Who is The Power Company Limited?

If you live in the wider Southland or West Otago regions, then it's likely you are one of The Power Company's 34,000-plus consumers connected to its electricity network.

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

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

The Board

Alan Harper - Chair

Duncan Fea

Doug Fraser

Maryann Macpherson

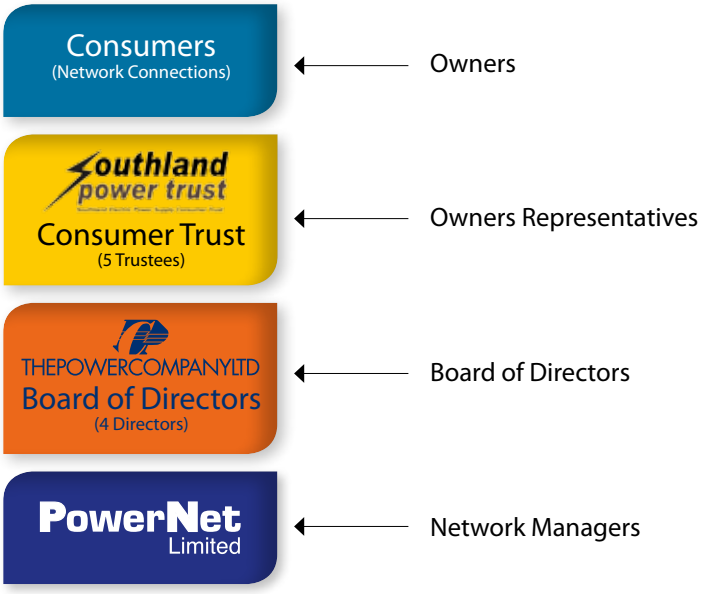
The TPC Board has four Directors appointed by the Southland Power Trust.

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 and an Asset Management Plan, monitoring PowerNet's performance, reporting to the shareholder, The Southland Power Trust and publishing an Annual Report.

PowerNet Limited is contracted to manage TPC's network and metering assets. TPC's main source of revenue comes from the use charge for PowerNet's lease and use of TPC assets.

PowerNet is the main point of contact for consumers.

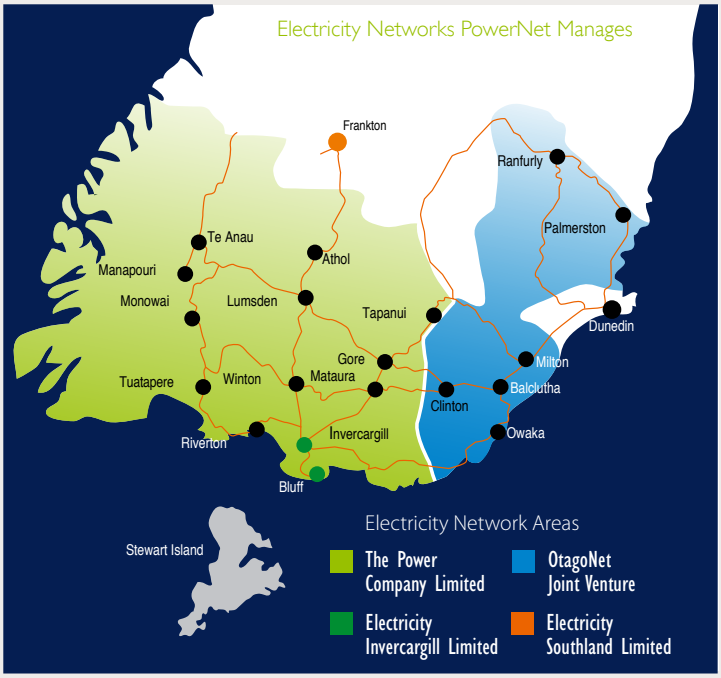
Other TPC revenue comes from the connection of new installations to the network and profits from investments in OtagoNet Joint Venture, Otago Power Services Limited, Power Services Limited and Electricity Southland Limited.



Who is
PowerNet Limited

PowerNet is an electricity network management company.

TPC contracts PowerNet to manage the electricity network assets on its behalf. PowerNet staff work from an office at Racecourse Road in Invercargill, a regional office in Balclutha and a 24/7 control centre located at the Invercargill Transpower substation.



Major Projects completed

TPC has completed several major network projects, including an upgrade of the Kennington substation, stage two of a line upgrade for Northern Southland, and a logistical challenge at Monowai.

Upgrade of the
Kennington substation

An upgrade of the Kennington substation from a single transformer to two new 33/11 kV transformers will provide capacity and supply security for future growth in an area already seeing industrial expansion. PowerNet network investment manager, Tod Trotman explains.

"The load on the Kennington substation has crept up over the years, with the sawmill, venison plant, farms and homes, and now a drilling company out there too. Our original plan to upgrade the single transformer has been adjusted to allow for this and future growth in the area."

Tod says "Having three feeders from the substation where there was only one previously meant security of supply for the businesses concerned, as well as the homes and farms serviced from the Kennington substation."

"The distribution network has been reconfigured to provide two additional new 11kV feeders so the customers supplied from the substation are now split into three lines. This provides separation between the rural supplies and the commercial/urban supplies off the substation, and limits the number of customers affected by an incident such as lines coming down in an accident or bad weather. In addition, some overhead lines have been moved underground to enhance the reliability of supply," he says.

The existing Kennington substation was 40 years old.

"A new 11 kV indoor switchboard has been installed, in a new prefabricated switchroom. This will provide better reliability than the previous outdoor switchgear. This switchroom also includes up to date features such as the latest in digital protection relays, communications gear and GPS clock synchronisation, which all contribute to a more reliable and robust power supply to the supplied customers," Tod says.

"The end result is a high quality, modern substation that should serve the needs of the Kennington area for many years to come."

The substation build and installation was completed at the end of March.

One of the 33/11kV transformer being lifted on site

Stage Two completed of
Mossburn-Athol

Stage two of The Power Company's Mossburn to Athol line upgrade was completed in early March.

"The 14.5km upgrade from 11kV line to include an additional 66kV line will provide the region with an improved quality of electricity supply," says Murray Popenhagen, project manager.

"The project will increase the network load capability for the future growth in the district," he says.

Infrastructure specialist Delta Utilities carried out the second stage upgrade. Line mechanics undertook sections of the upgrade using live line work to ensure customers were not affected by power outages.

"It was important to us to keep as many customers connected to the network at all times" says Murray.

The remainder of this project is in the final planning stage, including a 15km stage three line upgrade. In addition, construction of a new zone substation for Athol is also in the final planning stages.

The total project cost of the TPC project is in excess of $5million and is part of the 10 year Asset Management Plan.

Line Mechanics from Delta Utilities working on the line upgrade

A testing time at
Monowai

33/11kV transformer being lifted on site

It was almost a bridge too far for the upgrade of the Monowai substation.

The Monowai area is supplied from only one circuit from the Monowai Substation. The sole circuit splits into two circuits just outside the substation with one supplying the Blackmount area and the other circuit the Borland Lodge area.

To improve the reliability of this supply TPC installed a new 1 MVA 66/11kV transformer.

"This transformer was manufactured in Korea, transported to Timaru and then by road to Monowai," PowerNet network investment manager, Tod Trotman says.

"This proved to be a logistical challenge as the suspension bridge crossing the Waiau River has restrictions for loads crossing the bridge. The bridge limits are a maximum of 7000kg for each axle with a total of 28,500kg maximum mass. With the transformer weighing just over 16,000kgs a truck had to be selected with the required number of axles and the truck could not exceed 12,500kg."

To reduce weight the oil was drained from the transformer in Dunedin and transported separately.

This reduced the total weight considerably but the total weight still exceeded the restrictions on the bridge.

An application to the Southland District Council to take 33,000kgs over the bridge allowed the delivery of the transformer to site.

The logistical challenge didn't end there, though.

"Smith Cranes were to off load the transformer. An application to Southland District Council for the crane to go across the bridge was granted but the crane driver had to manage the axle weight before crossing the bridge by pushing his boom out to shift some of the weight from the rear axles to the front axles," Tod says.

Those transport challenges made the actual installation seem easy by comparison, and the new supply to the Monowai, Borland Lodge and Blackmount area changed over to the new transformer in early April.

Upgrade complete at
South Gore Substation

The upgrade of the South Gore substation was completed in late 2012 to ensure security of supply and as part of TPC's ongoing programme to upgrade and improve network assets.

South Gore substation services Gore township, and some rural areas around the town.

"The old switchboard was due for replacement," network investment manager Tod Trotman says. "We took the opportunity to upgrade to a modern 11kV switchboard, with modern protection and control systems."

The existing two 33/11kV 6/12MVA transformers supplied an indoor 11kV switchboard with four 11kV feeders.

Decom Electrical was contracted to complete the 11kV indoor switchgear design, construction and installation, while Otago Power Services (OPSL) Limited completed the required changes to the overhead network..

"It was a pleasure dealing with both Decom and OPSL and the two companies worked well together on this contract. Both companies have a high level of customer service," Tod says.

Tod said "The million-dollar project was a useful exercise for OPSL staff as they were able to complete training on high voltage phasing checks during the course of the refurbishment."

Asset Management Plan
set for 10 years

TPC's Asset Management Plan (AMP) has been set for the next 10 years.

The AMP, together with PowerNet's Works Programme and Business Plan, were presented at a contractors briefing earlier this month.

Chief executive, Jason Franklin says "PowerNet has developed ambitious Business Plans for Electricity Invercargill, The Power Company, OtagoNet and Electricity Southland networks, with capital investment increasing by over 25 per cent. "

"The purpose of the presentation to contractors was to summarise this information so they can see what the asset owners and PowerNet have planned for the networks over the next 10 years and more specifically over the next two years under the approved works programme," he says.

"Having the contractors fully understand the work ahead will ensure that together we can meet the expectations of the network owners."

Jason identified nine key areas of focus in the Business Plan, including risk management across the business, enhancing our people, customers matter, operational excellence and advancing growth opportunities.

The presentation was well received by the contracting companies who attended.

"Our plans are to deliver contractor presentations on a regular basis so that the contractors are given all the relevant information".

TPC major asset management projects for the coming year include:

- New Hedgehope Substation
- New Athol Substation
- New Mossburn to Athol 66kV Line
- New Isla Bank Substation
- New Fairfax to Isla Bank 66kV Line
- Waikiwi Substation Upgrade
- Oreti Valley Project-Design
- Oreti Valley Project-Winton to Centre Bush 66kV Line

Total Capital Investment for these projects is $10 million.

Trustees and TPC Directors visit to
Kennington substation

Southland Power Trust Trustees and TPC Directors got a first hand look at one of their newest network assets when the Kennington substation (see page 2) was commissioned last month.

"The Trustees and Directors are the ones approving asset investment decisions on behalf of customers and we like them to see the results of the investments we make in the network," PowerNet chief executive, Jason Franklin says.

"The Kennington substation is one example of how we are improving and upgrading our network assets to ensure future capacity and reliability of supply for our customers."

The Trustees and Directors were given a tour of the new substation and equipment by staff who were able to explain the importance of the upgrade.

The Southland Electric Power Supply Consumer Trust holds all the shares in TPC on behalf of customers connected to the Company's network and distributes the benefits to these customers.

L to R Maryann Macperson (obscure), Duncan Fea, Doug Fraser, Jason Franklin and Mark Zwies

L to R Jason Franklin, Mark Zwies, Graham Sycamore, Roger Paterson, Jim Hargest and Wade Devine

Southland

Warm Homes Trust

The Southland Electric Power Supply Consumer Trust, owners of TPC, together with Electricity Invercargill Limited, formed the Southland Warm Homes Trust (SWHT) in 2008. The SWHT receives funding from the Energy Efficiency and Conservation Authority (EECA) and from a range of Southland Councils and organisations, of which TPC is the largest funder.

The purpose of the SWHT is to offer support for warmer, healthier homes by providing subsidised insulation and heating assessments and retrofits for Southland and West Otago homes.

The SWHT is welcoming a greater commitment from the Southern District Health Board (SDHB).

Greg Buzzard, PowerNet chief financial officer, administrator to the trust, says a meeting held last month with SDHB and Primary Health Organisation (PHO) representatives proved informative for all parties following a presentation from Ann Currie of the Canterbury District Health Board.

"They've taken a positive step in doing more here in our community," he says. "With regard to the promotional and people side, the SDHB are being a lot more proactive in getting the message out to the medical profession about the Warm Homes project. As a result, people with health problems are continuing to benefit from the subsidised installation offered by the initiative."

TPC recommends people interested in the Warm Homes project make an enquiry with their medical professional to see if they are eligible for funding.

The SWHT has also been working with the Invercargill City Council, Environment Southland (ES) and the Gore District Council in the quest to improve air quality in the region.

"We've got some clean air issues in Invercargill and the Gore District area with levels of particle emissions," Greg says. "The local authorities recognised it's an issue and are working together towards steps to improve air quality."

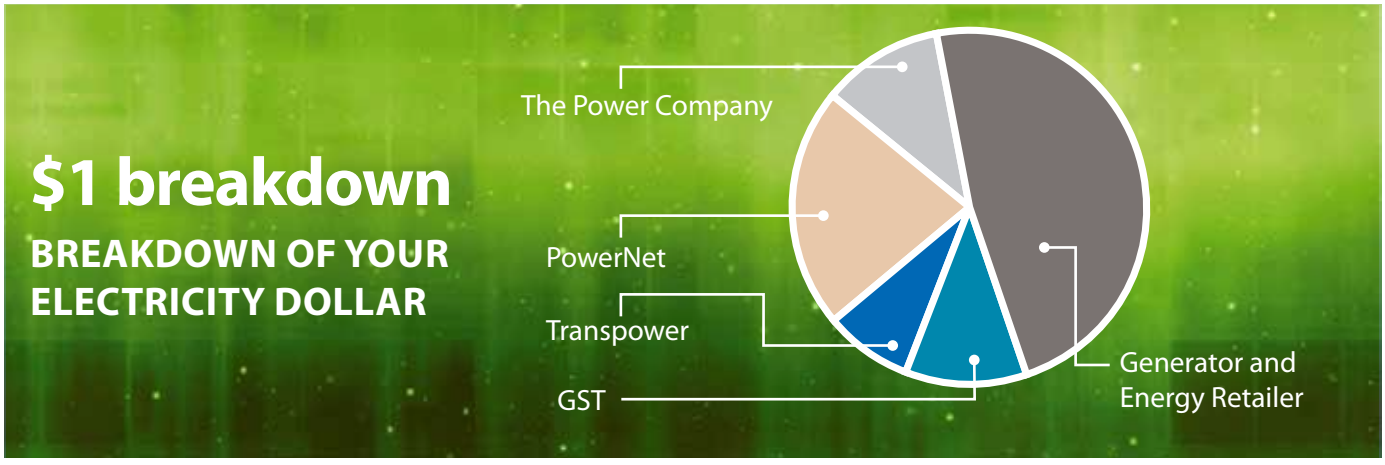
The SWHT would continue to remove dirty air appliances and replace them with clean air appliances, supported by funding from ES and the Energy Efficiency and Conservation Authority (EECA.)

"The SWHT is recognised by the local authorities as a vehicle to do that."

Southland Warm Homes Trust creating healthy homes

Call 0800 92 76 76 or 0800WARMSOUTH

- For a free energy assessment
- Insulation subsidies up to 60%
- Clean air heating subsidies up to $1,500



Vegetation Management

It is vital that you keep an eye on trees around your property if you live near 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, quality services manager.

He says while tree trimming is important near high voltage lines, it was 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."

Contractors Asplundh trimming trees on the TPC network

Safety Messages

On average, one power outage per week on the networks managed by PowerNet is caused by human error.

Whether it is not seeing overhead lines, or digging up underground cables, PowerNet quality services manager Graeme Webby says it is vital to be aware of lines and cables near where you are working.

Graeme says pulling up electric fences on rolling terrain close to overhead lines, moving aluminium irrigator pipes, carrying round bales on the front forks of a tractor, grain augers and even posthole rammers need to be used with care. Operators of tip trucks and excavators need to be aware of power lines.

"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 you are working or digging near underground cables, the Before U Dig website should be used to make sure you are not going to strike anything."

Before U Dig (www.beforeudig.co.nz or 0800 248 344) is a service that allows you to provide details of planned works on a particular site. The Before U Dig team contacts any member suppliers in the area who then supply information about the location of underground infrastructure to the contractors before they start work.

If you have any concerns about our service please call us on 03 211 1899 and we will be pleased to help – we have a free internal complaints process. 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