

August 2017

ACROSS *the* LINES

New mobile substation commissioned



PowerNet's new mobile substation.

Southland's first mobile substation was commissioned in March after nearly three years in planning and construction. The 15.66m long and 2.5m wide trailer mounted substation comprises a 5MVA transformer, 66kV and 22kV circuit breakers, control room and other auxiliaries.

Design by Mitton ElectroNet in Christchurch and constructed by ElectroNet Services in Greymouth, the substation can operate on four voltage configurations including 66/22kV, 66/11kV, 33/22kV and 33/11kV, making it suitable for the five networks which PowerNet manages.

PowerNet project manager, Vikas Sharma said the \$2.5m project has resulted in a valuable substation with great flexibility.

"It allows us to more promptly reinstate power to our communities in the event of major failure of the main substation. It can also be used at transformer sites, temporary building sites, in paddocks, on the side of the road, and will significantly help support unplanned outages and planned shutdowns," he said.

The mobile substation is owned by The Power Company Limited and will be hired by EIL and OJV as required. When needed, it will be mounted on the back of a semi-trailer and towed by a hired tractor unit to the required location where it will go through a setup and commissioning sequence.

Throughout the course of the project Vikas and PowerNet electrical engineers Mark Zwies and Steven Wallace closely reviewed and tracked the design and construction process to ensure all requirements were met with no compromises to functionality.

"Along with the challenge of keeping to the NZTA size restrictions and guidelines, it was important for us to ensure the substation would survive in the event of earthquake," Vikas said.

Seismic requirements were met by adding four hydraulic operated legs to the trailer which extend up to 1.5m outwards to help minimise the effect of an earthquake.

The mobile substation is available for use at most sites across the network now and a project has been set up to ensure all single transformer sites have the correct area and infrastructure to allow deployment of the mobile substation going forward.

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Integration brings opportunities for synergies



Michelle Henderson.

PowerNet has increased its shareholding in Peak Power Services Ltd (PPSL) and this means better opportunities for the two companies to work more closely together. PPSL manages and maintains the growing Electricity Southland network in the Queenstown Lakes area and acts as an agent for PowerNet's customer enquiries, network connections and metering.

PowerNet's shareholding in PPSL is now more than 90 percent. As a result, wherever possible, the companies will be working more collaboratively as one team, says PowerNet's chief operating officer, Michelle Henderson.

"Opportunities for collaboration will primarily be in areas where there's duplication of business and in areas of best practice," says Michelle.

"The new ownership change means the two companies' interests are closely aligned in almost all situations and this creates synergies that will benefit both customers and shareholders."

An action planning workshop held in June gave key staff in PPSL and PowerNet the opportunity to discuss long-term plans for integration and 'quick wins' following the ownership change.

"The quick wins will be actioned first and longer-term gains will be prioritised from there," says Michelle.

PPSL is led by Chris Way in the role of general manager. Chris is leading the field teams and project managers, while PowerNet's project manager at Frankton, Jim Giller, is liaising with developers in the Queenstown Lakes area to understand their needs. Customer contact activities are being transitioned to Jim as PPSL seeks to maintain existing relationships and grow new ones.

"Both Chris and Jim's input and leadership are important and we thank them for their commitment and input into the integration plan," Michelle says.

The latest from Central Otago

There's still plenty of work happening on the ESL network.

Cabling and installation work is underway for the first two stages of **Hanley's Farm**, a 561-hectare development on the outskirts of Queenstown. Here the landscape changes daily so there's a need for daily hazard assessments. In total, 247 sections have already been sold in the first four stages of the development, with potential for a further 1503 sections to be developed in the future.

Shotover Country subdivision sees the earthworks commence on stage 8D (75 sections).

Ducting requirements for the new **Kawarua Bridge** are currently being worked on with NZ Transport Agency.

Work continues at the busy **Remarkables Park** site with the Mountain Ash transformer completed, new high and low voltage and street light infrastructure currently being extended.

A contract has now been signed to reticulated the **Queenstown Country Club** retirement village. The village will comprise of approximately 240 villas, 90 apartments, 13 town houses, 24 residential sections, a cafe, club house and commercial development. The 22kV cable to the temporary worker accommodation and site sheds is now installed.

Over in Wanaka, cabling and installation work continues at the 220ha **Northlake Development**. Work on stages 1-3 is nearing completion, while work on stages 4-9 is about to start.



Ronnan Do Nascimeto (Peak Power Services), installing the Queenstown Country Club ring main unit, with Shotover Country subdivision in the background.

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Traffic management safety



Recent traffic management example from work on the ESL network.

A focus on traffic management has been keeping PowerNet field teams busy over the past seven months. All leaders and crews have been upskilling in the area of traffic management with an aim to help keep themselves and the public safe when working near or on roads.

Chief operating officer, Michelle Henderson noted an improvement in traffic management methods and procedures following the training.

"Well done to everyone who has participated, the standard of awareness and safety has lifted significantly. Our leaders are now continuing to coach their teams to ensure the right behaviours are displayed 100 percent of the time," she said.

PowerNet named as a finalist in the Deloitte Energy Awards



Pushing Boundaries:

Building an electrical substation in an inner-city residential zone

2017 Deloitte Energy Awards - Energy Project of the Year

PowerNet has been named a finalist in the Deloitte Energy Excellence Awards for the second year running.

The company's successful entry for the 2017 Energy Project of the Year award is titled 'Pushing the Boundaries' and outlines the challenges overcome whilst working on a unique electrical substation relocation and upgrade project in Invercargill's inner-city residential zone.

The Spey Street based project put up many technical challenges in relation to the design and consent requirements for an urban area. PowerNet project managers, Mark Zwies and Vikas Sharma worked during planning stages to help combat noise and heat emissions while also addressing the need for an architectural design that blended in with the surrounds. Effective transformer design and the ability to install equipment at a compact, enclosed site were also all successfully addressed throughout the three year project.

PowerNet chief executive, Jason Franklin was thrilled that PowerNet was nominated as a finalist for the work on the "state-of-the-art" inner-city substation.

"It's a great testament to our project managers and their teams. Through innovation, meticulous planning and a strong community relations programme, they have achieved an excellent outcome that deserves this recognition," Jason said.

PowerNet is nominated for the award alongside industry giants Shell New Zealand and Transpower. A panel of judges will be looking to set apart the best planned and executed project within the energy sector that also delivers benefits to stakeholders and the wider community. The winner will be announced at a premier black-tie gala event in Auckland on Wednesday 9th August.

The awards, which span the electricity, gas, petroleum and transport energy industries, have been held since 2010 and in 2016 PowerNet took out the Community Initiative of the Year category for its work in collaboration with St John.

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Substation project powers on

The three-year project to gradually replace Invercargill's 13 underground substations for safety reasons continues.

Work is currently underway to replace the Government building substation (Sub 526) located beside the Menzies Building in lower Esk Street.

"As part of this replacement work we are also removing Substation 511 in Dee Street. The new substation will be named Esk East of Dee and its site will be beside the old Government substation site," says PowerNet senior technical manager, Phil Hartley.

It is expected the work will be completed by mid-August.

Replacing the substation has had its challenges.

"Spark's main Invercargill exchange is located near the site so we've had to do a lot of trenching around telecommunications infrastructure. This has been quite slow going and it's been challenging to identify suitable locations to place cables and equipment," Phil says.

Substation 517, located outside the Westpac Bank in Kelvin Street, is the next to be replaced. The work will be done in conjunction with a new substation located at the site development for a new ICC-owned office block in Don Street.



Murray Cunningham, PowerNet.

Four to five substations are due for replacement this financial year, depending on available resource, leaving the remaining work to be completed in the 2018-19 financial year.



Icy move for new dryer cone

Icy winter conditions made a slow journey for a new dryer cone as it was transported to the Maitava Valley Milk factory near McNab in Gore in mid July.

The newly constructed cone dryer was eight metres wide at the base, four metres wide at the top and 6.8 metres in height. It was constructed by Crown Sheetmetal/NDA Sheetmetal in Invercargill.

PowerNet field teams from Onslow Street and Gore Depots assisted transporting company Fulton Hogan in the 70km trip, de-energising 11kV lines along the route.

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Learning to lead

More than 70 PowerNet team members are now speaking the same "leadership language" after having completed the company's leadership programme.

Leading with Courage was developed by PowerNet in conjunction with the Centre for Vision and Leadership to enable leaders to lead in line with the company's organisational shared vision.

PowerNet's general manager human resources, Trish Hazlett believes it is important to have all leaders using the same tools and language in order to achieve the vision. So, over the last three years all team leaders, as well as some emerging leaders, have been encouraged to participate in the programme.

"The benefits for the individual are gaining a toolkit they can use in both work and personal life, personal development and an enhanced leadership style. The benefits for the organisation are a common leadership language, use of same tools, a growth in leadership capability and seeing the personal growth and increased confidence in individual leaders," Trish said.

In groups of 12, participants work through the course over a four-month period, attending a two-day workshop each month. Each leader in training also receives two individual coaching sessions with the facilitator.

The workshops cover a range of topics, including communication styles, motivation, leading from the centre, control and influence, the 70/30 approach to problem solving, emotional intelligence, coaching and the four dimensions of the leadership diamond which are service, courage, vision and reality.

Participants also complete two surveys during the programme, one on their leadership style and the other on their emotional intelligence.

"The surveys provide our leaders with an opportunity to assess their own level at this point in time of their leadership journey and valuable insight into how they are perceived by others. The surveys also provide insight and opportunities for future growth for each individual," Trish said.

At the end of the programme participants do a presentation to the senior leadership team on what had the biggest impact and how they intend to implement their new skills in the future.

Chief operating officer, Michelle Henderson was one of the 12 staff that enjoyed the opportunity to take part in the programme this year.

"The course gave us the opportunity to learn new tools and use them in the classroom before taking them back to our day jobs. Everyone on the programme was enthusiastic and really keen to develop as leaders so it was great to be spending time together and learning from each other too," Michelle said.

So far 72 staff have completed the programme with another 12 currently in training. New and emerging leaders will continue to be considered for the programme going forward, as will further leadership opportunities for those who have completed the course.



Trish Hazlett.

Congratulations to -

PowerNet's line mechanics, Jack Senior, Tristan Swain, Nic Boyle, Sean Christensen, Sam Stewart, Joel Lee, Troy Kelly, Reuben Crossan, and Slade Evans on gaining their registration for Level 4, New Zealand Certificate in Electricity Supply.

PowerNet's arborist services manager, Mark Way on gaining a Bachelor of Applied Management from Otago Polytechnic.

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PowerNet presents award at St John Awards



Donna Coleman-Smith St John Waitaki Area Committee and Tim Brown PowerNet.

As a sponsorship partner of St John, PowerNet was represented at the charitable organisation's South Island Area Committee Awards in April.

PowerNet board chair Ross Smith, communications coordinator Kathryn McCoy and chief information officer Tim Brown, along with their partners, attended the event dinner which was held at Millennium Hotel Queenstown.

Tim presented the award for Sustainable Fundraising which was won by the Waitaki Area Committee.

"It was great to be part of the event. We are proud supporters of St John as it ticks all the boxes we look for in a community sponsorship partner; things such as health and well-being, safety, sport, community support, education, regional involvement, teamwork and of course, a trusted brand," Tim said.

This is the third year PowerNet has been in partnership with St John, and this year the level of support has been extended to the OtagoNet area, including Maniototo, parts of Central Otago, Balclutha and Milton down to the Catlins.

"Plans are well advanced for continuing our support for the 2017/18 year and we look forward to working with the St John team over the coming months to help make our region a safe, healthy and well supported place to live, work and play," Tim said.

Let the numbers do the talking

Since beginning our partnership with St John...

575 individuals have been fully trained across **38** courses in **7** Southland locations with **1** dedicated training hub fully supported to facilitate some of this training.

7 automated external defibrillators donated across the networks that PowerNet manages with another **2** in the pipeline for this year.

18,086 students have been visited across **137** different schools and preschools so far as part of the ASB St John in schools first aid programme.

1 industry recognition award for PowerNet when named winner of the 2016 Community Initiative of the Year at the Deloitte Energy Excellence Awards.

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Workshops keeping staff cyber safe

As part of PowerNet's continuous improvement and education journey, cyber safety guru John Parsons was back recently to present his latest seminars to Invercargill staff.

John is an internet safety and risk assessment consultant and provides specialist advice and direction on the safe use of digital communication technology.

PowerNet's chief information officer, Tim Brown said the purpose of hosting the seminars was to help keep PowerNet's computers safe and to get staff thinking about digital safety from both company and personal perspectives.

"Cyber safety includes not only the physical and technical aspects of a computer network, but also the education of our staff on user safety and what things like social engineering, phishing and cyber bullying look like," Tim said.

Following the success of the June seminars in Invercargill, further seminars are scheduled in August for field and office staff in Gore, Balclutha, Palmerston and Ranfurly.



John Parsons, Cyber Security and Sean O'Connor PowerNet.

Work on the electricity networks

PowerNet field staff are focused on the red tag poles and low conductor inspection and replacement projects across the network.

PowerNet's chief operating officer, Michelle Henderson said the total number of red tag poles is dropping slowly within The Power Company network while low conductor work in the same area is also progressing well.

Teams working on the projects in the OtagoNet area have achieved their goals for low conductor replacements but are still working hard to keep up after the discovery of more red tag poles. To help these teams reach their goal rate of 15 pole replacements per week, an extra team of approximately four staff from the Onslow Street depot have been called upon to help.

"While there has been some setbacks, as well as pole availability issues due to manufacture delays, our crews keep working towards their goals. Then going forward, they will keep inspecting poles and if they are red – they will be tagged, we are better to know the condition of our poles," Michelle said.

Michelle would like to thank staff from all regions and the team from Onslow Street for their help in Otago. She also wishes to congratulate to the staff who achieved the low conductor goal for OtagoNet.



A red tagged pole.

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New utes on the way

Nine new utility vehicles will soon feature in PowerNet's field fleet.

The double-cab Ford Rangers are likely to arrive at PowerNet around September. They will enhance PowerNet's modern fleet by providing staff with safe, fit-for-purpose vehicles.

PowerNet's infrastructure and administration manager, Claire Wallis, says the vehicles will replace older vehicles with high kilometres and be allocated to field depots as required.

After purchase and before delivery, the vehicles will be equipped with an internal fit-out, lights and ladder racks at a specialist utility fit-out company, Camco, based in Cambridge.

The new vehicles are part of PowerNet's regular vehicle replacement programme. There are 165 vehicles in the company fleet.

Congratulations Rachel Saunders



Congratulations Rachel Saunders on her win of Tracksuit Inc, Winter WonderGrand competition. Rachel's won the \$1000 prize by registering for the programme.

L-R: Amber Tilley (Synergy Health), Rachel Saunders and Trish Hazlett (PowerNet).

Women in Engineering 2017 summit



PowerNet's chief operating officer, Michelle Henderson was invited to Brisbane as a guest speaker at the Women in Engineering Leadership Summit 2017 in May.

The annual event is designed to address the unique challenges that women face in the engineering profession and provide strategies for women to overcome obstacles in order to facilitate leadership excellence.

Michelle attended the summit and presented to engineers and related professionals for 40 minutes about her "successful yet non-conventional" career path.

"My paper was on my career story, how I started out as a graduate engineer at Tiwai in the 90s, then moved to Rio Tinto in Australia and then back here to PowerNet. I also talked about getting back into work after taking parental leave with both my children and how I found networking key to my return. It was a great experience and I'm grateful to PowerNet for the opportunity to attend," Michelle said.

Photo: PowerNet's Michelle Henderson pictured with Alexandra Meldrum, chair, education & innovation committee from Engineers Australia at the 6th Annual Women in Engineering Leadership Summit 2017 in Brisbane.

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Pause for Safety in action

PowerNet's 'Pause for Safety' exercises are continuing to help team members go home unharmed.

PowerNet's chief operating officer, Michelle Henderson and field services manager, Jim Matheson were pleased to spot new initiatives being put into practice following the recent "Pause for Safety" exercise about danger zones.

"Jim and I were visiting work sites the day after the exercise and were very impressed to see the teams putting into action some of the outcomes. For example, one team had set up a barricade under the bucket truck so that no one could enter the danger zone below," Michelle said.

These safe behaviours displayed by team leader distribution Onslow Street Depot, Mase Salesa and his team were celebrated with a barbecue in May.

Michelle said she now looks forward to further Pause for Safety events and sharing more success stories and celebrations with PowerNet staff.



Line mechanic team members celebrate work site safety initiatives following a successful Pause for Safety exercise in April.

L-R: Gerard Anderson, Mase Salesa, Lyal Moreton, Michelle Henderson, Slade Evans and Kevin O'Connor.

Safety barricade set up by PowerNet field staff to help ensure a safe work zone on site.



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Boots and gloves for working safe

Line mechanics will be the first PowerNet staff to be decked out in specially designed boots and gloves that will make working with electrical lines and equipment a whole lot safer.

Over recent months a team of selected PowerNet staff have been tackling the issue of how to increase staff safety, looking at options to create a desirable 'equipotential zone' (EPZ).

An equipotential zone is a work zone of 'equal potential' which can protect workers from hazardous step and touch situations where an electric shock could occur, for example, induced voltage or line re-energisation.

While standard procedure involves earthing and de-energising overhead lines when carrying out maintenance or repairs, the creation of an equipotential zone adds another layer of safety to the workplace.

Field training officer, Chris Walker is leading the EPZ roll-out. He says the team has been looking at all options available to achieve a safe, equipotential zone in everyday work.

"This has included visiting Auckland-based company, Electrix, which uses the boots and gloves method to achieve an equipotential zone. We felt the boots and gloves approach would be the most effective way of improving staff safety on the five networks PowerNet manages," he says.

Manufactured by Skellerup, the specially-insulated yellow rubber boots were invented and tested for proof of concept in New Zealand, and the rubber gloves are designed to avoid electrical shock from touch hazards.



Dielectric-rated boots and high-voltage gloves

With more than 100 pairs of boots and gloves now on order, the roll-out of gear will start in August.

The first batch of dielectric-rated boots and high-voltage rated gloves will be issued to overhead lines staff. Over the next year, the roll-out will be extended to include technical staff, who will be consulted in advance so that they are kitted out with the best equipment for their needs.

While staff already use high voltage gloves for high voltage switching and glove and barrier work, wearing high voltage gloves for de-energised work will be new for everyone.

"The feedback we've received from line mechanics indicates there'll need to be some changes in techniques to make the new EPZ requirements work," says Chris.

The roll-out of EPZ equipment is part of PowerNet's ongoing commitment to good staff safety practices in the workplace and to a strong health and safety culture.

Hot air balloon experience one to remember

PowerNet's administration assistant, Janis Waters will never forget her 60th birthday gift of a hot air balloon ride back in April. What makes the experience so memorable was the pilot decided whilst flying that the wind was too light so made a landing in the middle of a Hamilton city street.

"Actually I was quite calm and relaxed about it all. Thankfully the streets are mostly underground, so power lines didn't pose a threat to us," Janis says.

"Due to the lack of wind the landing was diverted to a quiet street, the pilot had it all under control and no one was ever in any danger."

It was a great experience and an amazing feeling flying high above Hamilton, I would certainly do it again. Who knows where we might land next," she says.



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Workplace 5S transformations continue

Following the successful transformations of PowerNet Balclutha's yard, tin shed, truck sheds, arborist area and technician's workshop earlier in the year, the focus has now turned to the depot's indoor office areas.

Office staff recently completed training on PowerNet's management system '5S' and are now implementing their learnings to help streamline their work spaces.

The 5S system is designed to make workplaces organised, safe, visual, efficient and more productive using the five basic principles — 'Sort, Set in Order, Shine, Standardise and Sustain.'

PowerNet's business improvement manager, Rachael Watt said the vision is that all staff will have an environment that works for them.

"5S doesn't only apply to the workshops, it works everywhere. We are looking to '5S' all the common office areas and are encouraging staff to work through their personal areas to minimise clutter. It all helps to maximise output as they will spend less time searching for tools, equipment, information or clearing space to work on," she said.

Rachael noted that transformations of communal areas can be difficult, but was pleased to have received positive feedback from staff who had noticed a difference already.

"The transformations of personal desk spaces have been very obvious and instantaneous. But the communal areas will take a bit longer as there are many users who all need to be familiar with the principles of 5S to keep it in order," she said.

Balclutha office 5S champion, Mark Way is leading the staff room transformation project and is well aware there is no "quick fix".

"It's more about deciding what needs done, getting started and having everyone on the same page so we are thinking about it on a regular basis. Clutter builds up so easily, especially with many people using the same area," Mark said.

PowerNet's IT technician, AJ Cross has recently '5Sed' his desk as well as the depot's IT equipment.

"I have simplified, clarified and economised my area. The IT equipment has been centralised and it is easier to locate items. I now have some ideas in mind of how I can use shadow boards for spare equipment so I can easily see when items are missing. It's a work in progress," he said.

5S is part of PowerNet's five-year Lean Management journey which aims to eliminate waste, streamline processes, focus on continuous improvement and overall improve the workplace.



AJ Cross's desk before 5S



And after 5S

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Electric vehicle showcase begins in Southland



Public and staff viewing two EVs at PowerNet, Invercargill.

The annual #LeadingTheCharge Toe to Tip Road Trip was hosted by PowerNet when it came to Invercargill in April.

#LeadingTheCharge is an electric vehicle (EV) enthusiasts group and the aim of the tour was to promote EV technology to as many people as possible throughout the country.

This year the tour showcased several makes of EVs and provided PowerNet staff and members of the public with the opportunity to ride in various models including experiencing the phenomenal acceleration and autonomous driving of the Tesla vehicles.

PowerNet chief operating officer, Michelle Henderson gave a speech at the event advocating for the transition to EVs and congratulated current owners as

early adopters forging the way for the mass uptake of EVs.

Chief information officer, Tim Brown said PowerNet sponsored the Southern leg of the tour as part of the company's initiative to encourage the uptake of EVs in Southland.

As well as supporting the tour, PowerNet have signed a co-operation agreement with New Zealand's fastest growing EV charging network, ChargeNet.

"We are working closely with ChargeNet and looking at opportunities to help facilitate the building of their nation-wide network of Rapid DC Chargers through the distribution networks we manage," Tim said.

Live work methods under review

While almost every task with circuits de-energised and earthed can be completed live under strict criteria, the approach to live work methods is changing because of the requirements of the Health and Safety at Work Act 2015.

Live work methods have been used on low voltage overhead and underground lines and equipment since the early days of electricity; and on high voltage lines and equipment since the 1970s. Live line work allows maintenance to be done without disruption to supply.

However, the Electrical Supply Industry is currently reviewing its approach to live line work due to health and safety changes, says field safety and training advisor, Phil Johnson.

"Previously work was undertaken live in the first instance unless mitigating circumstances meant this was not possible; now work is to be done de-energised, isolated and where necessary earthed in the first instance, unless justification for live work methods has been determined and clearly met."

Phil has been a live line instructor since 1994. PowerNet's live line training is carried out under the umbrella of BETAA Consultants Ltd, using their documentation combined with practical line training exercises in Invercargill and on the network when possible.

Field staff are exposed to low voltage live work techniques in the field and their competency is assessed by a field training officer. Training in high voltage live line techniques takes seven weeks and requires a staff member to meet specific requirements, including holding a line mechanic registration for a minimum of two years and being experienced in earthed line practices that can be undertaken live.

The glove and barrier method, introduced in New Zealand in 1994, is the main high voltage live line method used on distribution networks. Staff work directly on lines and equipment using insulated gloves and sleeves and operating from an insulated elevating work platform. Additional protection for workers is provided by using insulated barriers and always maintaining two levels of insulation to prevent phase-to-earth and/or phase-to-phase contact.

"There will always be times where we need highly skilled staff to undertake work in a live line situation. Being able to work competently and safely in a live environment is critical to the safety of our staff and to the work that PowerNet does operating efficient, reliable networks," says Phil.

ACROSS*the*LINES

Updates from The Power Company Ltd and the OtagoNet networks

Ranfurly staff have been replacing red-tagged poles and replacing all the street lights in settlements across the Maniototo with LED lighting. They've also undergrounded approximately 200 metres of electricity services in Palmerston's main street.

The Lumsden team has been replacing cross-arms in the Centre Hill area, Mossburn, and also carrying out routine maintenance to replace earth leads on transformers. Te Anau staff have assisted with this, and in their own patch been replacing red-tagged poles and installing new connections for new housing developments.

A four-person crew from the Onslow Street depot has been helping the Palmerston team with red-tag pole replacements and other maintenance jobs in the Karitane area.

Shane Lawson's crew is busy relocating poles on the Slope Point, Haldane and Waipapa roads to assist with the Southland District Council's road realignment and sealing. Other crews are doing maintenance around the East Invercargill, Otagara and Fosbender Road areas.

Nathan Dickens has been leading a Winton crew that's assisting Gore staff on the Oreti River Valley build between the Centre Bush substation and Dipton. Lance Harris has been doing day-to-day maintenance jobs around Otagara, Drummond and Western Southland.

Reece Stephenson's Gore crew is carrying out line construction works on the Centre Bush to Dipton 66kV upgrade, helped by Travis Bastiaansen's crew from Gore and a Winton line crew.

Other Gore crews are completing line maintenance at Mokoreta and replacing red tag poles in the Gore area.

Balclutha staff have completed all the cabling and installation work at the new Plantation Heights subdivision. The finishing touches are now being applied, including replacing a pillar box that will tie new cables to existing cables. The team has also relocated an 11kV line at Ross Road, Clydevale, for irrigation pivots, and been busy replacing red-tagged poles and fixing low wires.

Good luck to the two teams who will be competing in the Connexis Annual Line Mechanic Competition being held in Hamilton 12-14 September.

Team Fuse — Hector Diamond, Lyndon Whale, Matthew Brown, Sean Christensen and manager Joseph Reti.

Team Switch — Shane Lawson, Cole Birse, Daniel Marshall, Slade Evans and manager Roy Duffin.

The three-day event is designed to bring out the best in the competitors while testing their knowledge and showcasing outstanding team work and safety practices.

We wish you all the best!

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Hon. Michael Woodhouse and Sarah Dowie visit PowerNet



L-R: Minister of Workplace Relations and Safety, Hon. Michael Woodhouse, Invercargill MP, Sarah Dowie, PowerNet's chief executive, Jason Franklin, GM HSEQ, Justin Peterson, field services manager, Jim Matheson. Middle row: Trainee line mechanics, Ione Pau and Sheamus McGuigan, Field safety and training advisor, Phil Johnson. Back row: Trainee line mechanics, Samantha Maurangi and Paul Ashby.

PowerNet hosted Minister of Workplace Relations and Safety, Hon. Michael Woodhouse and Invercargill MP, Sarah Dowie, at its Invercargill head office in July.

PowerNet chief executive, Jason Franklin said the two-hour visit included opportunities for Mr Woodhouse and Ms Dowie to discuss the company's operations, health and safety, view a staff training exercise and visit the system control facility.

"We introduced the Minister to PowerNet's work, including showcasing some of our health and safety processes. The visit was a valuable opportunity to gain insights into the Minister's perspectives on workplace health and safety and to discuss potential ways workplace safety could be further improved in New Zealand," Jason said.

After the initial briefing, Mr Woodhouse and Ms Dowie donned personal protection equipment to observe PowerNet trainees replacing an 11kV ABS switch on a power pole at the company's training facility, followed by a team debrief of the exercise.

The guests then also visited PowerNet's System Control facility, which provides a 24/7 control and faults customer call service across its five Southern electricity distribution networks.

As well as meeting with Jason, the pair also met senior managers Justin Peterson and Jim Matheson, field safety and training advisor Phil Johnson and trainee line mechanics, Samantha Maurangi, Ione Pau, Paul Ashby and Sheamus McGuigan.

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Electric vehicle drive underway

The joint project between PowerNet and the national Energy Efficiency and Conservation Authority (EECA) to encourage the commercial use of electric vehicles (EVs) in Southland has gotten off to a great start.

The aim of the project is to have 10 electric vehicles or plug-in hybrid EVs incorporated into Southland business fleets over the next year. As an incentive, PowerNet is offering to install an on-site charging unit at no extra cost to all participating businesses.

To help launch the initiative to the community PowerNet electrical engineer and project manager, Dyson Gentle presented details to Southland Chamber of Commerce and Sunrise Rotary Club members back in May and June.

A promotional video showcasing the ease and benefits of driving an EV was also created as part of the project with the help of James Jubb from Studio Jubb.

The two-minute clip stars Southland Chamber of Commerce president, Carla Forbes and PowerNet chief operations officer, Michelle Henderson using a fully electric Nissan Leaf to get about town, drop kids off at school and to go shopping. It was first played at 'The Leading the Charge' tour event in April before being uploaded to the PowerNet website and circulated on social media.

"The video is a light-hearted way to get across the key message that low running costs provide significant savings and that otherwise EVs aren't too different from other cars. As far as the driving experience goes EVs mostly feel like regular cars but with the added benefits of being more cost efficient, quiet and smooth, no gear changes and quick off the mark," Dyson said.

Dyson is pleased to have heard from a number of interested participants already, with some applications set to be finalised in the coming months.

"The response has been really positive from the outset. It's really satisfying to be able to encourage other businesses to support the transition away from fossil fuels and to help contribute to our national environmental targets," he said.

The project is set to conclude in March 2018 however all interested businesses are encouraged to register their interest as soon as possible as there may be an opportunity to extend the offer to meet demand if necessary.



James Jubb (Studio Jubb), Carla Forbes (Chamber of Commerce) and Michelle Henderson (PowerNet) at the charging station during filming of the EV promotional video.

[click here to view the EV video](#)

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Oreti Valley Project update



Centre Bush zone substation (before).



Centre Bush zone substation (after).

Led by PowerNet project manager, Roger Scott, the Oreti Valley Project (OVP) is a major five-part project to upgrade and extend the 66kV network to include Centre Bush, Dipton, Lumsden and Mossburn Substations by 2020. Stage one of the project is now complete and work on stage two is in progress.

Centre Bush substation upgrade

PowerNet staff, together with Decom Electrical and their subcontractors have recently completed work on the OVP in the Centre Bush area with the commissioning of the Winton to Centre Bush 66kV sub-transmission line and new Centre Bush substation.

The Centre Bush upgrade began in January and the new substation was commissioned on 2 August, then placed on full load on 3 August.

Centre Bush to Mossburn line upgrade

The upgrade of the Centre Bush to Mossburn 33kV sub-transmission line to 66kV started in April with PowerNet line mechanics undertaking the surveying. Workers using Skevington's vacuum truck from Palmerston followed route, excavating 178 pole foundations ready for piling.

PowerNet line mechanic teams installed cross-arms and insulators on the new Busck poles prior to installation which began in June.

The first section of the line between Centre Bush and the Dipton substation is scheduled to be completed early December, ready for the commissioning of the new Dipton 66/11kV substation prior to Christmas.



L-R: Skevington's vacuum truck extracts gravel from the holes before inserting the steel liner to prevent hole collapse.

The extracted gravel is taken off-site and crushed to AP40 grade and reused to pack around the newly installed concrete

ACROSS *the* LINES

Oreti Valley Project *continued*

Dipton substation upgrade



Ground works have begun at Dipton substation

Decommissioning of the original Dipton substation took place on 26 May in preparation for its upgrade from 33/11kV to 66/11kV. Work to remove the old substation equipment from site started in June followed by the site excavation for the new substation that is scheduled to be commissioned by 22 December 2017.

PowerNet project manager, Roger Scott noted that it was always going to be a challenge to minimise power outages at Dipton during the upgrade but he is confident in a plan that is in place to ensure minimal interruption.

"In order to keep the lights on at Dipton during the upgrade we have used one of the 11kV feeder circuit breakers at Lumsden substation to supply Dipton directly at 11kV via the 33kV insulated sub transmission line," he said.

A 3MVA mobile regulator has been placed at the Dipton end of the line to boost voltage. The regulator will supply the two Dipton feeders,

taking the place of the Dipton substation and allowing it to be off loaded and decommissioned to make way for the new substation construction to begin.

Jim Matheson, field services manager -

Meet one of our leaders in the field observing work and giving feed back to help the teams go home unharmed.

How long have you been in the industry? Over 45 years

What does your job entail?

Managing line and depot staff including supervisors, liaising with other department heads and management to ensure that work is undertaken in a safe and efficient manner.

Where are you from?

Born and breed in Gore, Eastern Southland, and still here!

Tell us about your family, I am happily married to Christine and we have three adult children and three grandchildren.



ACROSS^{the}LINES

Welcome to our new staff



Charlie Grindell
Electrician
Racecourse Road



Mary Bennett
Depot Administrator
Balclutha

Welcome back:

Alana McLeod-Young and Paul Barclay. Also, welcome Murray Popenhagen to the PowerNet team.

New appointments:

Reece Griffiths (Distribution Line Mechanic) Balclutha on his permanent transfer to Palmerston Depot.

Congratulations to:

Our PowerNet employees who have completed the last two Shared Vision workshops.

Farewell to:

Danielle McConechy, Muhammad Siddique, Justine Greg, Rebecca Thomas-Squires, Ann McDowall and Russell Bagrie.

Thanks to:

Each year New Zealand celebrates National Volunteer Week to recognise and celebrate the vital contribution of New Zealand's volunteers. This year PowerNet recognised our employees who volunteer in their communities. To everyone who works at PowerNet and volunteers, we just want to say a big **Thank You**.

Happy retirement Norm



On the 28th July we farewelled Norm (Smokey) Moreton after more than 50 years of service to the electricity industry. Norm has decided on his own terms to retire from the industry that he has dedicated over half his life too.

He started work in Southland around 1962 in Lumsden and progressed through the ranks to senior faultsman in the Ohai and Invercargill depots before going out contracting in 1995 based in Riverton as Western Powerline Contractors.

After contracting and a brief stint on the lines in Blenheim, he returned south and had roles with various companies on the network doing fault repairs and maintenance and then more recently with PowerNet as a pole inspection technician.

Norm will be missed greatly around the different depots. His cheeky "what's the latest" greeting (meaning what gossip is there?) and his words of wisdom regarding how the company is or isn't performing are going to be missed.

There are not many of Norms type and stature left in the industry so he takes much experience and knowledge with him which will be hard to replace.

We wish you well Norm in your retirement and well done on sneaking in another 10 years of work after (a certain someone in Winton) had you done and dusted way back in 2007!

Baby congratulations go to:



Lance and Alice Harris on the birth of Sadie, born 28 April weighing in at 8lb 3oz.

Kaleb and Jo Groen on the birth of Charlotte, born 14th May and weighing in at 7lb 13oz.