The Edendale dairy complex now has an installed capacity of 69 MVA (46 MVA firm capacity) with the new circuit breaker installed at Edendale Substation will be dedicated to the supply of PowerNet has an ongoing commitment to ensure customers on The Power Company network receive a safe, efficient and reliable electricity supply. The capital

“We have built the substation with a firm capacity of 12MVA, and the design of the substation allows for future growth,” he says. The existing Awarua Substation site was deemed unsuitable for an upgrade due to its size, but it will remain and continue to supply the smaller surrounding reliability to the Awarua area

single core 630 mm² 33kV cables running between the two. The project was commissioned in September 2015 at a cost of just over $2 million, their Edendale plant. The project was commissioned in September.

transformer at Fonterra’s Edendale plant and upgrades to the Edendale Substation commissioned The Power Company plays a crucial part in keeping New Zealand’s dairy output going with a new Fonterra’s Edendale plant receives upgrade while Edison Consulting Group was engaged to assist (SCADA). Decom Ltd was the principal contractor, for the three Fonterra transformers while Catapult Schweizer Engineering Labs (SEL) were engaged to provide new protection settings for the network. The new 33kV GIS circuit breaker was manufactured

Electricity Code of Practice 34 set standards for safety Environment and Quality Manager Graeme Webby says before you get started on the job if there are “There are different minimum safe distances and requirements for building or excavation near overhead lines, towers, poles and stay wires. The

Overhead lines nearby.” says. “There are different specifications in the Code of Practice can be found on the Energy Safety website at www.energysafety.govt.nz

In the end, the law makes it the responsibility of the employer to provide safe working conditions and

The Trust Deed sets out the rules governing the proceedings of the Trust and specifically precludes Trustees from taking part in the governance of The Power Company Limited. The only beneficiaries to both income and capital of the Trust are the consumers of The Power Company Limited. The Trustees’ duty is to exercise the rights of shareholders for the benefit of consumers as a whole. Trustees serve for a term of four years, with elections to fill vacancies every two years. The Southland Power Trust would like to thank the outgoing Trustees, Wade Devine and Graham Sycamore. The current Trustees are Jim Hargest (Chair), Stuart Baird, Stephen Canny, Carl Findlater and David Rose.

A message to Consumers from your Trust

After another successful year of operation The Power Company Limited is to credit a discount totalling $8 million to consumers connected to its network. The Southland Power Trust, as a holder of all the shares on behalf of its consumers, strongly supports this decision. Discounts credited to consumers of the past 15 years now exceeds $76 million.

We understand how important electricity is to the day-to-day life of our consumers. The Power Company Limited is one of the best performing rural networks in New Zealand. The area of rural Southland and West Otago covered by our electricity supply network has continued to experience significant and sustained agricultural, domestic and commercial growth. This requires the continuous upgrade and reinforcement of our electricity network to meet the needs of our community.

$8 million Consumer discount

We are dedicated to the continuous improvement of our electricity network. Each year millions of dollars are invested on projects to upgrade the electricity network assets and management systems so the Company can provide the region with a reliable, safe and secure electricity supply now and in the future.

Jim Hargest
Chair
Southland Power Trust

Southland Power Trust Trustees as at September 2015

• The Southland Power Trust was established in January 1998 to hold the shares in The Power Company Limited on behalf of all consumers connected to the Company’s electricity network.

• The Trust Deed sets out the rules governing the proceedings of the Trust and specifically precludes Trustees from taking part in the governance of The Power Company Limited.

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An average domestic consumer using 9,000kWh/pa will receive a discount of $160.20
Southland Warm Homes Trust

The work of the Southland Warm Homes Trust (SWHT) is continuing for another year after funding from the Energy Efficiency and Conservation Authority (EECA) was approved recently for the Healthy Homes Programme.

The SWHT, in conjunction with EECA, has carried out insulation and heating retrofits in more than 6,000 Southland and West Otago homes since 2008.

Funding under EECA’s Healthy Homes Programme is targeted at those who stand to benefit most from having their homes insulated, those being low income households with high health needs, including families with children and the elderly. Landlords with eligible tenants are also included but will be required to make a contribution.

To be eligible, homes must have been built prior to 1 January 2000. Occupants must have a Community Services Card (CSC) and those with high health needs must be referred through an approved referral service.

In addition to the continued EECA/SWHT programme, SWHT and Awarua Synergy are also offering a summertime subsidy of up to $2,000 for middle income families to undertake insulation.

The SWHT is very pleased to be able to carry on the work begun in 2008 and assist the more vulnerable members of our community.

For more details, contact the SWHT on 0800 WARM SOUTH or 0800 927 676.

Discount Calculation

All domestic consumers will receive a discount of 1.78 cents per kilowatt hour (including GST) on their power consumption recorded for the year ended 31 August 2015.

Discount Amounts

Discounts will vary between consumers due to differing levels of electricity consumption.

It is estimated an average domestic consumer using 9,000 kWh/pa will receive a discount of $160.20.

<table>
<thead>
<tr>
<th>Annual Electricity Consumption (kWh)</th>
<th>Average Monthly Consumption (kWh)</th>
<th>Discount $ (GST inclusive)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3,000</td>
<td>250</td>
<td>$53.40</td>
</tr>
<tr>
<td>6,000</td>
<td>500</td>
<td>$106.80</td>
</tr>
<tr>
<td>9,000</td>
<td>750</td>
<td>$160.20</td>
</tr>
<tr>
<td>12,000</td>
<td>1,000</td>
<td>$213.60</td>
</tr>
<tr>
<td>15,000</td>
<td>1,250</td>
<td>$267.00</td>
</tr>
</tbody>
</table>

The discount reflects the amount of variable line charge paid.

The discount for commercial consumers is 14.5% of fixed charges and 1.0 cents kWh/pa (including GST). Individual consumers - individually assessed.

TPCL Network Statistics - at 31 March 2015

| Connected Consumers - Total         | 35,396                          |
| Residential Consumers               | 25,832                          |
| Industrial Consumers                | 183                             |
| Commercial Consumers                | 9,381                           |
| Network Length                      | 8,808km                         |
| Consumer Density                    | 40 consumers/km                 |
| Number of Distribution Transformers | 11,014                          |
| Maximum Demand                      | 133MV                           |
| Total Energy Conveyed               | 754GWh                          |
| Regulatory Value                    | $308 million                    |

Breakdown of Your Electricity Dollar
Who is The Power Company Ltd?

If you live or work in the wider Southland or West Otago regions, then it’s likely you are one of The Power Company’s 35,000-plus consumers.

The Power Company Limited (TPCL) was formed in 1991 and owns the electricity network assets (such as power lines, poles and substations) in the Southland/West Otago area, excluding most of Invercargill City and Bluff.

TPCL is the biggest network in the lower South Island, with over 8,800km of lines and equipment to maintain. We deliver about 754 gigawatt hours (GWh) of energy every year to our consumers. Approximately 73% of TPCL consumers are residential, with the other 27% industrial and commercial users.

The Company is owned by its consumers through the Southland Electric Power Supply Consumer Trust (Southland Power Trust). Five elected Trustees represent consumers.

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Every year TPCL returns a discount to those connected to our network. Over the last 15 years, the Company has returned $76 million to consumers.

The Board

The TPCL Board is made up of five Directors appointed by the Southland Power Trust.

Directors’ responsibilities are mainly governed by the Company’s Constitution and the Companies Act 1993. Their role includes determining policies, preparing a Statement of Intent, a Business Plan, an Asset Management Plan, monitoring PowerNet’s performance, reporting to the shareholder, the Southland Power Trust, and publishing an Annual Report.

TPCL contracts PowerNet Limited to manage, construct and maintain its network and metering assets. PowerNet’s costs are recovered via a mark-up on capital and maintenance work and an agency fee for management services.

PowerNet is the main point of contact for consumers.

Chair’s message

Information for Consumers

In conjunction with Trustees I am pleased to announce once again that The Power Company Limited, your local electricity lines company, is crediting another discount totalling $8 million (including GST).

This discount will be received by all consumers who are connected to our electricity network at midnight on Wednesday 30 September 2015.

For domestic consumers the discount is 1.78 cents per kWh (including GST) for power consumption for the year ended 31 August 2015. Other consumers’ discount will be based on their supply contracts.

Your discount has been credited to your electricity retailer and will be passed on to you and be shown as a discount on your October or November electricity account.

Consumers with prepayment meters will have a discount credited directly onto their pre-power account by their electricity retailer and this discount will be available to use when next purchasing electricity.

The Power Company Limited Directors and the Southland Power Trust are committed to continuing improvement in your reliability of supply and to maintain line charges at competitive levels.

The Directors will endeavour to ensure that The Power Company Limited remains a successful business and continues to pass on the benefits to its consumers.

If you do not receive your discount by 30 November 2015 please contact your electricity retailer.

Directors wish to welcome Don Nicolson to the Board as from August 24 2015. Don is well known to Directors from his time as a Trustee. This has given him a close insight to the Company and I am sure he will make an excellent contribution.

Alan Harper
Chair
The Power Company Limited
Oreti Valley Project

Otago Power Services Limited (OPSL) has been assisting The Power Company with the initial phase of the Oreti Valley Project – a long-term plan to upgrade and extend the 66kV network to include Centre Bush, Dipton, Lumsden and Mossburn Substations.

In the first stage of the project, which will run over three years, a new 66kV line has been installed out of the Winton Substation to the west across the Oreti River and north to the Centre Bush Substation. The new line will provide a reliable and efficient power supply that allows for future expansion.

It was a big job that involved an array of at least 10 southern contracting firms, all with a part to play; be it tree-topping, traffic management, concreting or drainage.

With farmland being too wet for easy access to properties heli-stringing conductor across the Oreti River provided a particular challenge for Otago Helicopters.

"As part of this first phase of the project, around 132 new poles across 12 kilometres were installed following a process called hydovacing. This is when pressurised water and a vacuum system are used to create a hole in which to insert the pole. The use of hydovacing significantly sped up the construction side of the job," says Jim Matheson, Regional Manager of Otago Power Services, Gore.

Building the new line also meant regular planned outages, as service lines were reconfigured over an existing line to suit the new construction.

A significant aspect of the job was liaising with customers and partners to mitigate the impact of outages and to gain land access. OPSL has greatly appreciated the willingness of affected customers to work with the company to get the job done.

"OPSL staff also went the extra mile to deliver on the project. The willingness of all staff in Gore, under the leadership of Reece Stephenson, to work additional hours and travel to complete the build in a timely manner, coupled with the high quality of their workmanship, has greatly contributed to the project," says Jim.

This project commenced in January 2015 and was completed in September.

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Hedgehope Substation

The new Hedgehope Substation is supplying vital power to Southland’s important primary industries.

The substation was built to meet increased demand in the farming sector and provide greater security of supply for consumers in Central Southland.

The substation took 18 months to construct and was commissioned on March 19 2015 at a cost of approximately $3 million.

"The design of the substation allows for future growth. The substation capacity is 5MVA and we have allowed for future expansion of the substation if required. It is currently running at 11kV, but should the network change to 22kV it can operate at that voltage with minimal work required," PowerNet Chief Executive Jason Franklin says.

Prior to the new substation the power delivery to the region was from Winton, Kennington and Mataura. "We also needed to build a new 66kV spur line from Winton to Hedgehope to supply the substation," he said.

"Building the substation at this location has enabled the load to be reduced at the Winton Substation, which was running close to full capacity," Jason says.

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We’re just a phone call away

Power Issues?

Call PowerNet on 0800 808 587

Increased reliability across the TPCL electricity network means far fewer power outages – but on occasion they still occur.

Help is literally just a phone call away on 0800 808 587. PowerNet System Control operates a 24 hours a day, 7 days a week service.

The 0800 number puts residents directly in touch with System Control which has immediate access to the line staff out in the community.

System Control is happy to talk directly to network customers when a power outage occurs so there is no need to contact the electricity retailer. The quicker System Control receives accurate information from those affected, the quicker the power can be restored.
Fonterra’s Edendale plant receives upgrade

The Power Company plays a crucial part in keeping New Zealand’s dairy output going with a new transformer at Fonterra’s Edendale plant and upgrades to the Edendale Substation commissioned in September.

“Fonterra approached PowerNet in September 2014 to discuss their intentions to expand output at their Edendale plant. The project was commissioned in September 2015 at a cost of just over $2 million,” PowerNet Project Manager Jarett Contino says.

The upgrade consisted of the installation of an 11.5/23MVA, 33/11kV transformer at a new Fonterra switchroom/transformer compound, a new 33kV GIS circuit breaker at Edendale Substation and three single core 630 mm² 33kV cables running between the two.

Jarett says the new circuit breaker installed at Edendale Substation will be dedicated to the supply of the new transformer. The substation also received upgrades to the existing communications equipment.

The Edendale dairy complex now has an installed capacity of 69 MVA (46 MVA firm capacity) with the new state of the art network equipment installed and commissioned.

New Colyer Road Substation brings increased capacity and reliability to the Awarua area

PowerNet Chief Executive Jason Franklin said expansion at the Open Country Dairy plant and the industrial park at Awarua would be met by the new Colyer Road Substation commissioned on August 5 2015.

The Power Company Limited project took 18 months from start to finish at a cost of approximately $9 million. In conjunction, significant protection and communication systems have been upgraded for the Bluff, Seaward Bush and Colyer Road Substations, significantly improving the fast clearance of network faults.

“The existing Awarua Substation site was deemed unsuitable for an upgrade due to its size, but it will remain and continue to supply the smaller surrounding industries,” Jason says.

“We have built the substation with a firm capacity of 12MVA, and the design of the substation allows for future growth,” he says.

“PowerNet has an ongoing commitment to ensure customers on The Power Company network receive a safe, efficient and reliable electricity supply. The capital investment for the network is between $20-$30 million per annum, with a significant proportion of that spend dedicated to new and upgraded network assets,” Jason says.

The TPCL network project was facilitated by a number of contractors and manufacturers; PT CG Power Systems Indonesia supplied the transformer and the new 33kV GIS circuit breaker was manufactured by ABB Turkey. MWH Global was responsible for the overall design of the substation upgrade and Protechtion Consulting Ltd were engaged to provide new protection settings for the network. Schweizer Engineering Labs (SEL) were engaged to design the new voltage regulation scheme required for the three Fonterra transformers while Catapult Software made the changes to the Master Station (SCADA). Decom Ltd was the principal contractor, while Edison Consulting Group was engaged to assist with the overall project management.
Safety Messages

Trim that Vegetation – Carefully

It is vital that you keep an eye on trees around your property if you have overhead lines. To ensure your security of electricity supply and that you, your family and your friends remain safe, vegetation management is essential.

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 Graeme Webby, PowerNet’s Health, Safety, Environment and Quality Manager.

He says while tree trimming is important near high voltage lines, it is important to be aware of your surroundings when chopping back the hedge or trees.

“High voltage electricity can jump across gaps – so you should not be any closer than four metres to the wires without our approval. It can also be easy to forget about overhead lines if you are operating equipment to trim trees – it’s vital that anyone working near lines knows where the lines are at all times to avoid injury or worse.”

Look Up for Overhead Cables

What is above can make a difference to your safety.

The Electricity (Safety) Regulations 2010 and Electrical Code of Practice 34 set standards for safety in the construction sector.

“One size does not fit all when it comes to building or excavation works,” PowerNet’s Health, Safety, Environment and Quality Manager Graeme Webby says. “There are different specifications in the Code of Practice for different kinds of work.”

“There are different minimum safe distances and so it is best to become aware of what the Code says before you get started on the job if there are overhead lines nearby”

The Electrical Code of Practice outlines the requirements for building or excavation near overhead lines, towers, poles and stay wires. The minimum safe distances are designed to limit the chance of damage or hazards being created by the building or excavation. The minimum distances also ensure that the support structures can be accessed for inspection and maintenance.

Some excavations and other works near overhead electric line supports can compromise the structural integrity of the overhead electric line and metallic or conducting paths near overhead electric line supports can transfer voltage that could create a dangerous situation.

Mr Webby says the Code also covers material under overhead lines and the operation of mobile equipment.

“In the end, the law makes it the responsibility of the employer to provide safe working conditions and Code of Practice 34 helps employers achieve that goal,” he says.

The Code of Practice can be found on the Energy Safety website at www.energysafety.govt.nz