

April 2018

ACROSS *the* LINES

Meet our new Smart Energy Home tenants!



L/R: Maci, Cam and Chloe Waru.

Congratulations to the new PowerNet Smart Energy Home tenants, the Waru family!

Cam and Chloe, and their two-year-old daughter Maci were selected as the new tenants of the PowerNet Smart Energy Home in February.

A promotion was run using a range of media to find the most suitable tenants, which attracted a high calibre of applications in the form of short videos explaining why they wanted to live in the Smart Energy Home. Click [here](#) to view their entry.

PowerNet electrical engineer Dyson Gentle said the Waru's entertaining and well produced video was instantly one of the stand out applications, and after successfully completing shortlist interviews and checks he was pleased to offer them the tenancy.

"We were looking for some tenants who would be excited to learn more about energy efficiencies and who would be confident showcasing their experience in the public eye. Cam and Chloe are both keen and charismatic, so they will be great for us to work with and I think everyone will really enjoy following their journey," Dyson said.

Some of the technologies installed in the home include solar panels, battery storage, energy smart appliances, heat pump powered hot water and space heating, and an electric vehicle with a home-charging station.

The goal of the project is for PowerNet to learn more about the everyday use of current and emerging smart energy technologies in order to improve efficiencies and create savings for customers. For one year data will be gathered from the house that will show patterns of how the individual technologies perform and interact.

"For the Waru's this is a great opportunity to live rent free, experience the technologies first hand, and learn about smart energy use. For us, it's the next step in understanding future energy use trends so we can best manage the South's electricity assets now and in the future," Dyson said.

The Waru family moved from Winton to set up their new home-for-a-year in Invercargill. Chloe is a secondary school teacher at Central Southland College and Cam is a stay at home Dad and keen video blogger. We checked in with Cam to see how the family is settling in so far.

What enticed you to apply for the Smart Energy Home tenancy? *We applied for this for a few reasons. It seemed like a great opportunity to be a "guinea pig" for something that could potentially change Invercargill and/or the country! I also love making videos so I didn't pass up the chance to make a funny video. And of course, having the opportunity to live rent free for a year was pretty attractive too!*

How did you feel when you found out you had been selected? *We were pretty shocked! I mean, you apply for things like this and you never expect to be selected - so when we got the call we were so excited!*

How have you found settling in so far? *Everything has been pretty smooth sailing. I guess it's never easy moving house, but we managed to get it done and settled within a few days. (Although... there is the odd box still lurking around to be unpacked!)*

Any highlights from the house so far? *The dishwasher! In the other places we have lived there hasn't been a dishwasher (WE have been the dishwashers) so we have really enjoyed not having to wash and dry dishes every day!*

What would you like to learn more about in the Smart Energy Home? *We want to learn more about the solar power and how it all works. I find it very intriguing as to how we store and use power, and also send power back to the grid.*

How are you finding use of the electric vehicle? *We love it - it's an amazing piece of technology! It's deceptively quick and really quiet....(it makes listening to the Frozen soundtrack in the car a much louder experience!)*

Follow The Waru's year in the Smart Energy Home

Instagram - www.instagram.com/PowerNetNZ or Facebook - www.facebook.com/powerNetNZ

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It's flu vaccine time

It has been 100 years since the 1918 worldwide influenza pandemic which claimed more than two million lives.

Unfortunately, influenza is still claiming many lives today. This year the southern hemisphere's influenza season is expected to be a severe one, following on from the northern hemisphere's season where people are dying weekly due to a change in the viruses that cause influenza.

Influenza is a far more serious illness leading to severe complications (chest infections, pneumonia and admission to hospital/CCU) lasting 2-3 weeks or more, whereas the Flu like illnesses last about a week and very few if any go to having any complications.

The World Health Organization (WHO) has advised the vaccine be altered to include coverage for the changes. Once the new vaccine becomes available it will be provided free to all PowerNet staff.

Staff who would like the vaccination this year are asked to contact either Lauren Ridder on 03 2111885 (or lriddler@powernet.co.nz) or Tara Unahi on 03 419 0113 (or tunahi@powernet.co.nz) by Tuesday 24 April.

PowerNet occupational health nurse Karron Pink stresses the importance of people getting immunized, even if they have had the flu vaccine before.

"Protection from any previous vaccinations lessens over time and the vaccine changes each year in response to the changing virus pattern. This year's flu is a particularly nasty one and the new immunisation offers the best protection from infection and reduces the spread of the virus," she said.

Karron said that latest research also shows many people transmit influenza without even knowing they are infected.

"As well as getting the vaccine, it's very important to follow basic hygiene practices to help reduce spread of the virus, at home and in the workplace, such as careful hand washing and using disposable tissues," Karron said.

The Immunisation Advisory Centre recommends annual immunisation prior to, or during the influenza season for everyone who can be vaccinated. As well as some work places offering the flu vaccine to staff, it is funded for all pregnant women, people 65 years and over and certain at-risk groups.

An influenza/viral infection comparisons table will be displayed by the photocopier at each depot/office during the winter months.



Flu facts

Who is most at risk?

Anyone can catch and spread influenza. Being young, fit and healthy does not protect you from influenza. Children are more likely to contract influenza in any given season with 20-50 percent likelihood, compared to 10-30 percent in adults.

Can I build up natural immunity to influenza?

Immunity only develops after you have been exposed to a particular strain of the virus, either through infection or immunisation. Flu immunisation prepares and boosts your immune system to help you fight the particular flu viruses expected to be circulating each year. Immunity against one strain of flu will not necessarily protect you against another.

Can you catch influenza from the vaccine?

No - the current influenza vaccines available in New Zealand do not contain live virus. These vaccines contain fragments of inactivated influenza viruses and cannot cause disease. It is important to note that it can take up to two weeks to be fully protected following vaccination. So, if you are exposed to the influenza virus near the time you are vaccinated, the vaccine may not have time to work before you become unwell.

What to look out for

Influenza illness can include any or all of the following symptoms:

- Fever
- Muscle or body aches
- Headache
- Lack of energy - may be severe and last for two or more weeks
- Dry cough
- Sore throat
- Runny nose
- Vomiting and diarrhoea (more common in children than in adults)

Source: Immunisation Advisory Centre NZ

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Electric vehicles tour New Zealand

PowerNet hosted the third annual Leading The Charge tour when it came through Invercargill last month.

Leading The Charge is an electric vehicle (EV) enthusiasts group championed by the Better NZ Trust. The three-week-long tour from Bluff to Cape Reinga aims to promote and encourage more New Zealanders into zero emission electric vehicles.

Vehicles taking part in the tour this year included the Hyundai IONIQ, BMW i3, Nissan Leaf, and some Tesla vehicles.

PowerNet staff and members of the public were offered the opportunity to see the cars up close, speak with the owners and even to test drive some of the vehicles.

The Leading The Charge group use the tour as a way to showcase that long-distance driving using 100 percent electric power is possible with today's charging infrastructure.

There are about 100 fast charge units across the country and, following the install of two new units in Gore and Frankton last month, the Southern region now has five.

PowerNet chief information officer Tim Brown said this infrastructure is set to further improve in coming years, with plans for more chargers making it even more convenient for long-distance EV use.

"As well as supporting the Southern leg of the tour, PowerNet continues to work closely with ChargeNet to help facilitate the building of their nation-wide network of Rapid DC Chargers through the distribution networks we manage," Tim said.



Leading The Charge tour organisers Kathryn and Greg Trounson

EV numbers on the rise!

Figures show that the national electric fleet increased from 1150 in February 2016 to 6884 in February 2018. New registrations grew from just 38 in 2013 to 3682 in 2017.

There are currently 51 light electric vehicles registered in Southland and 430 in Otago.

Source: Ministry of Transport

"Our Say, Our Future" PowerNet organisational survey

PowerNet's largest staff survey is underway taking place between 10-24 April.

PowerNet general manager HR Marcus Waters believes with the company having undergone many changes over recent years, now is the right time for a collective review.

"The aim is for us to gain an insight and get views from our staff on how everything is going for them within the company. The information gathered will help generate priorities for the company going forward," he said.



The survey asks a range of questions covering topics such as business improvement, strategy, leadership, work culture, project management and communication.

The survey is being run online with a very clear and simple to use format and all responses will be recorded confidentially. Field staff are being provided time to complete the survey.

"It's really important we have everyone's feedback to ensure we can focus our efforts on the right areas," Marcus said.

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Balclutha site redevelopment



Concept 3D aerial view of the new build.

About this time next year PowerNet Balclutha staff will be working out of a brand new, multi-million dollar purpose built facility.

Works are set to begin on the redevelopment in September after the PowerNet board recently approved a business case to build a new workshop, administration building and warehouse/retail space at the Charlotte Street site.

The warehouse/retail space is to be leased to PowerNet's stores management and supply partner Corys Electrical.

PowerNet chief executive Jason Franklin said the new facility will provide an excellent base for effective service delivery throughout the region.

"The redevelopment will provide the infrastructure PowerNet needs for its people and clients for at least the next 50 years," Jason said.

Staff can look forward to a new, pleasant work environment, improved health and safety, better flow and a greater visible public presence. The workshop will be multi-use for distribution, arborist and technical staff while the administration building will be a combination of open plan spaces and offices for both office and field staff.

The facility is strategically designed to give PowerNet the flexibility and capability to continue operating at the site in a major disaster, and to run some of its southern operational headquarters from Balclutha if required.

"We wish to thank all those involved in the planning, including our Balclutha leadership team that had significant input into the overall design and building requirements, and the wider South Otago staff that were consulted on location options. We look forward to seeing it all come together," Jason said.

Balclutha office staff should face minimal disruption during the works. It is anticipated the PowerNet workshop offices will be completed around April 2019 and the Corys Electrical building in September 2019.

Life saved by an AED at Transport World

In March, a cardiac arrest happened during an event at Bill Richardson Transport World in Invercargill and the AED on the premises, which was one of three donated by PowerNet in 2016, was used and saved the woman's life.

The woman said that she was very grateful there was an AED on site and, along with the quick actions of the medical and nursing staff at the wedding "it certainly saved my life."

When accessible within minutes of a cardiac arrest occurring, an AED can vastly improve a person's chance of survival. They do save lives!

Pictured L/R: - Sarah Brown (PowerNet director), Robin Eustace (St John territory manager), Joc O'Donnell (Transport World executive director) and Tim Brown (PowerNet chief information officer).



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Women in our industry

Girls with Hi-Vis® month is fast approaching and PowerNet is pleased to be one of around 30 nationwide companies working alongside Connexis on this initiative.

The objective of Girls with Hi-Vis is to raise awareness and increase the number of women working in trade and technical roles in the infrastructure and energy industries.

PowerNet general manager HR Marcus Waters said that women make up about 20 percent of PowerNet's workforce. We are looking for ways to increase this percentage and this gives us a chance to open our doors and give more women a chance to experience the industry first hand," he said.

The PowerNet Girls with Hi-Vis open day will be held on 27 June for all women interested in the electrical industry. Anyone wishing to attend can register their interest by emailing fmcleod@powernet.co.nz or call 03 2111899.

To help celebrate the upcoming Girls with Hi-Vis month, this edition of Across the Lines profiles three PowerNet women working hard in a traditionally male dominated industry.



Lisa Terepai - Substation maintainer

Started at PowerNet in 2011

What does your job entail?

A wide variety of jobs ranging from maintaining substations, fault and investigation work, testing of switch gear, transformers, regulators, protection relays and associated control equipment including SCADA systems.

What led you to work in this industry?

A number of reasons and contributing factors, but the main one was that I needed a career change. After leaving school I ventured down the admin path like most girls I knew and worked for places like ANZ, CYFS and WINZ.

Becoming an electrician had been a bit of a fantasy for a long time, but taking the plunge and making it a reality was the hard part. I finally decided to enrol into the Electrical Pre-Trade course at Southern Institute of Technology (SIT) and through that I gained an apprenticeship at Power Services and I've never looked back.

What challenges have you overcome to get where you are today?

I started this venture when my boys were two and four, and must say it's all been quiet a juggling act. Occasionally the ball does drop, but I'm lucky to have amazing people in my life that will jump in at any time to pitch in. Initially money was a huge concern too, as an apprentice income is not exactly substantial when raising a young family - so I had to stay focused on the big picture. I still find myself battling to find the happy home/family/friends/work/study balance, but am working on it.

What is the best part about your job?

The variety, every day is different, the balance of indoor and outdoor work, being creative and technical to solve situations, and there is always something to learn!

Thinking ahead, what are your career goals?

First up I aim to complete my Power Engineering L5 Certificate which I should achieve at the end of the year. From there I will need to make the decision whether to complete the Diploma in Power Engineering or potentially Project Management.

What advice do you have for any other girls or women wanting to get into this industry?

Enrol into a pre-trade course. It gives you a great intro and foundation into the industry while providing you with insight to whether the industry is for you.

What do you think it takes to be a successful female in a male dominated industry?

A good sense of humour!

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Ange Eady - Network condition inspector

Started at PowerNet in 2014

Tell us a bit about yourself?

I'm a 45 year old woman who lives in Ranfurly with a bloke and a dog. I graduated from Canterbury University with an M.Sc in Geology last century and worked as a gold exploration geologist here and in Australia before moving to Ranfurly in 2001. For fun I read, cook, drink, knit and put out fires!

What does your role at PowerNet entail and who do you work with?

I travel around checking that the company assets, mainly power poles and lines, are in good condition and safe to be worked on. I'm the only woman in the data capture team (there's about six of us at the moment). Day to day, there's two of us carrying out network inspection in the northern region.

What path did you take that led you into this industry?

When I shifted to Ranfurly I had a number of typical small-town jobs mainly in retail and hospitality. After taking a break in 2013 to help look after my Dad, I decided that I needed to get back into work that I found more challenging. I was fortunate that Otago Power Services was advertising a GIS data capture position based in Ranfurly at the time. I applied even though I had no industry experience but my previous experience in the mining industry and my science qualifications were enough to convince Jim and Rachael to give me a go.

What challenges did you face getting here?

My two main challenges have been my lack of previous industry experience and that currently there is no formal qualification pathway for network inspection. It's been a fairly steep learning curve to get myself up to speed with what I need to know, but between the Line Mechanics Handbook, the Internet and lots and lots (and lots and lots) of questions, I'm getting there. I'm fortunate that my bloke is a sparkie, so he gets to have lots of romantic conversations with me about transformer theory and the single wire earth return system and so on!

What is the best part about your job?

It ticks most of the boxes I need – working outside, no nights and no weekends, a supportive environment, a good bunch of people to work with, not customer facing (after 10 years) I needed a break from talking to people about the weather - although, come to think of it - I do spend a lot of time talking to landowners about the rain/lack of rain! It's also a job with very measurable achievements, one pole inspected, 159,999 to go, two poles inspected 159,998 to go...

What else would you like to achieve in your career?

I would like to get some sort of industry qualification relevant to network inspection and carry on doing what I'm doing. Being involved in development of the data capture programme and trialling of new pole testing technologies is something I've found very interesting and I hope to carry on with that part of my role.

What advice do you have for other girls or women looking to get into this industry?

Talk to one of us, come out in the field and see what's involved, join an industry support group such as the Electrical Engineers Association and have a good think about what you want your career pathway to look like.

What does it take to be a successful female in a male dominated industry?

All the usual things like a good work ethic, a friendly and professional attitude, being proactive in your role, but also being aware of your personal and professional strengths and limitations and knowing how to work with these. For example, I felt my lack of industry experience was a major limitation but I was able to balance that against my good academic skills to be confident that I could learn what I needed to know. Having a good support network of friends and family and other professional women helps too.

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Jessie Wynne - Apprenticeship substation maintainer

Started at PowerNet in 2017

What is your role at PowerNet?

I've just started my new role as an apprenticeship substation maintainer. Since I started at PowerNet in December 2017, I have been following around the tradespeople as an electrical assistant, learning a lot of new skills from them that will help me in working towards my electrical qualification.

What qualification did you complete to get your position?

Last year I completed an Electrical Pre-trade at SIT. While studying, I started getting work experience every Friday at PowerNet which led to the job offer of an electrical assistant at the conclusion of my course.

What keeps you coming back to work every day?

The opportunity to learn new skills for an industry that will always be needed.

What do you think it takes to be a successful female in a male dominated industry?

I don't think your gender should matter. To be successful, you need to be dedicated and willing to prove yourself to others. I want to be seen for who I am and show that I am capable and willing to do anything that anyone else can. If something is possible for any other man or woman it is possible for me too.

What do you hope to achieve next in your career?

My goal is to gain my electrical qualification as a substation maintainer, then go on to exploring other possible opportunities within the electrical supply industry and maybe some additional qualifications.

Health and wellbeing review

The initial findings of an independent review of PowerNet's health and wellness benefits are expected back later this month.

PowerNet general manager HR Marcus Waters said the purpose of the review was to ensure PowerNet is making a meaningful difference to the health, wellbeing and safety of all staff.

"PowerNet has had an impressive list of benefits, such as medical exams, internet wellness programme, gym and swimming subsidies, evening drinks and free fruit. So the intent was to review whether we're being effective with these benefits and contributing to a safe, healthy and enjoyable workplace," he said.

Occupational medicine specialist and Cromwell-based Dr David Beaumont was engaged by PowerNet to assist in the evaluation, and to generate some expert recommendations. Dr Beaumont is the medical director and director of Fit For Work. He advocates for a team approach to health that sees people in the context of their whole lives, moving beyond the medical model.

After undertaking a review of the company's current health and wellbeing initiatives, Dr Beaumont led focus groups in Invercargill and Balclutha to collect staff views, thoughts and feedback. A good cross section of staff attended the workshops with most occupation groups from within the company represented.

"Thank you to all the staff involved in the recent focus groups. Through your input, Dr Beaumont was able to gather the rest of the data he needed for a holistic insight into our wellbeing practices. We came into this with an open mind and now look forward to seeing the output and recommendations," Marcus said.

The outcomes of the review will be collated and used to help form a direction for the future with the overall aim of ensuring PowerNet continues to be a great place to work.

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Mole Plough

Left: In a first for PowerNet, a mole plough was used to install the main supply cable and telecommunications cable for the Hanley's Farm development. The cabling followed a 2.5km line from the Hilton Hotel area, along SH6 and through private farmland to Hanley's Farm. Pulled by a large bulldozer, the mole ploughs 1.2 metre blade dug a 900 metre deep trench, laying the cabling simultaneously. The 15cm gap left in the earth was then restored by a roller.

Substation Upgrade



Above:
We have improved workplace safety by relocating equipment to above ground and closing underground substations. (L/R: Substation 510 before and after).

New beginnings for Winton staff

Nine PowerNet Winton staff made the transition to Onslow Street in February following the integration of the Winton depot.

The Winton depot had effectively been managed from Onslow Street since 2016 but the change means staff members are now able to work more closely together and can benefit from PowerNet's Invercargill-based office and plant facilities.

The Winton depot played an important role in Southland's electrical distribution history. Many line mechanics learned their trade at the depot. One of them was PowerNet area supervisor Murray Hamilton, who started out as a trainee lineman at Winton in 1984. From there, Murray spent much of the next 33 years working from the same depot in various positions, including linesman, faultman, live liner and depot supervisor.

Murray said that while the closure of the Winton depot is the end of an era, it is also the beginning of a new chapter in the history of electricity in Southland.

"The move was a big change for the staff, but it's one that provides a more diverse work experience which will help build a wider skill base for the team. No doubt the chance to work in different parts of the network while still managing the faults roster in the Central and Western Southland area will bring some challenges at times, but by working together from one depot, and with access to greater resources, it will be more manageable for storm repairs when required," he said.

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Oreti Valley Project update



Lumsden substation under construction.

The Oreti Valley Project is a major five-part project to upgrade and extend the 66kV network to include Centre Bush, Dipton, Lumsden and Mossburn substations by 2020.

PowerNet project manager Roger Scott said stage four of the project is progressing well.

"The new Dipton substation was commissioned as scheduled on 12 December last year, and the first stage of the microwave network has been completed recently too," he said.

All the primary equipment for the microwave network has been installed at Winton substation, Winton Hill radio site and Centre Bush substation. The next stage is to install it between Centre Bush to Elbow, Dipton to Elbow, Elbow to Lumsden, Lumsden to High Peak and then High Peak to Invercargill. Planning and consenting for install at White Hill is continuing.

"When completed, the microwave network will provide high-speed line protection operation between substations and high-speed communications back to system control," Roger said.

After months of planning and consent work, as well as a hold up on concrete poles from a supplier, work is set to re-start on the Centre Bush to Mossburn line upgrade later this month. As part of the upgrade two steel poles will be installed either side of the flood prone Oreti River and joined by a 543m conductor.

In Lumsden, stage one of the major civil works for the new substation is nearing completion and the steel placement has begun. The aim is for an October commissioning date, but that will be reliant on the progress of the Dipton to Lumsden line.

"We are still aiming for October but depending on the delivery of new concrete poles, the line may not be completed by then. More importantly for us though, the critical time to have Lumsden stage one completed and the new transformer in service will be prior to the next heatwave and when the irrigators come online," Roger said.

Roger wishes to thank everyone helping to make this project happen including; PowerNet lines crews (Dipton to Lumsden line), Decom Electrical, Donaldson Construction and Arnott's Drainage (Lumsden substation build), Broadpectrum (microwave installation) Edison Consulting (Lumsden substation designer) Linetech (Sub-transmission line designer), Protection Consulting (line protection designer) and Mitton (microwave designer) along with Corys Electrical and other suppliers that are currently working or supplying equipment for the project.

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BeforeUdig system upgrade

The handy beforeUdig service has been enhanced through new technology to create a much more efficient and effective service for all users planning on underground works.

The beforeUdig plan production service was fully automated in February. Prior to the web-based upgrade, PowerNet Geographic information system (GIS) staff spent much of their time manually producing plans for up to 20 requests each day.

BeforeUdig is an online call centre and website operated by Australian company Pelicancorp. The service provides information, plans and specialist cable location services to anyone undertaking work below ground. Utility companies such as telecommunication companies are regular users of the service, and many other businesses and private land owners also access the service when required.

PowerNet and OtagoNet became utility members of the beforeUdig service in 2012. Until now, PowerNet provided geospatial coverage areas, monitored emails and provided users with any requested plans or cable locations.

GIS technician Mark Aimers said the old process worked well but it was very labour intensive, so in 2016 PowerNet started to look into options to automate the process with Pelicancorp. Now, through the introduction of new software, Pelicancorp is able to gain direct access to PowerNet's GIS.

"The new process is great. The web feature services allow Pelicancorp to interrogate PowerNet's GIS and provide a range of responses back to the users based on our map information," Mark said.

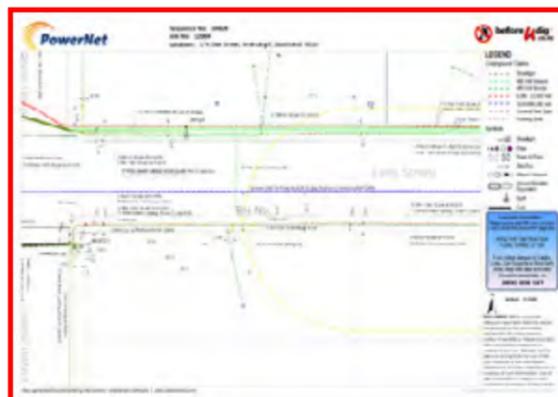
In order to have the best, correct GIS information available for the automated service, 20 PowerNet staff throughout the western region were introduced to new cable location equipment in November 2017, and new cable location regions were created based upon faults areas for each depot. To test the processes in the interim, a semi-automated model was then implemented for four months.

However, Mark said it was when the system went fully automated that the real benefits were recognised.

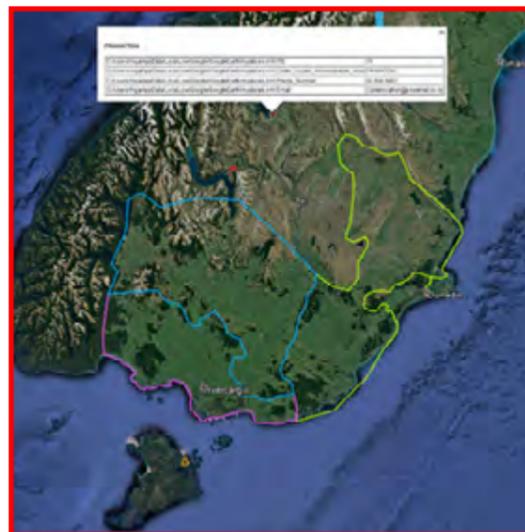
"For the user, it provides greater site location accuracy, less travel, a faster processing time of less than 48 hours and instant user access to key safety information. For PowerNet and its staff, it's about the time savings, increased resource, productivity and having better GIS data and associated documentation."

PowerNet GIS technicians now have more time to focus on updating, maintaining and improving the GIS. As part of the project they have created a new GIS legend and placed greater emphasis on underground cables.

"There are no excuses for anyone to bypass the system, it's now so straight forward for users and staff. A free call to 0800 248 344 will have an operator access beforeUdig on your behalf," Mark said.



Example of the automated response plan from beforeUdig with PowerNet's GIS detail inserted.



Administrative regions with data supplied to Pelicancorp.



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New field audit process

A new external field audit process is enabling safer worksites and staff to be more accountable for the safety of themselves and others.

Network Compliance Limited (NCL) managing director Gavin Rangitahi has undertaken more than 30 audits across field teams and contractors since being engaged by PowerNet in November 2017.

In the past, PowerNet's field audits were conducted in-house, but PowerNet GM HSEQ Justin Peterson said the aim now is for NCL to provide a more regular and more comprehensive field auditing service.

"The purpose of increasing field audits is to ensure people go home unharmed through improved compliance. Having the audit process managed externally, by specialised professionals will help create more consistency, stronger follow up procedures, greater accountability for staff, and overall, a safer work place for everyone out in the field," Justin said.

During the past few months both Gavin and Justin witnessed many positive outcomes of the audits.

"Although we have some areas to work on, it has been pleasing to read the reports and see across the board that PowerNet staff have been stepping up and creating safe work environments for each other," Justin said.

NCL started in 2003 from a start-up company with a simple idea to provide quality field auditing using industry specialists. The company now has five full-time electrical and gas industry auditors, working with the likes of Powerco, Aurora, Network Tasman, Horizon and Alpine Energy.

After each PowerNet field audit, Gavin provides a comprehensive report of his findings at each site, including recommendations on any areas that could be improved in order to keep people safe.

To allow PowerNet to track progress, new templates have been created in Risk Manager that provide an overall score of the audit. The system also records all non-conformances, and from there an action is generated for leaders to resolve.

"The system gives leaders and teams ownership of the safety behaviours and the actions required to ensure they all go home unharmed. We have already been able to put action plans in place to improve our compliance requirements and overall safety in the field," Justin said.

PowerNet will continue to work closely with NCL and regular audits will be conducted throughout the year.



L/R: PowerNet substation maintainer Phillip Chittock with director Joe O'Connell during a visit to the Winton substation to see the installation of the Remote Terminator Unit in March.



L/R: PowerNet director Duncan Fea with substation maintainer Wade Mason viewing a maintenance procedure on one of the Leven Street substation transformers in March.

Directors site visits

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System control process mapping project

Professional analysis of PowerNet's system control department has helped formalise processes, simplify documents, create consistencies and identify opportunities for improvement.

PowerNet contracted process improvement analyst Jackie Reid in January to map system control processes in Promapp and revise relevant quality management systems documents.

To ensure a thorough undertaking, Jackie spent time with system controllers, Roy Duffin and Kana Shanmuganathan, observing what they do, and learning what was happening and why. She then used current quality management system documents as a base to create a number of new processes and to simplify policies and procedures.

PowerNet chief operating officer Michelle Henderson said the bulk of the work is now complete, with more than 30 system control processes, policies and information documents now ready for publication.

"Jackie has achieved a great result. All the new processes were tested and reviewed by the system control team and have been compared to the relevant PowerCo standards. We are now very excited to move forward with these new documents in place helping to create a more streamlined, consistent approach," she said.

The project has resulted in many benefits for PowerNet, Michelle is now encouraging staff to familiarise themselves with the new documentation as staff are expected to follow the one official PowerNet way.

"For some, it may require small changes to the way they currently work but is important to ensure we follow the 'one team, one way of working' philosophy," she said.

Top five benefits

The work has helped...

- Formalise 'what we do' and 'how we do it' into PowerNet systems, rather than in people's heads.
- Identify 'who does what' at each step of the process.
- Simplify the documentation to make it easier to follow and understand.
- Identify numerous opportunities for improvement - some implemented already while others will happen over time.
- Enable consistency as it outlines the 'one way' we operate.

Maximo-Finance 1-Corys integration implemented

After months of successful collaboration, development and testing, the Maximo-Finance1-Corys Advantage integration solution was implemented on March 1.

PowerNet uses Maximo for asset management, Finance 1 for financial accounting and Corys procure Materials for PowerNet.

PowerNet IT staff and stakeholders worked closely alongside consultants from TechnologyOne, Certus Solutions and Corys Electrical on the project to produce a range of benefits for users.

PowerNet Maximo project manager Tony Corkill said that the integration of the three systems makes for more efficient and standardised processes.

"A project manager can now create an estimate in Maximo that will generate purchase orders for Corys Electrical, and other external service providers, that are approved via the delegated financial authority workflow process in Finance 1," he said.

Approved purchase order data is automatically transmitted to the Corys. Their custom middleware system validates the orders, converts the data and generates electronic invoices that PowerNet retrieves overnight.

A TechnologyOne ADAPT consultant created a custom, line-by-line validation programme to process the Corys invoice data, plus a dashboard to display invoices that failed validation in Finance 1.

Tony listed some of the main overall benefits as now having a set process for all PowerNet users, access to richer, higher quality reporting options and a clear "start and end-point" when ordering materials from Corys Electrical.

"This new project is part of our drive for continuous improvement in work and information flow. The business should now see efficiency gains in day-to-day purchasing, reporting and processing," he said.

A number of major features were also implemented in Maximo and a further upgrade of the asset management system is in progress.

ACROSS *the* LINES

Driving safety messages to our communities

The newly formed PowerNet safety communication group is rolling out its first initiative with safety messaging to be branded on company vehicles.

The group consists of HSEQ manager Graeme Webby, communications co-ordinator Kathryn McCoy, field training officer Joe Reti, HSEQ administrator Rachel Saunders and area supervisor Murray Hamilton.

Formed in September last year, the group's current focus is marketing to help reduce network asset incidents involving members of the public.

Two vehicles were branded with public facing safety messages late last year in a trial which received positive feedback. About 12 more vehicles across the fleet are to be branded with similar messages in the near future.

The key safety messages to be promoted through the vehicle branding exercise include keeping trees clear of powerlines, checking for buried cables before digging and looking out for wires when using machinery.

Group member Graeme Webby said that a primary target audience of "30-65 year old males working in rural areas" has been identified in order for the public facing messaging to be most effective.

"Our fleet is constantly moving throughout the entire area we service, so the added branding is great way to get the message out to the communities. This type of mobile advertising will also complement our other promotions that carry the same messages," Graeme said.

Another significant project recently undertaken by the group was a series of new, informative safety videos that can be viewed through PowerNet's website, YouTube channel and Facebook page.

Click on the below links to play each video.

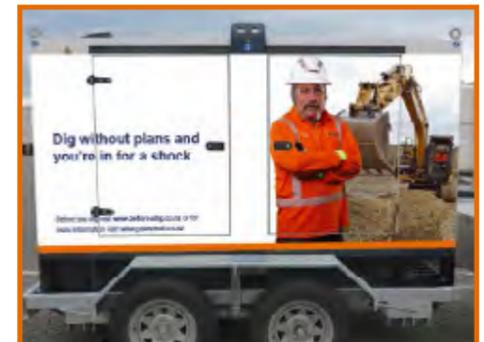
[Before U Dig](#)

[Trees](#)

[System Control](#)

Further marketing exercises for the group are likely to include campaigns on social media and promotional work with sport groups, farming organisations, schools and St John.

Going forward, the PowerNet safety communication group will also be involved in improvements to internal safety messaging, especially around critical risks.



Above: PowerNet vehicles branded with new safety messages.

ACROSS *the* LINES

SCADA equipment upgrade

PowerNet's old SCADA equipment had reached the end of its lifespan. It was recently replaced with new hardware and communication equipment that now meets the TCP/IP Protocols.

Before

After



The before and after photos of the old serial connections to the SCADA servers before the upgrade.

Before

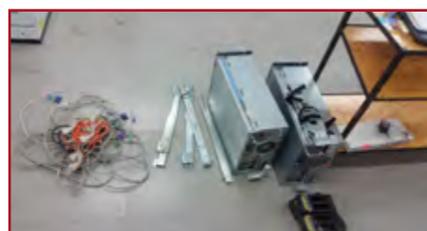
After



The before and after photos shows the server racks.



The old SCADA equipment no longer required.







Thanks to:
Sharon Johnston, Sally Mcleod, Tim Brown, Kathryn McCoy, Rachel Saunders, Waric Cross, Ash Naicker, Michelle Henderson, Rose Snell, Faye McLeod and Fiona Mason for representing PowerNet and collecting at The Batch for this year's St John Annual Appeal in April.

Pictured L/R: Waric Cross, Sally Mcleod, Michelle Henderson and Sharon Johnston.

ACROSS *the* LINES

Southern substation upgrade

PowerNet's upgrade to the Southern substation site near Elizabeth Park in Invercargill is progressing well.

Due to the forecasted load increase, the existing 23MVA single transformer Southern substation site is being upgraded to a dual transformer.

PowerNet project manager Vikas Sharma said the first phase of the two-part project was completed in March with the switchroom building upgrade.

"With a roof replacement, repainting and the addition of steel supports now complete, we believe the risk of outages in the event of a quake is now significantly reduced," Vikas said.

The second phase design work is underway with construction due to begin mid-2019. The target completion date will be in the financial year 2020-2021.

The second phase of the upgrade will include demolition of the outdoor 33kV bus work and structures and replacing it with indoor 33kV switchgear. It will also see the replacement of old 11kV switchgear, and a second 11.5/23MVA transformer from the former-Doon Street substation will also be added.

"The refurbished substation will be built to modern earthquake standards and away from earthquake prone structures. This is so customers can continue to receive the safest and most reliable power supply possible in the future," Vikas said.

The key contractors to the project thus far include Coles Consulting, Donaldson Construction and DECOM Electrical. The PowerNet technical team carried out the switch work to offload and re-energise the substation.

"There have been many people involved who helped make this project run smoothly and we really appreciate their support and ability to deliver such a quality project on time. We are also thankful to the public for their patience and support."



The roof replacement.



Preparing the panels protection barrier.



The physical barrier around the 11kV panels.



Construction on the substation underway.

ACROSS^{the}LINES

Corys Electrical golf competitions

Three PowerNet golfers were part of the team that represented Corys Electrical lower South Island branches at the companies South Island golf final in Arrowtown in February.

After taking out the Corys Electrical lower South Island tournament in November, the team faced off against upper South Island winners Rangiora for the prestigious Cory-Wright cup.

Team members Michael Mackway-Jones, Tania Cribb and Greg Buzzard from PowerNet, and Daniel Blair from Corys Electrical provided the highest pair score of 48, but came in second to the more consistent Rangiora players.

At the Corys Electrical lower South Island regional play-off tournament in Cromwell in November, teams from the region's six electrical branches went head to head, with each team consisting of a Corys Electrical representative and three clients.

The Frankton Corys Electrical branch, which opened to service the rapidly growing Frankton and Wanaka based Electricity Southland Limited electricity network managed by PowerNet, competed for the first time. PowerNet staff consisting of Greg Buzzard, Michael Mackway-Jones and Tania Cribb (Invercargill), Steve Pringle (Ranfurlly) and Fraser Morrison (Balclutha) along with representatives from Peak Power Services in Frankton also took to the course.

PowerNet chief financial officer Greg Buzzard said the annual competition provides a great opportunity for staff to meet work colleagues from across the region in an environment outside of work.

"Thanks must go to the team at Corys Electrical, especially South Island Regional general manager Wayne Reddecliffe for taking the time to organise and host the very popular event across their branches," Greg said.

Looking ahead, the competition is set to become even more competitive with Corys Electrical due to open more branches throughout the region in coming years.



A defibrillator for Five Rivers area



Five Rivers Café is the latest Southern organisation to benefit from a life-saving donation from PowerNet and St John.

An automated external defibrillator (AED) was donated to the cafe in February, one of four donated to Southern communities this year.

The donation is part of PowerNet and St John's sponsorship to improve public safety and education in the south.

The sponsorship includes the donation of four AED devices annually to the network communities which PowerNet manages.

Five Rivers Café manager, Harry Sheehy said the café was delighted to receive the donation.

"Our café is very safety focused and is immensely pleased to receive the generous donation of an AED from PowerNet. It is great to have the AED on site and know it could potentially save a life in the future.

The AED will be installed in the café entrance readily accessible to all visitors," Mr Sheehy said.

When available within minutes of a cardiac arrest occurring, an AED can vastly improve a person's chance of survival.

PowerNet chief information officer Tim Brown, said the AED donation was another way the company could support the Southern community to stay safe and healthy. Along with the AED donation, two Level 1 First Aid training sessions for the Five Rivers Café staff would also be provided by the PowerNet funded programme.

"Our partnership with St John is about using our joint resources to promote safety in our communities, mostly through education. It's great that PowerNet is able to back this up with the donation of life-saving equipment such as AEDs," Tim said.

Pictured above L/R: St John Northern Southland area committee chair George Stewart, St John Lumsden station manager Helen Bottcher, Five Rivers Café manager Harry Sheehy, The Power Company Ltd chair Doug Fraser, PowerNet depot supervisor Maurice Graham.

ACROSS^{the}LINES

Welcome to our new staff



Jon Palenski
Arborist
Palmerston



Wade Mason
Substation maintainer
Onslow depot



Ashish Naicker
Web developer
Racecourse Road



Sosiceni Rakaidawa
System controller
Racecourse Road

Welcome:

Angela Dixon (Racecourse Road) and Sohail Bhatti (Racecourse Road).

Congratulations:

Shaun Colley on his appointment of field training officer, Lyndon Whale on his appointment of depot supervisor (Balclutha).

Farewell:

Jim Giller (Frankton), Tracy South (Racecourse Road), Cory Sutton (Balclutha) Bevan Cooper (Racecourse Road), Troy Kelly (Gore), Ben McKenzie (Student), Bondili Singh (Racecourse Road), Chris Smith (Balclutha), Sean O'Connor (Racecourse Road) and Chris Walker (Balclutha).

Thanks to the Australian arborists:

Three Australian arborists assisted PowerNet in March to reach vegetation control targets for the 2017/18 budget year. The Asplundh team of Ethan Hindman, Ashley Thompson and Dan White spent five weeks with PowerNet arborist team leader Rob Dickie and his crew undertaking priority tree cutting tasks. During their time working on the OtagoNet network the teams compared work methods, procedures and processes and our Australian neighbours went home very impressed with how the PowerNet arborists operate. Rob wishes to thank Ethan, Ashley and Dan, the PowerNet Balclutha team for giving them all such a warm welcome. Thanks also goes to PowerNet Arborist services manager Mark Way and Asplundh general manager Steven Milburn for coordinating the experience.

Personal achievements:

Congratulations to Michelle Henderson on her appointment on the SIT Advisory Group. Mark Way who completed the Hollyford Track in Fiordland over Easter, racking up 121,000 steps for the Workplace Step Challenge over the 56km distance.

Sporting achievements:

Congratulations to Chris Carey who managed to negotiate the trees well recently on the tight Temuka golf course. Chris won 'best net' in the intermediate section at the Electropar South Island Power Companies two-day golf tournament in February. Mike Johnston on his 1st place in the Te Anau Club's annual fishing competition. Aaron Sinclair's son Flynn on winning the Swim Across Lake Te Anau race in February, clocking a time of 24mins 2sec for the 1.9km swim. Justin Peterson participated in the Gut Buster (75km) and Steve Labes and Mike Dela Cruz rode the Motatapu event (47km). The Brew Chop event (40km) saw PowerNet participation from Steve Labes, Paul McCullough, Justin Peterson and Mike Dela Cruz.

Baby congratulations:

Simon Faddes on the birth of his son Brooklyn Jack born on the 15 March weighing in at 6lb 12oz.

Congratulations Jessie!



In March, our very own Karate Kid - Jessie Wynne (who by day, is an apprentice substation maintainer) was awarded her Shodan Black Belt grading in Auckland.

Two weeks later, Jessie attended the World Association of Kickboxing Organisation (WAKO) 2018 Oceania Open Championships held in Australia. Jessie placed runner-up in the Under 52kg Junior Kickboxing title fight and gold in the Amateur 52kg boxing division. The gold medal was an amazing accomplishment for Jessie as it was her first competitive experience in the boxing ring. Jessie has practiced karate for eight years and kickboxing for four years.

