# **OtagoNet** CONNECTIONS

### Safety Messages

Trees and power lines don't go together

With the growth season upon us, trees may be growing too close to power lines and have the potential to cause fire, power interruptions, appliance damage, power failure, electric shock or electrocution. When trees are trimmed or felled near overhead lines, great care needs to be taken.

Tree owners are legally required to ensure their tree(s) are kept at a safe distance from electricity lines to ensure public safety and to protect the electricity network because:

- in very dry conditions trees close to lines may cause electrical sparking resulting in fire.
- children that climb trees close to power lines are at risk of serious injury or death.
- in severe weather conditions, vegetation can become electrically 'live' and may electrocute anyone coming into contact with it.
- in bad weather, trees can topple or branches break-away causing damage to power lines resulting in a power outage. In snow or icy conditions the additional weight on the tree can cause a similar scenario.
- tree roots can grow around underground electricity cables rupturing the insulation and causing power supply failure.

"Protecting the safety of the public and ensuring a secure supply of electricity to consumers is important to us" says OtagoNet's network manager, Terry Jones.

OtagoNet has an extensive ongoing vegetation control programme in place to maintain a safe clearance between trees and power lines.

If you know of trees which are causing interference or have the potential to cause interference with an electricity line please give us a call on 03 418 4950 or email trees@otagonet.co.nz.

Further information can be found on the OtagoNet website www.otagonet.co.nz under the menu option 'customer information'.





Otago Power Services Vegetation team-trimming trees on the OtagoNet network



## From the Network Manager

Please do not hesitate to contact us at any time if you have concerns or queries about your electricity supply, or if you are thinking about building and would like to plan for the supply of electricity.

Phone: 03 418 4950

Email: enquiries@otagonet.co.nz

Mail: PO Box 1586, Invercargill 9840

Website: www.otagonet.co.nz

Terry Jones
OtagoNet Network Manager



If you have any concerns about our service please call us on 03 418 4950 and we will be pleased to help. If we are unable to resolve your concern you can contact the free and independent Electricity and Gas Complaints Commissioner on 0800 22 33 40, www.egcomplaints.co.nz

# OtagoNet Joint Venture Newsletter April 2013 CONNECTIONS

#### Who is OtagoNet?

Marlborough Lines Limited, The Power Company Limited and Electricity Invercargill Limited formed a joint venture just over a decade ago to provide the electricity network services across most of Otago.

OtagoNet Joint Venture (OJV) was formed in July 2002 following the purchase of the electricity network assets from the shareholders of the consumer co-operative company Otago Power Limited.

The electricity network assets include power poles, power lines, underground power cables, transformers and substations.

The area is quite vast from St Bathans in the north to the Chaslands in the south and inland from the Blue Mountains in the west to Shag Point on the north east coast. Over 14,700 consumers are connected to the electricity network.

When OtagoNet purchased the network in 2002 it was in need of significant maintenance and upgrading. As a result, capital expenditure on the network has increased from around \$2 million to more than \$10 million a year.

The projects are largely replacing lines and rebuilding 11kV and 33kV lines, but also include substation upgrades and work on transformers and switchgear, alongside other planned works. With such an extensive electricity network, around 100 kilometres of overhead lines are renewed every year at a cost of approximately \$7 million.

As you drive around the OtagoNet area, you will see the rebuilt lines are becoming more evident as our maintenance and upgrading programme progresses.

One of our asset management strategies is to reduce the average age of our network to ensure our customers have a safe, secure and reliable supply of electricity.

This newsletter illustrates OtagoNet's commitment to providing a reliable, long term electricity supply which meets customers' requirements and expectations and promotes growth in the region.





Electricity
Invercargill
Limited
24.5%

The Power
Company
Limited
24.5%

Marlborough
Lines Limited
51%

## Palmerston gives up number 8 wire after nearly 60 years

Good old Kiwi number 8 wire has done its bit for Palmerston and now it is being replaced.

Palmerston residents will have noticed Otago Power Services crews replacing the old poles and conductors just off State Highway One at Bushy Park and Flemming Road without realising they are watching the end of an era.

"The lines were installed in about 1954, and at that time it was economical to use number 8 galvanised wire as a conductor, as copper was in short supply and expensive" OtagoNet network manager Terry Jones says. "We're replacing the old poles and conductors with new ones to bring them well and truly into the 21st century."

"We're replacing the old poles and conductors, and parts of the line route – which had a few kinks in it – has been straightened to improve our network," Mr Jones says.

The infrastructure improvements at Palmerston are part of OtagoNet's drive to reduce the average age of its network assets.



"It's a good tidy up for the area. While there are only about 18 customers receiving supply off these parts of the network, Otago Power Services will be running new lines to improve security of supply to them."

Most of the work was done in March 2013 and includes new concrete poles.

"We have about 40 similar jobs across our network. It's not just a tidy up, it's improving our network performance and reliability," Mr Jones says.

# **OtagoNet** CONNECTIONS

#### Catlins area gets new 33kV poles

The Catlins area, an increasingly popular tourist destination, is getting an upgrade of its 33kV supply line from Balclutha.

The final stage of replacing power poles, some over 50 years old, is being completed between Finegand and Kaka Point.

"We're replacing the old wooden poles with new concrete ones with steel cross-arms," OtagoNet distribution engineer Chris Walker says. "We completed the Kaka Point to Owaka part of the project last year, and we have almost completed the Finegand to Kaka Point part of the works."

Chris says the work, carried out by contractor Otago Power Services Limited, involved working on live 33kV lines to ensure customers had continuity of supply while the works went on.

"The crews have replaced about 58 poles which are coming to the end of their working life. The new poles will last up to 60 years."

He says the excellent summer weather has sped the work along, with the current stage only taking about six weeks.

"The Otago Power Services guys have done a great job. Live line work is never simple, but they have made a great job of this and our customers have not been interrupted."

The final part of the work will occur next year, when conductors will be replaced.

"That work can't be done live, so we will bring in generators to ensure there is supply to the people using that part of our network," Chris says.

The replacement is part of OtagoNet's works programme to ensure the network assets are maintained so that customers have a reliable and secure electricity supply.



Live line work on the Catlins upgrade

## A phone number to remember 0800 753 951

Please keep clear of all power lines and always treat them as live.

To help us keep you and others safe, and enable us to fix any potential problems, please call us on 0800 753 951 for:

- broken or leaning power poles
- broken power lines
- clashing power lines
- power lines touching a vehicle
- trees close or touching power lines
- anything that appears unusual on the electricity network



## Kyeburn gets a makeover

The single wire earth return lines that have supplied Kyeburn and Danseys Pass areas for many years are being upgraded.

"We're rebuilding the last 6 kms of the line to the Danseys Pass Hotel, retaining the single wire system," OtagoNet network manager Terry Jones says. "A second part of Kyeburn with single wire lines is north of State Highway 85 to the foot of the Kakanui Mountains. We have quite a few more customers up there now and with the extra load, the 7/16 galvanised wire doesn't perform as well as the new aluminum lines."

He says like the Palmerston refurbishment (see page 1) there was quite a bit of history in the old lines that are being replaced.

"The 7/16 galvanised wire was strong enough so you could run it from hilltop to hilltop, and it was economical at the time. It's done a good job and now it's time for an upgrade."

The refurbishment of the line starts on State Highway 85 and crosses farmland towards the Kakanuis.

"We are well underway with this work which is broken into two parts. We are replacing five kilometres of line this year, and another five kilometres next year to complete the works," Mr Jones says.

The first section of the works was completed in March 2013.

## Owaka to Tahakopa work nears completion

A two year project on the 11kV line between Owaka and Tahakopa is nearing completion.

The replacement of poles and conductors as part of OtagoNet's works programme has seen the need for generators as it was not possible to replace the conductors while they were live.

"We've used generators to keep the power flowing," OtagoNet distribution engineer Chris Walker says.

"It's important that our business customers are not left without power, so to maintain the supply we were able to bring in generators and ensure that reliability was not compromised."

Chris says the replacement work, being carried out by Otago Power Services Balclutha staff, has progressed well for such a large project.

"The guys have worked very well on this, because it's not an easy project considering the land they have to cover."

He also says there has been great support from landowners and farmers while the work was underway.

"Everyone has been very helpful and understanding. We've had no problems and we appreciate the assistance of our customers to get this work undertaken."



Otago Power Services line mechanic working on pole replacement on the Owaka to Tahakopa 11kV line

www.otagonet.co.nz