

Safety Messages

The tip truck is unloading gravel on your farm lane when suddenly there's a bang, a flash and the next thing you know all your power has gone off.

Quality services manager Graeme Webby says on average in New Zealand, one outage per week is caused by farmers or contractors not being aware of overhead lines or underground services while carrying out work on their property or near the roadside.

"While these incidents are a nuisance to a lot of people because our protection systems often turn the power off over a wide area, the real concern is the danger to the people involved – fatalities can happen in these circumstances."

"We encourage people to be aware of their surroundings. That pole might have been away in the distance as you're going backwards in your digger and then next thing you know, there's a crash and the power is cut," he says.

"Some outages are easily fixed – some take the contractors a bit more time – and that can be lost production time for farmers and costly in repairs."

He says tree trimming has also been an issue.

"High voltage electricity can jump across gaps – so you should not be any closer than four metres to the wires without our approval."

Mr Webby says pulling up electric fences on rolling terrain close to overhead lines, moving aluminum irrigator pipes, carrying bales on the front forks of a tractor, grain augers and even posthole rammers need to be used with care.

"With more irrigators being used, there have been a number of incidents in other regions where the pipes have touched overhead lines with disastrous results," he says.

"If in doubt, stay away, or call the OtagoNet faults number on 0800 753 951 for assistance."



Be aware of overhead lines and know where underground services are before you undertake any work:

- always treat all lines as live
- never go near a fallen line
- never climb any power pole or pylon
- look above when using mechanical plant or high machinery
- look above and keep well clear when handling electric fences or moving equipment like irrigators near power lines
- if you are operating machinery that contacts overhead or underground lines, stay in the cab and try to move the machinery away to break contact with the line, then drive the machine well clear of the line before you get out



Xmas message

OtagoNet would like to wish all our customers a Merry Christmas and Happy New Year. Our office will be closed from Friday 21 December until Thursday 3 January.

If you do have an issue with your power supply during this time, ring our faults number on 0800 753 951. It is often better for you to call us rather than your electricity retailer as you can talk to the people who run the network 24 hours, 7 days a week.

Season's Greetings to you all.

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 4184950 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

Major upgrade work in the OtagoNet region continues

A new dairy factory at Clydevale, increased business activity in the Milburn area and the Mt Stuart wind farm all have OtagoNet's stamp on them.

"The Gardians dairy factory consultants approached us about securing a supply to their new plant at Clydevale," OtagoNet network manager Terry Jones says. "We built a new substation, a new 33kV distribution line and river crossing, an 11kV extension to the factory and rebuilt a section of another 33kV line. It was a substantial project and we were able to connect the plant to our network at the beginning of July in time for their commissioning."

An increase in business activity in the Milton area saw OtagoNet build another major new substation to service growing power demand and provide greater security of supply for consumers.

OtagoNet commissioned the new \$1.2 million substation at Milburn after Southern Cross Forest Products (SCFP) identified a site for a new plant on Limeworks Road. SCFP moved a completely disassembled plant from Western Australia and reassembled it in a new building on their Milburn site. Included was the original 2.5 MVA 11kV transformer which is now connected to the new substation for their power supply.

The new Milburn substation also supplies the lime works, Craiggine's timber mill across the road, the new prison and the local load in Milburn, Kaiti, Clarendon, Circle Hill and half-way back to Milton. Forestry companies and other primary industries are expected to be moving into the area with others expanding their current business. These will need extra capacity and the new substation will provide a better and more reliable supply to existing and future consumers.

The transformers, building and switchgear were all delivered to the substation site by March 2012 and OtagoNet connected the timber mill to the existing 11kV line with a regulator to allow SCFP to commission their plant and start operations. This arrangement supplied SCFP for some four months while the substation was completed and commissioned.

The 11kV switchboard in the substation and the timber mill were finally livened from the 33kV line in early September.

"We have also been busy with completing the connection from the Mt Stuart wind farm, which now tees into the 33kV line between Glenore and Lawrence, and replacing 1 MVA transformers in small substations at Paerau and Wedderburn," Mr Jones says.

OtagoNet has also been working on substation safety, with fences being augmented and moved to improve the clearances from the live equipment within.

"We are further protecting the public to ensure it is safe when people are close to our substations and to restrict unauthorised access," he says.

Members of the public should not attempt to go into substations and if they have any concerns they should call OtagoNet's 24 hour, 7 day faults number 0800 753 951 to report any concerns.



Progress on the OtagoNet Asset Management Plan

When you are administering \$10 million in capital expenditure every year, it's important to have a plan.

The OtagoNet Governing Committee signs off the company's Asset Management Plan, which lays out the work we intend to do on our network over the next 10 years.

"The Plan is used to outline all the expected maintenance and renewal work in the next 10 years" OtagoNet network manager Terry Jones says. "While it can be hard to see that far into the future, we need to plan what to do, when and what it will cost."

Mr Jones says the first 2 years of the 10 year plan are specified and budgeted in detail, with the work scoped and planned for year's 3 to 5 and projects 5 to 10 years away being more general and may be modified if needed.

"With \$10 million of capital expenditure and \$3.5 million worth of maintenance each year, there is considerable detail required in the Asset Management Plan. A lot of the work is rebuilding 11kV and 33kV lines, together with some substation replacement work. The aim is to upgrade the network, reduce the average age of equipment and increase reliability for our customers."

"We have a wide variety of work in the Asset Management Plan from smaller but necessary projects from \$50,000 up to rebuilding the subtransmission line between Balclutha and Milton at a cost of up to \$600,000 for next year alone. Overhead line replacements make up most of the cost at some \$7 million each year with substation work and new customer connections averaging \$3 million per year."

Arborist Antics – the formation of the Utility Arborist Group

Otago Power Services is the key contractor for the Otago Joint Venture network. Otago Power Services arborist and compliance manager, Mark Way recently assisted in forming the New Zealand Utility Arborist Group (UJA), a concept of which Mark first suggested over 15 years ago.

Vegetation management is a significant activity that impacts electricity network companies. OtagoNet spends over \$820,000 annually on vegetation management to ensure that trees are kept well clear of electricity lines in the interests of public safety and electricity reliability. OtagoNet contracts Otago Power Services to complete its vegetation management activities.

Mark and a fellow colleague Brad Ryan, vegetation management supervisor at WEL Networks, had discussions recently with the US Utility Arborist Association about the possibility of forming a New Zealand equivalent to provide a forum for all electricity industry associated activity related to arboriculture.

The New Zealand UAG was formed as a sub-committee of NZ Arbor earlier this year. "The opportunity to network with other like-minded souls in the interests of expanding knowledge, improving processes, increasing safety, and all the other good stuff that goes with being part of a professional group is what we are hoping to achieve with the introduction of this new group." Mark said.



Mark Way

OtagoNet Statistics

Below are some facts about the OtagoNet electricity network that covers coastal and inland Otago from Shag Point in the north east, inland through to St Bathans and south down to the Chaslands.

Connected Consumers Total	14,800
- Residential	11,240
- Industrial	10
- Commercial	3,550
Network Length	4,404km
Consumer Density	3.4 consumers/km
Number of Distribution Transformers	4,174
Distribution Transformer Capacity	159MVA
Distribution Transformer Density	36kVA/km
Maximum Demand	59.4MW
Total Energy Conveyed	407.6GWh
Regulatory Value	\$127 million

Before U Dig Service

About to dig and not sure what's underground?

OtagoNet is now part of a "one stop shop" which helps individuals and contractors identify underground services before they start excavating or digging.

Before U Dig (www.beforeudig.co.nz or 0800 248 344) is a service that allows you to provide details of your planned works on a particular site. The Before U Dig team contacts infrastructure members in the area (such as OtagoNet) who then supply information about the location of underground services before work starts.

"Safety is paramount here," says Terry Jones, network manager, OtagoNet. "If you are going to dig below 300mm you should be contacting this service because contact with live cables carries immense risk. It also impacts us, as with expensive repairs to damaged cables and the unplanned outages caused by contractors or individuals not locating underground services before digging may affect hundreds of other customers."

He says it is a free service to the people requesting the information and has been very popular, with over 50 enquiries last month across the Otago area serviced by OtagoNet. OtagoNet will respond to each request even if there are no underground cables to ensure that they will not be digging too close to poles and undermining them or around transformers that may have buried earth wires. Please allow 5 working days for us to organise a cable location.

"If people want us to come out and physically locate a cable for them, we can do that too, however there may be a charge."

Are you a medically dependent consumer?

In November 2009, an electricity industry guideline was released (the **MDC Guideline**) on arrangements to assist medically dependent consumers (**MDCs**). The MDC Guideline sets out the requirements of electricity retailers in respect of medically dependent consumers. The MDC Guideline defines a MDC as "A domestic consumer who is dependent on mains electricity for critical medical support, such that loss of electricity may result in loss of life or serious harm. For the avoidance of doubt, medical dependence on electricity could be for use of medical or other electrical equipment needed to support the treatment regime (e.g. a microwave to heat fluids for renal dialysis or equipment such as that listed in Appendix B [of the MDC Guideline])".

As a responsible electricity distributor, we wish to make medically dependent consumers aware of the following points contained within the MDC Guideline and the Electricity Authority's website that are of relevance to medically dependent consumers who are supplied electricity by retailers that use the OtagoNet distribution network.

Electricity supply by retailers of electricity cannot be guaranteed and temporary electricity outages do occur from time to time. The MDC Guideline does not imply a guaranteed supply of electricity by retailers to medically dependent consumers.

Medically dependent consumers need to take responsibility for ensuring that they have an emergency response plan in place for their medical care when electricity is not available.

Emergency response plans can range from ensuring that a stand-by battery is always fully charged, to relocating to a friend's or family member's premises with electricity or, in very serious circumstances, calling an ambulance to be taken to hospital.

OtagoNet, similar to other suppliers of distribution network services in the electricity industry, from time to time experience events beyond its control and cannot guarantee a continuous supply of electricity by retailers who use its distribution network to supply electricity to customers, including medically dependent consumers. These events can be caused by, among other things, regional supply (i.e. Transpower) issues, tree damage, vehicle accidents, storms and equipment failure. The unplanned outages caused by these events occur with little or no warning and cannot be predicted nor notified ahead of time. The time to restore supply varies, dependent upon the scale and complexity of repair work required. For planned outages, medically dependent consumers, along with other customers, should receive advance notification through their chosen retailer or via a mail drop prior to the outage.

In line with the MDC Guideline, OtagoNet strongly recommends that medically dependent consumers develop an emergency response plan for when electricity is not supplied to them. In addition, OtagoNet recommends that medically dependent consumers disclose to their retailer any information relevant to any disconnection decision by that retailer.

Further information and the MDC Guideline are available on the Electricity Authority's website: <http://www.ea.govt.nz/consumer/mdvc/>

Faults – Freephone 0800 753 951

Our faults call centre is based in Invercargill and is literally just a phone call away on 0800 753 951 and it operates 24 hours a day, 7 days a week.

We are happy to talk directly to our customers when a power fault occurs so you only need to contact us. The quicker we get accurate information directly from those affected, the quicker we can get the power restored.

If your lights are flickering or dull, it could indicate a potential problem that could turn into a major cost.

"Dim or flickering lights are a warning something is wrong with your electricity supply," says quality services manager Graeme Webby. "The first thing you should do is turn off or unplug as many appliances as possible, and then call our faults number 0800 753 951 for assistance"

Mr Webby says if there is low or fluctuating power there is a chance that appliances, particularly electronics, could be affected. He says some times the fault will be in the house itself which will require checking by your own electrician, but if homeowners call our call centre first we can discuss the situation with you and if necessary send our contractor to check the external connection.

**Power Problems?
Call 0800 753 951**

OtagoNet

New faces at OtagoNet



Andrew Holt

Andrew Holt has joined the OtagoNet team at Balclutha as our new GIS Technician. Andrew has a BSc degree from Kansas and has been working as a GIS technician both in America and more recently in Auckland with Electrix. He's decided New Zealand is the place to be and is just completing his residency application. Andrew is responsible for keeping our electricity network plans and records up to date on our geographical information system.



Chris Walker

Chris Walker is OtagoNet's new Distribution Engineer. From closer to home, Chris has come across from Otago Power Services where he was one of their best live line mechanics. Chris has a great knowledge of the Otago network so will be invaluable to the OtagoNet team and customers.

OtagoNet Customers' Function

Understanding customer needs and consulting on how we are performing is important to us.

An OtagoNet customer function in Balclutha held in July this year brought together our Governing Committee and senior staff with a range of our customers.

"We got some great feedback on the network and our customers' expectations on quality and price, amongst other things," chief executive Jason Franklin says.

"It was largely positive and a good exercise in customer consultation and getting the perspective of our OtagoNet customers which is important to us."

The committee and senior management also visited several OtagoNet projects, including the new Milburn substation and the new OtagoNet Sports Arena at Cross Recreation Centre in Balclutha.