



# More Power to the People

The Power Company Limited's newly upgraded Waikiwi Substation in Invercargill brings more power to the people in the Waikiwi, Lorneville and Otatara areas.

The upgrade meets a growing electricity demand and future proofs supply for households and businesses in the area.

The project to upgrade the existing substation, built in 1967 by the NZ Electricity Department, involved 18 months of planning and construction work. Two new transformers were installed and housed in a newly constructed, architecturally designed building.

"This upgrade will improve system security and power supply to the Waikiwi and surrounding areas," PowerNet's Project Manager, Roger Scott says.

The upgraded substation was commissioned in November and represents a fantastic combined effort by PowerNet staff, contractors, subcontractors and consultants.

The Power Company Ltd (TPCL) owns Southland's electricity assets (excluding Invercargill City and Bluff) and these assets are managed by PowerNet.



*The substation site before the upgrade*

## How the Project Rolled

The 18-month project involved installing two new 33/11kV, 11.5/23MVA transformers and constructing a new architecturally designed transformer building.

In late April 2016 the first stage of the upgrade was completed when the first transformer was livened. The second transformer was later livened in September 2016.

The new building housing the transformers was then fully enclosed to meet the requirements of the Invercargill City Council district plan by reducing ambient noise. It was also architecturally designed and landscaped to fit in with the surrounding environment.

The pre-existing separate building on the site continues to house the 33kV and 11kV switchgear.

Due to the compact nature of the site, design and construction was a challenge. Installing the new building and equipment was completed in stages to maintain electricity supply and to minimise disruption for residents and businesses. This meant ensuring that one transformer was always working.

The commissioning of the second transformer ran two months ahead of schedule, a testament to the hard work of all involved in the project.

## Work began in May 2015 to upgrade the Waikiwi Substation.

*Roger Paterson (PowerNet chief engineer) observes the foundations being laid*



*Walls going up*



*T2 transformer being moved into the building*



*TPCL chair, Alan Harper, takes a look at the T1 transformer*

*Congratulations to our staff and the contractors who worked on the Waikiwi Substation upgrade.*

*A job well done!*

*The newly upgraded substation*



*TPCL directors preparing for a tour of the new substation. From left to right Phil Johnston (Decom Construction Manager), Don Nicolson (Director), Doug Fraser (Director) and Jason Franklin (PowerNet Chief Executive)*

