing the washers in any dripping taps.
- Wash clothes in cold water if possible, and wait until you've got a full load before washing.
- Choose energy-efficient appliances. The Energy Rating label lets you compare the efficiency of similar products - the more stars, the more efficient the product is.

E-Bikes

At the end of 2021, Aurora Energy purchased three E-bikes for staff to use as an alternative to cars when heading out for local meetings. A number of staff have taken up the opportunity to use these alternative modes of transport – here is our Corporate Administration Manager Kate taking the E-bike for a spin!



Kate on the E-Bike



COMMUNITY DROP-INS

Speak to the Experts

Drop in between 4-6pm on the following dates:

In May, we will be holding community drop-in events to share our progress and update you on our future plans.

These include:

- ⚡ How we're improving our systems and processes to benefit our customers
- ⚡ Our projects from now until the start of 2026 - where, when and how much they'll cost
- ⚡ How these projects and programmes will reduce our network safety risks



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 is planned for your area.

Monday 23 May

The Dunedin Centre, Conference Room 1
1 Harrop Street, Dunedin

Tuesday 24 May

Alexandra Community House
14/20 Centennial Avenue, Alexandra

Wednesday 25 May

Queenstown Events Centre
Joe O'Connell Drive, Frankton

Thursday 26 May

Wanaka Community Hub
34 McDougall Street, Wanaka

We'll share the plans on our website and are happy to answer any queries you might have if you can't make it to one of the meetings. For more information head to yoursay.auroraenergy.co.nz

PUBLIC SAFETY – OVERLOADING

Do you run a number of household appliances at the same time? You might be overloading!

Overloading isn't safe for you or our people who work on the network, and it's a potential fire risk.

Maximum appliance load

A typical household can run up to 14 kilowatts (kW) of appliances, or 60Amps, at one time.

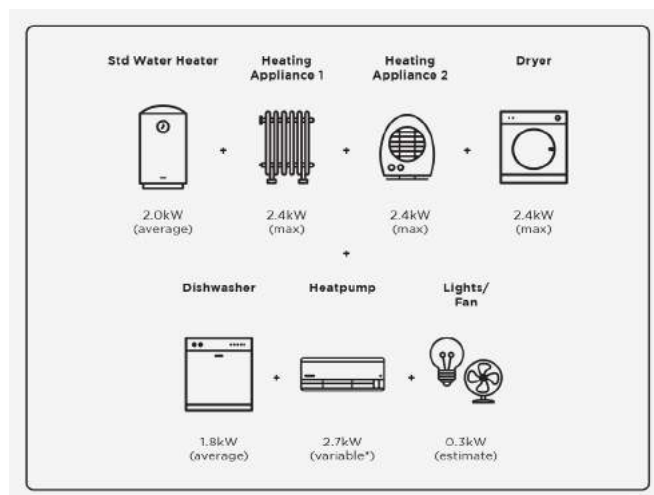
If you turn on all of your heaters, a clothes dryer, oven, use hot water and use all electric appliances during free off-peak power times, you risk blowing your house-fuse, having a power cut, and needing to call Aurora Energy to turn your power back on.

Signs you're overloading

- Circuit breaker often trips or fuses blow
- The socket outlets are warm or discoloured
- Lights dim or flicker
- Your electrical contractor tells you so
- Your retailer sends an invoice for exceeding your supply.

A few last tips

- If you take up an offer for free power with your electricity retailer, please use it smartly and safely
- Check how much electricity your appliances use
- Only qualified technicians should repair electrical appliances
- In a power cut, call Aurora Energy on 0800 22 00 05 and report the incident
- If you need help from Fire and Emergency New Zealand, call 111 immediately
- Ensure everyone in your flat or home understands this information.



If you would like to receive regular updates from Aurora Energy, please email aurora.enquiries@auroraenergy.nz and ask to be added to our mailing list.



auroraenergy.co.nz



0800 22 00 05



info@auroraenergy.nz



[@auroraenergynz](https://www.facebook.com/auroraenergynz)



[@auroraenergynz](https://www.instagram.com/auroraenergynz)



[auroraenergynz](https://www.linkedin.com/company/auroraenergynz)