

## Spey Street substation update

The resource consent process for the proposed Spey Street substation reached its conclusion in December with designation for the substation confirmed following the Notice of Requirement (NOR) hearing held on 6th November.

General manager of network operations Gary Pritchard said the hearing, convened by the Invercargill City Council, also included submissions from neighbours of the site. "Any issues raised by the neighbours previously were certainly addressed by PowerNet going into the hearing," Gary said.

"The Commissioner noted that we had already carried out extensive consultation and as a result of those discussions with neighbours, had amended the design of the substation."

The design submitted at the hearing was 'markedly different' to that submitted during the initial consent process and included a reduction in size.

"The decision of the Commissioner and our acceptance of the conditions allows us to proceed with the substation development while continuing to work closely with neighbours to address any concerns such as noise or hours of work," Gary said.

PowerNet is now advancing the project, engaging in discussion with Invercargill City Council to determine the most suitable route to lay the new 33kV cable from Findlay Road to the new substation.



Gary Pritchard and Allan Derrick at the public consultation

## Kyeburn gets makeover

The single wire earth return lines that have supplied Kyeburn and Danseys Pass areas for many years are being upgraded with the first section of the project now complete.

"We're rebuilding the last 6kms 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 aluminium lines."

## Queens Drive realignment underway

A prime opportunity to upgrade cables emerged for PowerNet when stage two of the Queens Drive realignment got underway.

The Invercargill City Council project, which commenced in November last year, involves widening the road, installing new traffic lights at the St Andrew Street intersection and replacing both storm water and sewer mains.

PowerNet's technical engineer, Phil Hartley said it was an ideal time to upgrade 2.2km of Electricity Invercargill Limited's 50-year-old 11kV cable over four feeders, as well as install fibre cable ducting. Improving the existing conductor size from 95mm copper to 300mm aluminium will assist in increasing capacity into the north-east Invercargill area.

Bond Contracts Limited was tasked with the trenching and laying of the cables, while Power Services Limited completed the cable jointing.

Phil said the longest cable pull was 420m around two tight bends. "This proved no challenge to the three contracting companies all working together to complete this stage of the project," he said.

The cables have now been commissioned and PowerNet's work on the Queens Drive project is complete.



A contractor inspecting the new cable

## Tom Campbell appointed president of the EECA

PowerNet and Electricity Invercargill director Tom Campbell has been appointed chairman of the Energy Efficiency and Conservation Authority (EECA).

Mr Campbell, who will be at the helm for a three-year term, has a long-standing interest in improving energy efficiency stemming from roles at Rio Tinto, including Managing Director (NZ and UK) of Comalco and General Manager of the Tiwai smelter.

He is chair of Crown Research Institute GNS Science and a director of Todd Corporation and the New Zealand Standards Council.

The role of EECA, as set out in the Energy Efficiency and Conservation Act 2000, is to encourage, promote and support energy efficiency, energy conservation and the use of renewable energy resources in New Zealand.



Tom Campbell

## Contractors briefing

Now set for the next 10 years, the Asset Management Plan (AMP), together with PowerNet's Works Programme and Business Plan, were presented at a contractors briefing earlier this month. Chief executive Jason Franklin said PowerNet had developed ambitious Business Plans for the EIL, TPCL, OJV and ESL networks, with work increasing by over 25 percent.

"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 network over the next 10 years in the AMP and more specifically over the next two years under the approved works programme in the Business Plans," he said. "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 that attended. "Our plans are to deliver contractor presentations on a regular basis so that the contractors are given all relevant information."



PowerNet senior leaders address contractors

## Pro-active approach to safety applauded

With the aim of enhancing safety while working in the community, PowerNet initiated a briefing with two of its key contractors.

General manager of network operations Gary Pritchard said the company invited staff from both Chorus and Downer to PowerNet's head office in January to attend an electrical safety briefing.

"It's about being pro-active. It's in the best interests of the public, the contractors and the networks to ensure we do everything possible to avoid instances of injury or damage to equipment," he said.

"Contractors who work with us on various projects are experienced in their own field but we can't expect them to have the same level of specialist knowledge about our industry. If we can impart some of our experience regarding the electrical side of things by hosting briefings like this it will ultimately improve safety for everyone involved."

The initiative was well-received by the contractors.

"It was modelled on safety briefings Chorus had used elsewhere with other networks in other cities but we modified it to make it relevant to our environment here," Gary said.

"Ideally, in the future, it would be great to see any new staff employed by the contractors we work with automatically go through a safety briefing regarding the electrical industry so they are well prepared for the range of projects we work on - from underground cabling to overhead lines."

## 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.

OtagoNet distribution engineer Chris Walker said 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 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."



Live line work on the Catlins upgrade

## The Power Company project increases capacity and reliability in growth area

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

"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," he said. "Our original plan to upgrade the single transformer has been adjusted to allow for this and future growth in the area."

Tod said having three feeders from the substation, where there was only one previously, meant security of supply for the businesses concerned, as well as 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. 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 said.

The existing Kennington substation was 40 years old. "A new 11kV 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 said. "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 is due for completion soon.



Arthur Everson from Transfield working on the Kennington Substation

## Upgrade of electricity supply for Mossburn Athol area

A massive line project to improve electricity supply to northern Southland has just completed its second stage.

After four months, 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," project manager Murray Popenhagen said. "The increased capacity would provide for future growth in the district," he said.

An engineering review, which was part of the Asset Management Plan, found that voltage quality improvements were required in the northern Southland region with irrigation now being utilised in areas such as Athol, Riversdale and Mossburn to improve land productivity.

Delta Utility Services successfully tendered for the upgrade with line mechanics from both Dunedin and Central Otago completing sections of the upgrade using live line techniques to ensure that customers were not affected by power outages. "It was important to us to keep as many customers connected to the network at all times," Murray said.

Stage one, comprising 5km of line from the Mossburn zone substation through Mossburn and finishing across the Oreti River, was completed last year.

The remainder of this project is in the final planning stage. This includes stage three of 15km line upgrade and the construction of a new zone substation in the Athol area.

The total project cost is in excess of \$5 million and is part of The Power Company's 10 year Asset Management Plan.



Marcel Moore from Delta Utility Services working on the Mossburn to Athol line

## 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, undertaken by Otago Power Services Balclutha staff 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."



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

## Electricity Southland Limited gains Shotover rights

Work has begun on the network for Electricity Southland Limited (ESL) now that it has secured exclusive network rights to the new Shotover Country development at Frankton. The contract will almost double the size and capacity of the existing network.

Included in the new development are 770 residential lots at Ladies Mile near Frankton along with a new 500 pupil primary school. Jason Franklin said "this was an exciting opportunity that would put ESL into a strong position for the future growth in the region. It will take some years for the uptake of the residential lots, but obviously with the new primary school it will be an attraction for families. We see it as fitting well with our investment in Frankton."

Stage one involves extending the existing ESL network from the Glenda Drive industrial area to Shotover Country with a 22kV cable and work on this is expected to be completed by June 2013. Stage two will include relocating a 33kV line at Shotover Country by the end of 2014 to allow further growth in the development.



The Shotover Country Subdivision

## SDHB supports SWHT

The Southland Warm Homes Trust (SWHT) is eagerly anticipating a greater commitment from the Southern District Health Board (SDHB).

Greg Buzzard, a member of the project team, said 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 down here in our community," he said. "With regard to the promotional and people side, the SDHB are being a lot more proactive in getting the message out there about the Warm Homes project. As a result, people with health problems are continuing to benefit from the cheaper installation offered by the initiative."

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 dirty particles," Greg said. "They realise it's an issue and if they don't sort it out we can't have any new industry coming in and developing"

The SWHT would continue to remove dirty air appliances and replace them with heat pumps, supported by funding from ES and the Energy Efficiency and Conservation Authority (EECA). "They recognise the SWHT is a vehicle to do that."

## 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, at that time it was economical to use number 8 galvanised wire as a conductor, as copper was in short supply and expensive at that time," 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."

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

## Identifying the risks

Representatives from PowerNet and alliance contractors have provided valuable input into the Semi-Quantitative Risk Assessment (SQRA) currently being undertaken by PowerNet.

"It's a way of identifying the biggest risks that our workers face," quality services manager Graeme Webby said. "We brought together a group of people from across the spectrum ... guys that are working at the coal face and various contractors, to project managers and estimators. It's been quite an enlightening process and there was real value in having such a cross-section of people involved."

The two-week workshop assessed existing risk policies and identified where any new ones could be implemented. Melbourne-based company GHD Consultants, which has previously completed the process for a number of international firms, would now compile an extensive report with the resulting data used to develop an action plan.

Graeme said over 200 potential improvements were identified by the SQRA group. "They range from some very simple things to some quite major decisions which will need to be made," he said.

He believed it was an extremely important process for the company to embark on. "Things change over time so you can't just put a stick in the sand and say 'we're safe now'. You have to keep evolving."



Participants provide valuable input into the SQRA workshop

## Recent sponsorships

### SIT Awards

The academic achievements of hundreds of students were celebrated at the annual Southern Institute of Technology Awards ceremony, staged at the Civic Theatre in December.

Since 2006, PowerNet has proudly sponsored two award categories – Top Student Electrical Pre-trade Semester Two and Most Improved Student Electrical.

PowerNet distribution manager Ian Robertson attended the event and presented the awards to the 2012 recipients.



Top student - John Bennett



Most improved student - Michael Lintem

## In Tess' honour

A plaque has been erected at Hospice Southland recognising the \$3,000 donation made to the organisation by Tess Van Dijk's family and PowerNet following the passing of our colleague. The donation was used to purchase an IV pump, an important piece of equipment which assists Hospice in continuing the vital work it does for the community.



## Ch-ch-changes

### New faces at PowerNet



Trish Hazlett

#### Trish Hazlett – Human Resources Manager

Growing up in a small rural settlement near Gisborne alongside her nine siblings, Trish initially opted to pursue a career as a school dental nurse. After five years, she decided it wasn't what she wanted to spend her life doing so ventured south with the intention of working her way back north six months later.

Like so many others, Trish quickly fell in love with Southland and its people and decided to make Invercargill home. Her experience working in Human Resources now spans 23 years in a variety of sectors, including government agencies, health, education and retail.

Married to Geoff for 15 months, the couple have a blended family of three boys and two girls, all adults. Away from the office, leisure activities include DIY projects, four-wheel-driving, property management, gardening and exploring New Zealand. Trish also enjoys reading, cooking and genealogy.



Tim Brown

#### Tim Brown – GM Corporate Services

A recent addition to PowerNet's management team, Tim brings a range of skills and experience across both IT and general business.

General manager of corporate services, Tim's new role has overall responsibilities for HR, IT, Property and Facilities management, vehicles, Health & Safety, Risk & Insurance and Marketing.

Starting his career as an automotive engineer, Tim then spent 10 years in the New Zealand Police as a sworn officer in various roles. He has also run his own business, managed several others and more latterly specialised in IT management.

Tim's community involvement has included time on school boards, as a Southland Boys' High School Rugby Club volunteer and with Sunrise Rotary.

The youngest of six, Tim was born and raised in Invercargill and, after a short OE, returned to the city to marry Simone and raise sons, Ben and Sam.

Heading into the empty nesting stage of his life, Tim enjoys hobby engineering (and even has a very small blokes shed!), boating, home renovating, hunting, fishing and recreational walking on some of the great tracks around the South with Simone and ageing Labrador Archie.

#### A fond farewell to:

And a fond farewell to Lyn Daly, who has moved to Fielding. Also heading north are Drew Curtis and Jerry Almano, who are both now working in New Plymouth.

#### It's a boy

Steven Wallace's son Theo James arrived at 9.24am on February 26, weighing in at a healthy 8lb 10oz.

#### Wedding bells

Congratulations to Fiona Rumble who married Kevin Mason at their home in Winton on Saturday, 23 February. The beautiful bride was given away by her two sons, Corey and Hayden.

From all of us at PowerNet we wish you many happy years to come.



United

## Meter clocks 40 years for Alaister

Testament to a career which now spans 40 years, Alaister Marshall remembers the excitement which surrounded the arrival of Southland Electric Power Supply (SEPS) first ever computer.

"It was parked in the engineering office and guys would take their turn and have a dabble on it," he recalled. "Let's face it, the phones we have in our pocket would have more computer capabilities than that dinosaur ever did."

Fresh from high school, Alaister joined the ranks of SEPS - a division of the New Zealand Electricity Department - as a drafting cadet in 1973 at the tender age of 16. "Because I was into tech drawing and those sort of subjects, a teacher recommended working for a government department in the draughting office," he said.

After the government's recruitment process, successful candidates were assigned to an industry without choice. Alaister was pleased to be allocated electricity. "I always had a fascination with the technological side of things and that's what the electricity industry is."

In 1976, Alaister ventured north to Wellington to work at the New Zealand Electricity Department's head office and also spent a stint in Christchurch at its technical training centre as a training officer before settling back in Invercargill.

He's witnessed several restructures for PowerNet and its predecessors over the years and experienced an array of roles, including his current one as customer and metering services manager.

"I really enjoy the customer side of the job. It's very satisfying to get any issues they have resolved for them," he said.

After four decades in the industry, Alaister wouldn't hesitate to recommend it as a career option.

"For one thing, it's going to be there. It's hard to imagine we would ever lose electricity because it's such a vital part of society itself," he said.

Married to Linda, the couple have two sons - Vaughan an apprentice electrician and Brenley an engineer. "It's pleasing to see them do well and achieve in their own careers," he said.

Along with a passion for karting, Alaister is an enthusiastic cyclist of all disciplines - road, track and off-road.



## Staff events

### PowerNet staff up to the challenge

A massive 15,882 active minutes were clocked up by the PowerNet team during the BNZ Workplace Challenge.

Comprising staff members Bevan Cooper, Helana Middlemiss, Katie Lahman and Ann McDowell, the team earned an impressive ninth place overall out of 102 teams in the Office/Car-based category. A Sport Southland initiative, the annual BNZ Workplace Challenge aims to get people active and motivated to exercise while completing personal and group challenges.

Although the PowerNet team didn't win any prizes during the event's five-week duration, each agreed they had benefitted from the opportunity to get active and recognise the importance of exercising regularly.

Thanks to PowerNet management for their support.



Sharon, Helana, Ann, Katie and Bevan

## Motatapu conquered

The iconic Motatapu can now be ticked off for two staff members. Alaister Marshall, customer and metering services manager, and Steve Labes, ICT support engineer, are both keen riders and enjoyed the challenge of the 47km off-road ride. Steve completed the course in 3hr 21min with Alaister just 10mins adrift in 3hr 31mins.

The annual event, which begins at Wanaka and finishes in Arrowtown, attracts thousands of keen participants. The duo clocked up many months training, with Alaister also completing the Moonshine Trail back in February. Plans are already underway for next year's Motatapu with both hoping there is less cramp, faster times and, for Alaister, a sighting of Shania Twain.



Alaister Marshall



Steve Labes

## The sky's the limit for OtagoNet network manager Terry Jones

Together with his partner Karen, Terry flew in the New Zealand Multiclass National Gliding Championships at Omarama in January along with 31 other entrants. Karen and her gliding partner/co-owner Doug Hamilton secured an impressive third place in the Open class while Terry, entered in the Standard class with his smaller glider, secured sixth overall.

The trio then ventured north to Taupo to fly in the Club Class National Championships from 11 to 22 February. "The Club Class is for the older and slightly lower performance gliders and is keenly fought over by young and old from the very experienced racing pilots to some not so experienced," Terry said. "At the same time the event caters for the higher performance gliders like our German LS8 18m single seat glider in an Open Class competition running alongside the Club Class nationals."

A total of 22 gliders raced from Taupo over tasks running up to Thames, east to the Bay of Plenty, west to Taumarunui and south to Mt Ruapehu. "As I was a new boy in the area and there was lots of unlandable forest to cross I took a conservative line, enjoyed the new scenery and came in at 7th place," Terry said. Overall, Terry enjoyed his involvement.

"They were two great events staged in quite different parts of the world with great friends and competition from 51 different gliders and 58 pilots in total," he said. "It's one way to use up four weeks' annual leave and spend a few days and 3,000km on the road towing a 9.5m long trailer. I was even able to fly over some 20 power stations in the area - one of which I built 23 years ago."

## Sean O'Connor – OtagoNet scholarship

An OtagoNet scholarship has equipped Canterbury University student Sean O'Connor with valuable industry knowledge.

Now embarking on his second year of a BE degree, Sean spent the summer break with the company.

"As we have done with others before him, we sent Sean out with the contractors for the summer so he obtained practical experience in the field and would be in a better position to understand the physical side of our distribution industry," network manager Terry Jones said. "Sean spent time with the line gangs working on line rebuilding and maintenance as well as working with the estimators and administrators gaining knowledge of how the contractor's business works. He also looked at the more complex work of substation construction and testing of the protection relays with the technicians."

With family near Gore, Sean's first assignment was with Otago Power Services in Gore before venturing north to Balclutha for a stint with the technicians.

"We expect him to be back next summer and then would have him start working out of the Balclutha office, gaining more engineering and project management knowledge."

## Gavin Austin – Engineering student gaining work experience at PowerNet

Electrical engineering student Gavin Austin will embark on his final year of study with valuable industry knowledge under his belt.

Now completing his fourth year of a Bachelor's degree, Gavin spent the university holidays working at PowerNet, including stints with Transfield Services, Power Services and the Gore-based team at Otago Power Services.

He concluded his ten weeks at PowerNet with the engineering team in Invercargill creating network models. "While I was with the various contractors and companies, I observed a wide range of work, giving me a deep insight into the work occurring across the network," Gavin said.