

Issue 178

October 2015

ACROSSTheLINES

PowerNet commits to continuous improvement in Health and Safety



Tim Brown

PowerNet's commitment to continuous improvement in Health and Safety took another step forward in August.

The Health, Safety, Environment and Quality (HSEQ) team, Bob Taylor from the Electricity Engineers' Association (EEA) and Samantha Turner from law firm Simpson Grierson gave a series of presentations to the PowerNet Board and team leaders on 30-31 August 2015 in Invercargill and Balclutha.

"We have an expectation and commitment to Health and Safety from everyone, so it was important to include as many as possible in these presentations," PowerNet General Manager Business Support Tim Brown says.

"The Board has specifically requested they be included in our company duty and commitment to Health and Safety, so the presentations are an important part of their pledge to support our major focus on keeping staff, contractors and the public safe."

As part of this on-going commitment from the PowerNet Board, an annual review of PowerNet's Health and Safety performance, plans and improvements was also given to the full board.

This PowerNet presentation was delivered by PowerNet CE Jason Franklin, Graeme Webby, PowerNet's HSEQ Manager, and Tim.

"The presentation covered updates and continuous improvement actions on such things such as Safety Leadership, the Competency Framework and training for staff, Vehicle Safety, Elevated Work Platforms, Confined Space Management, Contractor Management system, Incident Cause Analysis Method and Personal Protective Equipment, amongst other topics," Tim says.

The Board also heard from EEA president Bob Taylor, who presented an outline of the significant changes the industry is facing.

"Bob also covered topics such as the new Health and Safety legislation, the new EEA Safety Strategy including its 'Back to Basics' campaign aroundTesting for Safety, Isolation, Proving De-Energised and Earthing of High Voltage Equipment, Pole Safety Working at Height and Low Voltage procedures."

Bob was followed by a further presentation on the new Health and Safety legislation from Samantha Turner. Samantha covered obligations on both workers and officers under the new legislation, six due diligence obligations and that a consultative team approach to improving Health and Safety is key to improvements.

"Samantha commented on the great communication and commitment shown by the PowerNet Board by including Health and Safety representatives at the Health Safety Environment and Risk Committee meetings to get viewpoints and consultation on continuously improving Health and Safety at PowerNet," Tim says.

The Board's commitment to Health and Safety is evident. All members of the HSEQ team and the new Chair of the staff Health and Safety Committee Lisa Terepai attended and were invited to speak and comment on the various aspects of the presentation.

Ranfurly Depot celebrates three years without Loss Time Injury



L to R Justin Peterson, Jim Matheson, Pat McAuley, Vaughan Dowling and David Steel

Otago Power Service Limited (OPSL) Ranfurly team had something to celebrate last month, when they successfully reached three years free of Lost Time Injury (LTI).

OPSL Integration Manager Justin Peterson says it was the first time a team at the company had accomplished such a feat.

The nine OPSL team members celebrated with a meal with Managers and Directors at the Ancient Briton Hotel in Naseby in early September.

"It was a balmy zero degrees when we arrived at 5pm in Naseby, but the locals certainly made us all feel warm and welcome," Justin says.

Each team member receiving a labelled bag with the message "Three years LTI free." The bags were gifted to show the appreciation from the company of the team's achievement.

Supervisor David Steele was very proud of his team's achievement and mentioned during speeches that he expects this trend will continue with the culture built within the team and was looking forward to the next celebration in three years' time.

Otago Financial Systems Migration



Rachael Watt

Otago Power Services Limited (OPSL) has successfully migrated its financial software to Technology One and IMS Payroll, the software used by PowerNet Limited.

"We thought it would be best to stage the migration, especially as the Easter holidays fell at the beginning of April. Tara Unahi and Lauren Ridder worked on the migration of the payroll first. OPSL went live in the IMS Payroll system in February," OPSL Company Accountant Rachael Watt says.

"After that was successfully completed, Jim Phair started his work on the migration of OPSL's financial accounting into Technology One. Jim set up all the OPSL charts and uploaded the historical accounting information, then trained the end users and provided help-desk type services for all our queries. Jim has been instrumental to this process and we have really appreciated his assistance," Rachael says.

"We are already experiencing the benefits of having all our accounting staff (across PowerNet and OPSL) on the same financial software, especially assisting each other as back-up cover when important accounting deadlines loom.

Rachael congratulated Jim, Tara, Lauren, Janis Waters, Melanie Morrell and Andrea McAdam for their efforts during the migration process.

The next stage is to implement some of the efficiency improvement applications within Technology One, such as electronic timesheets.

PowerNet leads the way with new electric car

PowerNet's commitment to the future has been reinforced with the purchase of their first 100% electric vehicle, a small yet extremely efficient electric Nissan Leaf.

"PowerNet can see a significant transition from fossil fuel vehicles on New Zealand roads to a future where electric vehicles (EV) are a major part of the country's vehicle fleet. Being at the forefront of this transition is very important to PowerNet, given the significant network assets we manage across Southland and Otago," PowerNet Chief Executive Jason Franklin says.

The zero-emissions Leaf will be a permanent fixture in the PowerNet fleet and will be used around Invercargill.

"The range is about 100km before it needs a full charge, so it's perfect for trips to visit customers and attend meetings around town."



PowerNet's Nissan Leaf

Jason believes the cost of the EV technology is falling all the time, and with very well priced second hand import vehicles only a couple of years old arriving from Japan, EV's are fast becoming a cost efficient option for Kiwis.

"We see that in the not too distant future EV's will be a lot more common in New Zealand."

PowerNet is now considering upgrading to either full electric or hybrid vehicles as fleet vehicles become due for replacement.

PowerNet has installed a charging station at its Racecourse Road office, with an average normal recharge taking four hours or seven to eight hours with a portable standard three pin connection. This charging system is available for public use, with any electric vehicle able to be plugged in and charged. This will make it convenient for EV customers to charge their vehicle while visiting PowerNet.

"The unit will plug in any brand of electric vehicle, making it user-friendly," Jason says.

Twenty five percent of the Nissan Leaf is made from recycled materials, such as recycled steel, recycled soda bottles and recycled plastic from household appliances.

"The Leaf meets all the PowerNet strategic vision commitments of being Safe, Efficient and Reliable," Jason says. "It also shows our commitment to using new technology to enhance every aspect of our business."

"Furthermore, there is a great opportunity for New Zealand to transition from fossil fuel based vehicles to electric. This transition will mean increased utilisation of the local electricity networks, especially as EVs recharge overnight when daily electricity demand is at its lowest. This is a very clean, green energy form; especially given the very large proportion renewable energy is of the New Zealand electricity supply."

PowerNet Safety messages reach students

Our sponsorship of St John in Schools now brings First Aid training along with PowerNet Safety messages delivered to over 1,500 local students.

PowerNet funding given to St John has enabled their Educator Jo Lilley to increase her capacity to visit more schools within the Southland and Otago regions.

"Thanks to the support from PowerNet, I have visited 1,580 children who attend either school or preschool around PowerNet's catchment. My visits to these schools empower children to make the right decisions in an emergency," Jo says.

The lessons are age appropriate, build on each other and are designed to fit into the current curriculum.

"Our core business of responding in an emergency continues to highlight amazing children who have used the valuable skills they are taught in a real emergency situation," she says.



PowerNet branded sticking plasters

All children who attend one of Jo's visits are given a St John and PowerNet branded box of sticking plasters.

"The children love receiving their plaster boxes and each box has one of six PowerNet Safety messages aimed to remind them about safety around electricity," she says.

PowerNet, St John and the Farming Show

Last month saw the commencement of a six month farm safety advertising campaign on the local radio station Hokonui Gold's Farming Show and Radio Sport channel.

PowerNet General Manager Business Support Tim Brown says the Farming Show would provide a strong reach into the PowerNet and St John rural sectors in which they work.

"This campaign is designed to inform farmers of potential risks and to ensure safety when working around the farm," Tim says.

A mix of 30-second commercials across the two radio shows will run during prime time (breakfast and morning). The commercials will promote the St John series of first aid courses and our farm safety messages.

In addition to the commercials, 60-second advertorial style interviews will be delivered to listeners. These will be shared between St John promoting their courses and PowerNet, promoting farm safety.

Thanks to Otago Power Services Limited (OPSL) Regional Manager, Jim Matheson for agreeing to be the 'voice of PowerNet'. We look forward to hearing you on the radio Jim.

New Power Line for Maniototo Road

With the continued changes in irrigation in the Maniototo region, OtagoNet Joint Venture (OJV) has been busy installing an 11kV power line on the Maniototo Road.

The new line will provide increased security of supply to farming customers in the locality and support new irrigation projects such as pumps, pivots and storage dams.

Around 5.5km of line was installed in August this year along the stretch of Maniototo Road extending north and south of Duffy Lane.

"The particular area where the line has gone in was one where we didn't have a lot of supply already. With the ongoing increase in irrigation, it's important for our customers that they're provided with an effective and efficient service that meets their business needs," says Mark Hastie, OPSL Project Manager.

Over the past few years, OJV's network of power lines in the Maniototo has been continually expanding, matching a growth in irrigation requirements.

Particular considerations with the installation of power lines in the area include the need to take into account the region's extreme weather conditions. Factors such as the pole loading capacity for snow are important in ensuring that the impact of harsh weather events is minimised.

Improved Supply to Wharetoa/Clydevale

A new 11kV 3 phase line is currently being installed along Clutha River Road to service the increasing power needs of consumers in the Wharetoa/ Clydevale area of South Otago.

Work on the project began in August and it is expected to be completed by October.

"The project involves replacing an existing single wire earth return line with the new 11kV 3 phase line," says OPSL Project Manager, Mark Hastie.

"The new line will improve supply and provides an alternate feed to the area, which has experienced considerable load growth in recent years due to dairy conversions," he says.

The line links upgrades already completed on Clutha River Road, with the line crossing the Clutha River at Tuapeka Mouth.

The route follows the twists and turns of the Clutha River Road. Construction crews have needed to negotiate very rocky ground conditions and trees along the Clutha River bank.

"It was great to have good cooperation from adjacent landowners, which enabled us to design a route around some difficult corners and rocky outcrops," Mark says.

Cabling Work Reveals the Past

Digging trenches for underground cabling as part of Balclutha's streetscape upgrade has, not surprisingly, revealed some of the town's former infrastructure.

Old gas, water and petrol filler pipes and bottles from the late 1800s have been some of the buried treasure Otago Power Services Limited (OPSL) staff discovered when carrying out the work.

A Historic Places Trust representative was on-site when digging work was underway to make sure that nothing of historical value or significance was destroyed or damaged.

The job for OPSL primarily involves laying one kilometre of low voltage underground cable the length of Clyde Street, from the town hall to the south end of the central business area. Power poles and overhead lines are being removed and new lamp poles and lanterns installed. OPSL staff are also installing up-lighting under trees to create ambience and a rest area with a walled garden will also be illuminated.

The work carried out by OPSL is part of a \$2.3 million Clutha District Council upgrade project to beautify the town's main street.

OPSL Project Estimator Russel Carr says a significant part of the project also involves reconnecting the underground cabling and service lines to businesses along the main street route. This involves running new cables up to existing businesses to link them in with the main underground cable.



Rob Dickie (OPSL Arborist Supervisor) laying the new cables

Russel says the public have been hugely supportive as the work has been carried out.

"We'd like to thank them for their patience. As always, ensuring the safety of the public has been paramount and this has sometimes meant we've needed to temporarily narrow footpath access or block off parts of the pavement while work has been carried out. The public have been very cooperative and this has been greatly appreciated," Russel says.

The project, which began in May, is due for completion in November.

Oreti Valley Project



Staff from Otago Power Services installing the 66kV conductor on the new 66kV line

OPSL has been assisting PowerNet 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 using a process called hydrovacing. This is when pressurised water and a vacuum system are used to create a hole in which to insert the pole. The use of hydrovacing significantly sped up the

construction side of the job," says Jim Matheson, Regional Manager of OPSL, 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.

Lean Management Implementation

With the six month Lean Management training now completed, it's time for the Lean team to start implementation around the PowerNet and Otago Power Services Limited (OPSL) offices and depots.

The training programme, run by Venture Southland, saw 12 PowerNet and OPSL staff come together to identify areas of waste and where efficiency could be improved within the companies.

Lean Management spokesperson, Justin Peterson says Lean is about continuous improvement and the removal of waste.

"The benefits to PowerNet and OPSL are instant with staff engagement, cleaner work areas and elimination of frustration through a structured process," Justin says.

Justin believes Lean Management follows on from our shared vision programme.

"In order to achieve the company's purpose, we need to get smarter in how we operate and Lean is a great platform that will allow us to deliver our purpose in the future. The Lean Management Programme is about ownership at all levels; it will be up to all PowerNet and OPSL staff to play their part in order for the Lean process to be effective," he says.

Rachael Watt (OPSL Company Accountant) will be leading a full implementation plan to roll the programme out in a staged process to the entire organisation.

"We expect to have around 70 staff trained in Lean processes by the end of 2016," Justin says.

Initial Implementation will be a three to five year process to get Lean operating throughout the organisation. In conjunction with our Shared Vision, Lean will become a part of how we do business.

Goodbye Geese

The Distribution Project Team have been busy trialling some new devices to limit goose strikes on the lines in the Monowai area.

PowerNet's Senior Distribution Manager Barrie Duffin says geese have until recently been playing havoc, striking powerlines on the Monowai feeder causing the Monowai circuit breaker (CB) to auto reclose.

"After line patrols by Te Anau depot's line mechanics Mike and Hamish and communication with local farmers in the area, it was determined that geese were striking the line in a very defined section of the line. We found eight dead geese under two spans of the line and a very high probability that these were the cause of the CB auto recloses," Barrie says.

In the paddock adjacent to the line strikes was a gaggle of geese (well in excess of 200) and the local farmers indicated that there were hundreds more in the area. Many of the auto recloses were happening at dusk and dawn when the geese have trouble seeing the line in the low light.

"You can alter the line construction so the geese hitting them will not clash the wires together, but they still strike the line and either maim or kill themselves in the process. It was decided to put up markers to increase visibility of the line in the low light of dusk and dawn. The markers can be installed either during an outage, live line from a bucket or from the ground using a telescopic hot-stick and special attachment," he says.

After just over a year of the markers being installed in the Monowai area, there has been a marked decrease in auto recloses that could be attributable to geese strikes and recent inspections have found no dead geese in the vicinity. It is still a bit early to tell at this stage how successful the trial has been, as the geese were also culled by the locals around the same time as the markers were installed, though there is still a reasonable population in the area. Other marker types are available and they might be trialled in the future. They are not a panacea for bird strikes, just another option available to reduce outages and potential damage and can be installed quickly and relatively cheaply.

St John "HEARTsafe" training
Hands Only CPR and Safe Uses of an AED
SUNDAY 18th October 10am-2pm at St John, Lee Street, Bluff
All Welcome

New Colver Road Substation commissioned

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

The project on the The Power Company Limited (TPCL) network 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 Colver 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 Colver Road Substation with a firm capacity of 12MVA, and the design of the substation allows for future growth," he says.



Colver Road Substation

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

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

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 69MVA (46MVA firm capacity) with the new state of the art network equipment installed and commissioned.

The project was on the TPCL network facilitated by a number of contractors and manufacturers; PT CG Power Systems Indonesia supplied the transformer and the new 33 kV 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.



PowerNet participates at the Connexis Competition

Hamilton's Mystery Creek was this year's venue for the Annual Connection Line Mechanic competition held in October.

PowerNet Field Safety and Training Advisor Phil Johnson said this year's team consisted of Mike Johnston (Te Anau), Shane Lawson (Invercargill), Lance Harris (Winton) and Joseph Richards (Lumsden). The team was managed by Sharon Johnston and supported by Jan Van Staden (Onslow Street depot).

The three gruelling days of competition included pole installation, electrical theory, pole top rescue, crane operations, first aid, earth bank and hardware installations, low voltage cable and pillar box installations.

"This year we won the "Dougie Award" (the Doug Hertz Memorial Trophy). This award recognises the team that represented their Company best in presentation, appearance, attitude and manner," Phil says.

Congratulations team on a great effort.

Pictured to the left are the team training for the event.

Waitati Customers benefit from Alternative Supply Options



Staff from Otago Power Services laying cable

Customers in the Waitati area are now benefiting from increased reliability in their power supply with the installation of a 33kV underground cable along Manse Road.

Work was completed in July 2015 on the Waitati Tee project to install a new kilometre-long underground cable – the longest 33kV underground cable in OtagoNet Joint Venture's (OJV's) network.

The cable provides an optional connection that means power can run directly from Halfway Bush to Waitati rather than via the Palmerston Substation.

Until now there has been no alternative supply if a fault occurred on the existing 33kV line that connects Palmerston to Waitati. Now, if needed, power can be re-routed from Halfway Bush to Waitati through the new cable.

The cable follows Manse Road, forming a bridge connection between the 33kV overhead line from Halfway Bush to Palmerston and the 33kV overhead line from Palmerston to Waitati.

"Because the majority of 33kV feeders installed in OJV's area are overhead lines, installing 33kV cables proved an interesting project to work on," says Project Manager, Raji Senaratne.

"Installing cable along a route crossing waterways and in tricky terrain meant we had different challenges from those we might encounter when working above ground. One in particular was the winter weather – with lots of rain this year the muddy ground made some work difficult," he says.

The 71mm cable has been laid approximately one metre into the ground for safety reasons.

The installation of the cable also means that the reliability and security of power supply to customers in the Waikouaiti area is enhanced.

A new substation – a replacement for the existing Waitati Substation - is scheduled to be constructed in Manse Road in 2020/2021. The substation will increase the reliability of supply and cater for the continuing load growth in the region.

Milton-Balclutha Line rebuild almost completed

The fifth stage of a long-term project to rebuild the Milton to Balclutha 33kV line is now underway.

The massive project has focused on both replacing parts of the existing line and upgrading its capacity to enhance reliability of supply and service to customers. The line provides a vital power supply in localities that include Milton, Milburn, Waihola and the Lawrence area, as well as taking power from the Mt Stuart Wind Farm.

The fifth stage of the project has involved connecting the Transpower Balclutha Substation, the point of supply to the Elderlee Substation in Milton. While the line will run at 33kV, the overhead line has been built and insulated at 66kV for future proofing and insurance.

PowerNet Easements and Wayleaves Co-ordinator Mike Harris says the undergrounding work has brought challenges.

"In particular, we needed to thrust four big ducts under State Highway One to clear the telecommunications cables along with water mains. This meant digging nearly four metres under the road," he says.

"Much of the wider project work has been overhead work which has also had its challenges," Mike says.

"The mix of materials used - normal concrete poles, steel poles and newer fibreglass cross arms - all provided an interesting challenge for the installation of overhead lines. This work was ably completed by PowerNet's Senior Lines and Structural Engineer, Carl Rathbone, with great support from Murray Dickie and his Otago Power Services Limited (OPSL) team."

The fifth stage has largely been carried out by OPSL, with Queenstown-based Peak Power Services Limited supplying the technical expertise to connect into substation lines. The civil work has been completed by local contractors SouthRoads Ltd and Andrew Haulage, both from Balclutha.

During this fifth stage, the team took the opportunity to remove some old equipment from the 11kV circuits that feed Hillend and Stirling, and the Essex and Cromer Street feeds into Balclutha. This included removing power poles around the bend on State Highway One between Balclutha and Johnson Road.

Dont forget the NZ Blood Service will be back in Invercargill between the 19th - 21st October.

To book an appointment to donate phone 0800 448 325

Local Renewable Wind Generation Reaps benefits



Attendees at the Flat Hill Wind Farm opening

The PowerNet shareholders, Electricity Invercargill Limited (EIL) continue to expand their horizons with strategic opportunities that complement its core business, such as investment in Bluff's Flat Hill Wind Farm.

The eight 850kWh turbine wind farm was officially opened in August this year and is operated by Southern Generation Limited Partnership (SGLP)— a joint venture between Pioneer Generation Limited, (EIL) and The Power Company Ltd (TPCL).

"EIL and TPCL's involvement in the SGLP reflects the importance of strong regional and strategic alignments. The partnership provides EIL and TPCL with fantastic opportunities to strengthen their businesses through the collective power of joint expertise and experience, enabling benefits to be passed on to our regional economy and local communities," says PowerNet CE, Jason Franklin.

"A key benefit of the Flat Hill Wind Farm project is the efficiency of using a local, renewable resource which reduces transmission costs. These kinds of projects support our communities through the supply of green electricity."

Located on 460 hectares of private land around 3km from Bluff township, Flat Hill Wind Farm is the world's most southerly wind farm, generating electricity to supply approximately 2,600 homes. The electricity generated is fed into the local network via the Bluff Substation.

The wind farm was constructed by Pioneer Generation Ltd. PowerNet's technical team was contracted to lay 11kVcables, including installation into the Bluff Substation as well as testing and commissioning work. The team also installed the switchgear ring main units and the turbine transformers, located around 6 metres above the ground. Team members completed additional safety training for height work before completing the job.

The Flat Hill Wind Farm project is SGLP's second wind farm investment – it also owns the nine-turbine Mt Stuart Wind Farm southwest of Milton. The partnership was formed in April this year, with EIL and TPCL jointly holding a 50% stake, and Central Otago-based Pioneer Generation Ltd holding the balance. PowerNet manages this investment for its shareholders, being EIL and TPCL.

Reliable and Safe Supply Paramount in Cabling Work

A buzz of activity continues around the city's Spey Street area as a second stage of cabling work gets underway to support the commissioning of the new Spey Street Substation next year.

The \$8 million Spey Street Substation project represents one of the most significant upgrades to Invercargill's electricity network in recent decades and the new 11kV cabling work is an important part of the project.

The cabling will allow for a smooth transition of power loadings to the new Spey Street Substation from the existing Doon Street Substation, which has been identified as a high-risk location if an earthquake should occur.

"The cabling work will ensure that customers continue to receive a safe and reliable power supply both in the future and as we move the power loadings over," says Project Manager, Vikas Sharma.

Phase one of the work from September until November involves installing cabling in Tay, Jed, Esk, Don and Spey Streets. Initially five 11kV circuits will be transferred from the Doon St Substation to the Spey Street Substation. A further final 11kV circuit will be completed by early November.

In the project's second phase, a further seven 11kV cables are being laid in the vicinity of Spey, Jed, Yarrow, Leet, Deveron, Gala and Doon streets and the Invercargill Museum area.

"We thank the public for their patience as we complete this work," Vikas says.

It's planned that the transfer of all 11kV loads will be completed by mid-February 2016, and the new Spey Street Substation second stage commissioned at the end of March 2016.

The decommissioning of the Doon Street Substation is part of a wider 33kV cable extension project running parallel to the 11kV cabling project. The cabling will also connect up with new 33kV cables that are being installed in the city.

Smart Track comes to PowerNet



Example of Smart Track map showing PowerNet's vehicles are working

PowerNet's Infrastructure and Administration Manager Claire Wallis says fleet management is about to be made easier with the introduction of Smart Track to all PowerNet's vehicles.

"Smart Track is the leading provider of GPS based tracking services in Australia. The utility companies using this tracking service are finding it improves the speed of responses to network outages and extreme weather events. It also improves the ability to provide a safe working environment," Claire says.

The programme is an integrated web based GPS fleet management system which provides GPS tracking and web based visualisation, mapping, administration and reporting and is used by several large utility companies around New Zealand.

"Our fleet currently consists of 91 vehicles. This will grow to 180 vehicles when OPSL is integrated next year. This system will improve safety through monitoring and emergency duress alerts, along with driver behaviour reporting. Staff can be reassured that we will know where to find them and respond when they need assistance," she says.

Smart Track is also integrated with the New Zealand Transport Agency database and will automatically update service requirements such as registration, WoF, CoF and RUC's. Servicing and required compliance testing of each vehicle will also be monitored and managed efficiently.

"A pool booking system will replace the current Outlook booking system with reporting accurately showing the utilisation of our pool vehicles."

"An extra benefit to PowerNet is the ability to have our Geographic Information System data overlaid on the map. The location of network assets will then be captured providing accurate location details of assets," she says.

What's happening around the Depots

Ranfurly and Palmerston Depots continue on the projects mentioned in this newsletter

Balclutha Depot is still working on the Main Street undergrounding, replacement of red tag poles and fixing low wires. Balclutha is also working on pole replacement on the Riversdale to Lumsden 33kV line.

Gore Depot still has a crew working in the Southern area and the rest of the work is feeder maintenance along with replacement of the red tag poles etc. Winton Depot are undertaking general maintenance around Tuatapere. They are starting a line rebuild out of Centre Bush Substation to the Centre Bush Township. The team have commenced work erecting fences on the tower line from Winton to Heddon Bush.

Te Anau Depot are working on the Monowai to Blackmount 11kV pole change which involves replacing 30 poles. They are also working on a line rebuilt in the Te Anau Basin to support the new connections in the region.

Lumsden Depot continue on the storm repairs along with the building of an 11kV line (28 poles) to a dairy shed at Centre Hill.

Onslow Street Depot

The field teams are working on storm repairs and general maintenance and contract work.

The technical team have begun ring main unit (RMU) servicing. They installed a new transformer at the new HWR Museum, replaced the transformer at Peacehaven and repaired a feeder cable that faulted at the Makarewa Substation. The team also replaced a faulty 11kV cable which feeds the Countdown Wakikiwi transformer.

PowerNet's Technical Team train in height rescue



The technical team at their height training course

PowerNet's technical team spent two days height rescue training at Adventure Southland in May. The course, run by Chris Cox from NZ Safety, ensures the team remains safe when working at height.

PowerNet's Technical Distribution Supervisor Ray King says height refresher training is undertaken every two years. It teaches the attendees about risks involved when working at height and how to use a fall arrest device

"It was important to provide height rescue training to all staff prior to working at the Flathill Wind Farm. PowerNet's technical team were contracted to provide the transformer terminations on each of the eight turbines. These transformers were approximately 5-6 metres above the ground," Ray says.

Robert Allan visits Hillside Primary

25 students from Hillside Primary School had a visit from Winton depot Line Mechanic Robert Allan in September.

"During the school term the year 3-8 students had been studying electricity generation and transmission. I was invited along to the school to talk to the children about my role at PowerNet," Robert says.

The 90 minute presentation included showing the children the video he took of the helicopter stringing the cable at stage one of the Oreti Valley Project.

"The children asked plenty of questions about our network equipment, why power cuts happen and how an arc flash suit protects technicians when they work on ring main units. It was a great opportunity to remind the children how to keep themselves safe around electricity," he says.



Robert Allan speaking to students from Hillside Primary

The Darts challenge continues



Ray Cuthbert takes his turn with the darts

Congratulations to Onslow Street depot for their win against Winton depot in the six monthly dart challenge held at Invercargill's Club Southland early in September.

PowerNet Field Safety and Training Advisor Phil Johnson, who organised the event, says it was a great night out with some excellent darts played.

"Things were looking ominous for Onslow Street with Winton taking the first three games on the trot, however persistence and consistency prevailed," Phil says.

The final score was Onslow Street depot 10 games won (24 legs) Winton 6 games (19 legs).

"There were some great individual performances. Congratulations to Ray "Curly" Cuthbert for a fantastic 155 finish (triple 20, triple 19, double 19) and to Mort MacIntosh who remained unbeaten on the night," he says.

Teams consisted of Onslow Street depot – Phil Johnson, Mort MacIntosh, Barrie Duffin, Tauira Patterson and Harlon (Tauira's friend who kindly filled in to help make up the numbers). The Winton depot team included Murray Hamilton, Ray Cuthbert, John Maginn, Craig O'Callaghan, Shannon Lynch, Robert Allan and Sean Christensen.

"We look forward to the next challenge, whether it be Winton again or further afield - BRING IT ON," Phil says.

Balclutha office wins Daffodil Day display competition



The team at Balclutha office came together at short notice to participate in the Cancer Society's Daffodil Day (non-window category) display competition held in August.

With just two days notice the PowerNet and Otago Power Services Limited Balclutha office put together the winning entry. Competition was tough with a field of 70 entries from around the Clutha district.

Congratulations go to the awesome team of Rachael Watt, Janis Waters, Debbie Taylor, AJ Cross, Ian Elder, Terry Jones, Lloyd Williamson, Helen Widdicombe, Tara Unahi, Mark Hastie, Melanie Morrell, Wondimu Gebretsadek, Chris Walker, Andrew Body and Kristie Bell.

Left: Balclutha Office winning entry

Nathan's part Scooter Run

Well done to Nathan Donnelly on his participation in this year's Southern Scooter challenge held in September. The biannual event is a fundraiser for New Zealand Prostate Cancer Foundation.

The 200km challenge (on scooters) ran from Bluff to Queenstown, had 100 keen riders and raised close to \$70.000.

Unfortunately for Nathan, this was not his year to finish, with his scooter breaking down (melted piston) just before the convoy of scooters reached Winton.

"My scooter wasn't the first to break down; one met its demise just before Awarua. It was a great event and guest rider, Buck Shelford was very good company. It was great to meet him and to listen to his great speech on prostate cancer at the prize giving in Queenstown," says Nathan.

Nathan's scooter has since been repaired and he can't wait for the next event in two years' time.



Nathan Donnelly riding towards Winton (Photo supplied by Cory Varcoe Photograph)

Sporting Accomplishments

Congratulations to Jim Phair on gaining 3rd place in the 78km Gore to Waikiwi Cycling classic held in September.

Congratulations to Waric Cross on being awarded the Waihopai Football Club Division 2 Most Valuable Player.

Congratulations to contractor Grant Smith on becoming the NZ Community Trust Volunteer of the Year.

Happy Retirement

To Dave Griffiths and John Cunningham who retired in August.

The pair commenced their employment at PowerNet back in 2001

We wish you both well in your retirement.

Relay for Life is happening on the 19th March 2016.

To register your interest and be part of the PowerNet team contact:

Mary Anne Smith on 03 2111 887

New Staff

Welcome to our new staff at Onslow Street depot, Frankton and Racecourse Road.



Onslow Street Depot Barry Chittock Substation Maintainer



Onslow Street Depot Brad Templeton Substation Maintainer



Onslow Street Depot Jeff Carmody Technician



Onslow Street Depot Kevin O'Connor Line Mechanic



Frankton Chris Way PowerNet Project Manager



Racecourse Road Alana McLeod-Young Administration Assistant



Racecourse Road

Dmitrii Shliaga

Systems and Support

Engineer



Racecourse Road Quinn Aicken GIS Administrator

Two New Directors for PowerNet

Welcome to Don Nicolson and Sarah Brown who were appointed to the PowerNet Board in October.



Don operates a grazing farm at Waimatua and a cropping farm at Irwell in Canterbury. Previously Don was the first elected trustee on the Southland Electric Power Supply Consumer Trust (SEPSCT), where he served three four-year terms. His previous governance roles also included President of Federated Farmers.

Don Nicolson



Sarah Brown

Sarah has been a Director of Electricity Invercargill since 2013.

Sarah is an Associate with Goodman Tavendale Reid, specialising in general commercial and rural based legal work.

She has been the Council Chair of the Southern Institute of Technology since 2011 and is also a trustee of the 1000 Days Trust.

Farewell

Luke Grant and Matthew James.

Congratulations

Jason Franklin on his appointment to Electricity Engineers' Association (EEA).

Grant Finch and Richard Healey on gaining their NZQA L4 Arborist Certificate.

New Appointments

Congratulations go to the following staff on their new appointments:

Brad Templeton to Substation Maintainer, Gary Davis and John Murphy to Leading Hands.

Baby Congratulations

To Dyson and Andie Gentle on the birth of their daughter Adelaide Lee (Dela).

Well done Kendrick

Congratulations go to Kendrick Dela Cruz (Mike Dela Cruz's son) on his achievement at becoming the 2015 Year 5 top speller in New Zealand.

Welcome contractor Vivien Lightfoot



Born and bred Southlander Vivien Lightfoot will now be helping out with PowerNet's external communications on a casual basis.

Vivien's journalism career has seen her as a writer and editor for Statistics New Zealand and for a private public relations consultancy. For the past seven years, she worked for the Southern Police as their district communications manager.

Vivien lives in Cromwell and early this year established her business Content Bee. She will be writing some newsletter content and will be in contact with individual staff when required.