

July 2016

ACROSStheLINES

PowerNet Appoints A New Chief Operating Officer

The new Chief Operating Officer role is critically important for the newly amalgamated PowerNet.

PowerNet's Chief Executive, Jason Franklin says given the importance of the role, PowerNet engaged an external recruitment company to undertake an extensive search, to ensure the best person was selected for the role.

"It gives me pleasure to announce the appointment of Michelle Henderson to the new Chief Operating Officer role for PowerNet," Jason says.

Michelle will join PowerNet from Rio Tinto Iron Ore in Perth, Australia. Her current role is General Manager Engineering and Asset Management.

Over Michelle's 24 year career she has held a number of varied roles with Rio Tinto, starting as a Graduate Engineer at New Zealand Aluminium Smelter (NZAS) at Tiwai Point in the early 1990s. Michelle left the NZAS Tiwai plant in 2010 and transferred to Rio Tinto's Gladstone plant in Queensland, where she held various roles before transferring to the Rio Tinto Iron Ore operations in Western Australia.



Issue 181

Michelle Henderson

Michelle has significant engineering, leadership, business improvement and workplace safety experience from her varied Rio Tinto roles.

Michelle will leave Perth in late September and start at PowerNet at the start of October. She will move back to Southland with husband Kipp and their two children, Scott and Amanda.

PowerNet Achieves Tertiary Accreditation



Left to right: PowerNet's Deon Bridger (Health & Safety Combined Committee Chairman), Graeme Webby (HSEQ Manager) and Amanda Milne (HSEQ Officer) The management of PowerNet's workplace safety has been acknowledged with the top level Tertiary status of Accident Compensation Corporation's (ACC) Workplace Safety Management Practices (WSMP).

The certificate recognises the company's commitment to continuous improvement in workplace health and safety. It also comes with an added benefit of a 20 percent discount on the company's ACC levies but as PowerNet Health, Safety, Environment and Quality (HSEQ) Manager, Graeme Webby explains, the accreditation means much more than that.

"Health and safety practices help prevent incidents and injuries of course, but they also reap many other wider benefits, from improved employee attendance and motivation to greater productivity and company reputation," he says.

He believes good health and safety standards are vital in any workplace and pointed out that the WSMP audit process also aligns strongly with PowerNet's Critical Success Factor of Continuous Improvement.

"Achieving the tertiary status provides peace of mind for the entire company; that an independent body has assessed our health and safety as best practice."

Graeme believes the accreditation is the result of thorough work and dedication by many PowerNet staff but singles out HSEQ Officer Amanda Milne for her commitment to attaining this status.

"The ACC WSMP audit process is quite intensive and requires a lot of preparation to ensure the information the auditor needs to see and the people the auditor needs to talk to, are readily available. All this preparation was done by Amanda and it's largely thanks to her efforts that we successfully achieved top tertiary accreditation."

The ACC WSMP certification is current for two years, at which time PowerNet will repeat the audit process to maintain the status.

Assistance Given To Fiji After Cyclone Winston

Fifteen PowerNet staff have had a once in a lifetime experience working in cyclone-stricken Fiji during the past three months.

The strongest cyclone to ever hit the Pacific Island nation, Cyclone Winston, struck on 20 February causing much devastation including major damage to the Fijian electricity network resulting in significant power outages.

The need for experienced line mechanics was immediately requested through the Ministry of Foreign Affairs and Trade and PowerNet soon jumped at the chance to join international recovery efforts.

PowerNet Chief Executive Jason Franklin said he was pleased to be able to provide the much needed expertise and resources to help with the reconstruction of the country's electricity services.

"It's great that we have a pool of highly trained and skilled staff that we can draw on to provide this kind of support," he says.

Throughout April, May and June, three teams of five line mechanics from PowerNet each worked for approximately three weeks near Luatoka, the country's second largest city. The PowerNet teams were working hard alongside New Zealand crews from Top Energy, North Power, Unison and Powerco. Their tasks included disconnecting fallen lines and clearing debris so power lines could be reconstructed safely, erecting fallen power poles and re-stringing lines, as well as reinstalling fallen transformers and other overhead distribution equipment. A PowerNet crane truck was also shipped to Fiji for use in the reconstruction work.

The first team, who set off on 2 April included Team Leader Reece Stephenson and Line Mechanics Mark Payne (Gore), Joe Clarke and Sachin Chand (Invercargill) and Cory Sutton (Balclutha), arrived to an added challenge. A second significant cyclone, Cyclone Zena, was passing through and all work was postponed until it had moved on.

Just two days after the first team returned home a second team, consisting of Team Leader Mark Isaacs (Gore), Rob Gray (Balclutha), Hector Diamond, Tauira Patterson (Invercargill) and Mike Johnston (Te Anau) set about the same labour intensive repair work in the same area, about an hours drive inland from Luatoka.

Then, on 17 May it was the final team's turn, with Lyndon Whale (Team Leader), Daniel Marshall (Balclutha), Travis Bastiaansen, Simon Latty and Cole Birse (Gore) all heading over to do their bit for the Fijian recovery effort.

PowerNet Service and Delivery Integration Manager, Justin Peterson praises the efforts of all those involved.

"Seeing the devastation first hand was no doubt a sobering experience for them all. It was also very hot and humid so to keep hydrated they were needing to drink up to 10 litres of water a day. The work was very manual as the teams did not have the luxury of modern equipment. They all worked hard and got their part of the job done. The feedback from other networks and their teams was fantastic. It's great we can showcase the talent we have and to be recognised for it; we are very proud of them," Justin says.



Joe Clarke working amongst Fiji's sugar cane



The PowerNet crane truck working on the Fijian network



PowerNet's Joe Clarke



Lunch break for Team 1

A Minute With Mark

Mark Isaac from Gore was the Team Leader of the second PowerNet team working in Fiji. Here's what he had to say about the experience:

Describe your Fijian experience in three words Awesome humbling country

What was the biggest work-related challenge you faced there? Heat - and walking through dense sugar cane!

What team achievements are you most proud of from your time in Fiji? Too many to mention them all, but completely rebuilding a feeder from the ground up is hard enough in New Zealand let alone in a tropical country with the limited plant and equipment we had. So I was proud of the guys and how they coped with the long days and the heat.

Did you get a chance to see the sights? We managed to cram in as much as we could on our day off (Sundays). We went to Beachcomber Island, Cloud 9 Fiji, Denarau Island, Loutoka Market and Nadi.

What is the one thing about the Fijian experience that will always stick with you? Driving past a village every day watching kids playing touch rugby on a dirt field. Some days they had a ball and some days they had a coconut - apart from that, the fact that we were treated like kings by all the locals.



PowerNet's Mark Isaac

Would you do something like this again and why? In a heartbeat. I loved working with different line mechanics and companies. We shared and learnt new ideas and techniques. We generally knew how to have a good time. Apart from that, throw in a tropical Island and I'm there!







All four photos show the destruction caused by Cyclone Winston

Invercargill Charges Into The Future

Invercargill's first public electric vehicle (EV) fastcharging station was officially opened at 116 in Esk Street (next to the Scottish Hall) by Sarah Dowie, MP for Invercargill, on Thursday 21 April.

PowerNet's General Manager Business Support, Tim Brown said the fast-charge station was a joint project between PowerNet and Auckland based company Charge Net NZ.

"Charge Net NZ, is the operator of a nationwide electric vehicle charging network and has supplied the user-pays fast DC charger unit. The fast- charging unit can provide an 80 percent charge for a vehicle in 10 to 25 minutes through a plug-in DC charger. Electric vehicle drivers can access the fast charger network via an RFID card, which drivers tap against the charging unit to activate it, or via a smart phone App," Tim says.



Sarah Dowie, MP Invercargill and Steve West, Charge Net NZ

The joint project between Charge Net NZ and PowerNet will make EVs a viable option for more people living in, or passing through Invercargill.

"EVs are becoming an increasingly viable and attractive option for everyday road users. More New Zealand businesses are also making the shift to 100 percent electric or plug-in electric hybrids. Whilst EVs can be charged at home or at a workplace, a reliable and public fast-charging infrastructure is essential for growing New Zealand's electric fleet," Tim says.

Supplying the infrastructure for the EV fast-charger shows PowerNet's commitment to promote sustainable energy in the Southern Region.

"PowerNet and Charge Net NZ have a cooperation agreement to explore future opportunities to install further EV fastcharging stations around the Southern Region," Tim says.

Cory Sutton gains a National Aviation Title



PowerNet's Cory Sutton

In February 2016 PowerNet Distribution Line Mechanic (Balclutha), Cory Sutton and South Otago Aero Club member Jimmy Crawford attended the 2016 New Zealand National Aviation Championships held in Ashburton.

Cory says winning the 2015 Regional Aviation competition qualified the pair to attend the Nationals.

"Our decision to enter was on the spur of the moment; we thought we might as well "have a go" at the national event."

Cory says the conditions in which they flew were everyday conditions for South Otago, but for the Cantabrians it was considered rough and difficult.

"The competitions consisted of flying and navigating a set route, completing a set number of tasks, and ultimately dropping a flour bomb on a target from a designated altitude," he says.

We were both amazed at how our flight went. We virtually had no practice prior to entering so we were pleasantly surprised when it was announced that we were the competition winners.

Rewarding work completed as six 'H Structures' replaced

PowerNet's Onslow Street depot line mechanics completed one of their largest projects of recent times in May when they finished the 'Gap Road' upgrade.



A cross arm being lifted off the 'H structure' on Gap Road

Six 'H structures' were replaced over a period of a month between North Makarewa and Winton. The PowerNet Pole Inspection team categorised the structures as needing urgent maintenance in February when they noticed one was no longer safe after being hit by lightning and that others had considerable deterioration.

The line runs a 66kV double circuit from North Makarewa Substation to Winton Substation. PowerNet Distribution Line Mechanic Team Leader, Shane Lawson says it was a critical part of the subtransmission network.

"The work was needed to secure reliability to many substations, including the new Oreti Valley Project. It's a great example of our purpose statement [Safe - Efficient - Reliable – Power to Communities] and we are really pleased with how it was executed," he says.

At any given time a team of six line mechanics worked on the job. The old poles were between 15-17 metres long and were lifted out when the help of contractors Noel McIntyre Drainage, Purdue Bros Limited and Smiths Crane & Construction. The poles and crossarms were then replaced by the PowerNet team and the original conductors were reused. Each structure replacement

took 1-2 days and Shane says that a good patch of weather created favourable working conditions and good paddock access. He also noted however, that the last structure they worked on at Gap Road turned out to be rather challenging.

"It was surrounded by running gravel, so instead of simply digging a hole we spent a couple of days hydrovacing and fitting three metre deep sleeves to shore the hole."

The challenge was elevated as the structure above the running gravel was situated in a residential area, meaning the 11kV line had to be isolated and generators needed to be supplied to industrial customers affected by any outages. Shane was pleased to see the team making the most of the opportunity to work together out in the field on a larger scale project, learning new skills and overcoming the challenges.

"It was an awesome team vibe right throughout the project. We were excited to be working on something different and we all got that good feeling of success when we completed the last structure."

Well done to PowerNet's Helen Widdicombe who took the plunge by having her hair shaved to raise money for charity.

Helen before



"I'd been thinking about shaving my hair off for a charity for a while. The Leukemia and Blood Cancer Foundation 'Shave for a Cure' provided me with an excellent opportunity to shave all my hair off and help a charity out in the process. Nobody else in the Balclutha office was prepared to do it in spite of the joking about a mass shave last year.

I raised a total of \$580 which I am rather chuffed about."



Helen after

Stage Two Commences For The Oreti Valley Project

Stage two of the Oreti Valley Project (OVP) is underway, with the substation and line upgrade work now targeted around the Centre Bush, Dipton and Lumsden areas.

The OVP is a major long-term plan to upgrade and extend the 66kV network to include Centre Bush, Dipton, Lumsden and Mossburn Substations. PowerNet Project Manager, Roger Scott said the OVP will help ensure network supply reliability, future proof the area for potential growth and also increase generation capability into the network.

The first stage of the project was carried out in 2015, with a new 66kV line installed out of the Winton Substation to the west across the Oreti River and north to the Centre Bush Substation; 132 poles installed across 12km. Stage two is another labour intensive stage, encompassing the Centre Bush Substation upgrade and feeder cable installation, Centre Bush to Dipton line design, Dipton Substation detailed design and Lumsden Substation upgrade detailed design. The first four of nine new microwave communication sites in the area will also be completed as part of stage two.



Two of the communication towers for the Oreti Valley Project

"Upgrading the existing line from Centre Bush Substation to Dipton Substation will involve rolling outages along the line to raise the existing 33kV line voltage by installing 66kV insulators along the line and also re-insulate the 11kV line with 22kV insulators for a future 22kV conversion project. The sections that have 400V under-build will be removed and installed on the opposite side of the road or installed underground," Roger says.

According to Roger, staff and contractors are making great progress to date, with the design of the Centre Bush Substation and feeder cable already complete and the microwave installations underway. "The design of the Winton and Winton Hill microwave installations are complete, the Lumsden microwave design is currently being modified and the Elbow microwave installation is still under negotiations for access to the Elbow tower which is five kilometres north of Lumsden," he says.

The Centre Bush to Dipton line legacy pole testing and foundations work has been completed and is currently awaiting a report to confirm the proposed upgrade will conform to AS/NZS7000. The Dipton Substation detailed design has been reviewed and the Lumsden conceptual design has been completed and the soil contamination and site geotechnical reporting is underway.

Along with PowerNet line mechanics, the work of many consultants and contractors, namely Mitton Electronet, Protechtion Consulting, Beca Consulting, Linetech Consulting, Edison Consulting, Decom Electrical, Donaldson Contractors, Wilson Contractors, Traffic Management NZ will help see stage two of the OVP completed by March 2017.

With astute planning in place, outages will be minimised by back feeding supply from alternative sources. The project is divided into five stages, the last of which is expected to be completed before the end of the 2020 financial year.

Tracksuit Inc



Two Underground Substations Merged

The underground substation 519 on the corner of Deveron and Don Streets and the above ground substation 521 on Don Street have been merged into a new, centrally located above ground substation called Sub 519 Deveron South of Spey.

The new substation was completed, tested and livened on 13 June, after the decommissioning work and removal of the old substation was completed a month prior.

PowerNet's Substation Maintainer and Site Supervisor Paul Barclay said the old 'Don Lodge' Substation 521 was first earmarked for decommissioning following a fault in the HV cable feeding the transformer in 2014.

"The switch in sub 521 was unreliable and also had operational restrictions, so it made good sense to replace it, and with the increase in capacity in the new 519 Deveron South of Spey, all it took was a couple of extra low voltage cables from 519, and a link box upgrade across the road to relocate it," he says.

The PowerNet team working on the project included Phil Hartley (Project Manager) Jason Nicolson (Electrician/Cable Jointer), Jordan Coutts (Apprentice Electrician) and Andrew King (Line Mechanic/Cable Jointer).



Left to Right - PowerNet's Jordan Coutts, Andrew King and Paul Barclay, lifting the new switchgear into position at sub 519

Bond Contracts Limited completed all the excavating and reinstating work including the installation of ducts under the carpark in the early stages in preparation for the pending switchgear.

Paul said the team worked hard to keep the adjacent shops and businesses clear for their customers during the day and worked during cold wet nights when electricity shutdowns were required and thanks those affected for their understanding.

The relocation of the old substation 519 is the second of 12 to be carried out over a three year period as part of a major underground substation relocation project. The next underground substation for replacement will be Sub 614 (Herbert West of Carron), then both Subs 511 (Dee North of Tay) and Sub 529 (Government Sub) will be combined into one new substation. These projects are scheduled to begin in August and are expected to be completed before the end of the 2016/17 financial year.

Directors Learning From Worksite Visits



Sarah Brown (Director), Roger Scott, Dave Tose (PowerNet) and Peter Leith (Decom) PowerNet's Directors have all agreed to be actively involved in site visits around the three major networks PowerNet manages.

PowerNet Chair, Ross Smith says the visits are proving extremely informative for Directors in gaining a better understanding of Health and Safety risks as well as helping identify any areas of concern they or the staff they visit have.

"We work in a high risk industry and irrespective of the recent changes to the Health and Safety Act Directors felt a need to better understand those risks and the efforts we were making to mitigate them by way of additional Safety Equipment, increased Training and Development and improved Safety Policy and Procedures. A key objective for both the Board and the Senior Leadership Team is to ensure we have a culture within the business that promotes safe work practices ensuring the safety of both staff and the public. 'Home safe everyday' is critically important," Ross says.

All Directors have been scheduled to make at least two site visits per year.

The planned visits will include major asset replacement projects or smaller maintenance projects and will involve both PowerNet staff and external contractors.

"Not only are we gaining a better understanding of our business and of Health and Safety risks, we are finding interaction with the field teams is very positive," he says.

Any observations are fed back to the monthly Board meeting and if required are followed up by the Chief Executive.

The visits are expected to be a permanent fixture in the Directors' schedules.

Underground Medical Emergency Drill Hailed A Success

When a 'medical emergency' drill was initiated in an underground substation recently, PowerNet field staff and the Invercargill Fire Service kicked into emergency response mode.



Rescuers from the Invercargill Fire Service; Paul Dawson, Adam Milne, Anthony Haines Neil Ladbrook and Duanne Shannon. In the Stokes basket is Andre Grobler (PowerNet).

PowerNet Field Safety and Training Advisor, Phil Johnson said emergency response drills are conducted regularly to ensure the health and safety of everybody involved, and the underground scenario was no different.

"It's extremely rare to initiate an emergency response as a result of an incident occurring in an underground substation. I've not known it to occur in my 30 years in the electricity sector, however it's still very important that we practice the response procedure and understand what needs to be done."

The exercise was held in May on Herbert Street at one of the network's 11 underground substations; all of which will be progressively shifted above ground over the next three years as more modern equipment is installed.

The scenario was played out over two hours, with a PowerNet staff member having suffered a medical event and needing evacuated from the compact substation through a maintenance hole in the Herbert Street median strip.

"The situation aimed to test our emergency planning procedures and allowed staff to gain experience in rescue and first aid. It also helped prepare them for the unlikely event should such a situation unfold," Phil says.

Phil noted the biggest challenge faced in this scenario was access, with most of the four-by-five-metre substation being taken up with electrical equipment. To overcome this issue the fire service used speciality rescue equipment designed for confined spaces.

Three fire appliances attended the exercise and firefighters successfully lowered a Stokes basket, a stretcher where a person is strapped in and immobilised to prevent further injury, and hoisted the 'patient' to ground level.

PowerNet and the Fire Service wish to thank customers affected by the short power outage necessary to complete the exercise, as well as the motorists who were in the area at the time for their patience.

Lean Management Update

PowerNet's Business Development Manager, Rachael Watt says -

The lean management central visual boards have been populated at Racecourse Road with information sent to all our depots to update the individual depot boards. Individual depot KPI and 5S information will be kept up-to-date, providing the depot with a visual representation of performance. The Senior Leadership Team board at Racecourse Road will provide a representation of performance across PowerNet (including network specific KPI measurements).



PowerNet's Social Club Annual General Meeting 22 July at 8.30am, Edison Room (Board Room), Racecourse Road, Invercargill. All Welcome!

Two upgrades for Makarewa Substation

The Makawera Substation has undergone two upgrades in recent months, with the install and commissioning of a replacement Remote Terminal Unit (RTU) and new arc flash protection.

PowerNet Senior Technical Project Manager, Phil Hartley said the RTU was replaced due to age and reliability, while the arc flash protection install was part of a network improvement safety initiative for substations with indoor switchboards.

"As the interface between system control and substation equipment, the RTU provides valuable feedback on the status of other equipment, so it's very important to always have it up to date. The arc flash protection equipment has been installed to provide quick isolation of the switchboard in the event of an arc flash and to minimise damage to the switchboard and risk to personnel," Phil says.

The RTU replacement was commissioned in March, led by Senior Protection Engineer Robert Ivory with the panel build and wiring being completed by Power Systems Technician Jeff Carmody.

Then in May, the arc flash protection was installed and commissioned. This involved running a clear fibre optic cable around the switchboard and installing new protection relays with arc sensing capabilities . This work was completed by Maintenance Supervisor Jacques Vergottini, Substation Engineer Jack Wadworth and Jeff Carmody.

Phil said that the success of both the recent upgrades means the designs for the new RTU and arc flash protection will now become standard for future projects.

"We now have a standard RTU design which we can roll out to other upcoming RTU replacements projects - Heddon Bush will be the next. It's the same with arc flash; we now have a standard design that we can roll out to other switchboards as needed."

Deloitte Energy Excellence Award Entry Selected As A Finalist

PowerNet's "Saving Lives Together" entry in the Deloitte Energy Excellence Awards has been announced as a finalist in the 2016 event.

The annual awards provide an opportunity to recognise excellence and achievement across the electricity, gas, petroleum and transport energy industries throughout New Zealand.

PowerNet General Manager Business Support, Tim Brown says the awards had six entry categories and our entry was in the Community Initiative category with our major sponsorship of St John.

"We wanted to recognise the great work St John do in the community as well as capturing and summarising all the activities we have been working on with them. Our award entry team, consisting of PowerNet's Communications Co-ordinator, Kathryn McCoy, Vivien Lightfoot (contracting journalist), Charizabel Sapiandante (St John) and Haylee Officer (AD Design) did a great job capturing and articulating the feedback we had from our staff, St John and more importantly the community who benefit from this programme," Tim says.

Chairman of the 2016 judging panel, Toby Stevenson, says the calibre of entries was extremely high and the finalist selection process had been tough as this year, there had been a record number of entries received.

Tim says, "We are thrilled to be recognised as a finalist. The teams from both PowerNet and St John have worked hard and really well together to deliver first aid awareness, training to the community and promote the general health and safety theme."

Finalists in the Community Initiative Category include, Shell New Zealand (Helping Kokako sing again in Taranaki),





King Country Energy (Tree of Light:Em-POWER-ing A Rural Community In Need) and Powerco (School Safety Programme).

"While being a finalist is great, it's the benefit to and feedback from the community both organisations serve that excites us," Tim says.

Winners will be announced at the industry's Black-Tie Gala Event held at SKYCITY, Auckland on Wednesday 10 August.



Spey Street Substation Project Completed

Left: The old villa at 219 Spey Street

Right: PowerNet's Network Assets Manager Mark Zwies outside the new Spey Street Substation after completing Stage 1

One of the most significant upgrades to Electricity Invercargill Limited's (EIL) network was completed by PowerNet at the end of March after four years in progress.

The \$12.3 million Spey Street Substation project comprised the construction of a new substation supplied by a new 33kV cable from Transpower's Invercargill grid exit point at Tuai Street, a 33kV extension cable from the Doon Street Substation, 12 new 11kV feeder cables to transfer the existing load from Doon Street, as well as the reconfiguration of the Doon Street site.

The 33kV cable from the Transpower site runs 4.2km from the grid exit point in Tuai Street, down Yarrow Street, across Queens Drive and into Spey Street.

The new fully enclosed substation is built to resilient earthquake standards and away from earthquake prone structures. It contains two 36MVA transformers and two 11kV switch boards, separated for added supply security.

The project was planned in 2012 when the Doon Street Substation, near the Invercargill Water Tower, was identified as a high-risk location in the event of an earthquake. PowerNet Chief Executive, Jason Franklin said the development gives greater security and reliability of electricity supply for Invercargill businesses and residents while future-proofing the EIL network.

"The requirement to shift from Doon Street meant we looked at the needs of our customers and at the same time, we have allowed for future growth," Jason said.

PowerNet Major Projects Manager, Vikas Sharma said he was pleased with the quality and schedule of the finished project, which was the biggest EIL undertaking since the undergrounding of overhead lines began in the 1960s.

The experienced PowerNet Technical team carried out the required 11kV testing and commissioning work on the Spey Street project, while key contractors involved were Decom Electrical Limited, Bond Contracts Limited, Delta Utility Services Limited and Calder Stewart Industries Limited. Other contracting and consulting companies involved were Southern Quantity Surveyors, McDowell Architects and Corys Electrical.

"There were many people involved who helped make this project run so smoothly and we really appreciate their support and ability to deliver such a quality project on time," Vikas says.

Vikas noted one of the biggest challenges of the project was trenching and installing the underground cables in the vicinity of existing live power cables, fibre and other services such as water mains and gas pipelines.

"We also wish to thank all the residents and businesses along the route for their

patience and understanding while we completed the work, and especially the upper Spey Street residents for bearing with us while the substation was constructed," Vikas said.

Residents will notice further tidy-up works in the area over the coming months and reconfiguration of the old Doon Street substation will be completed in 2019 with the demolition of the control building and site reinstatement. All major equipment on the Doon Street site will be refurbished and used elsewhere on the EIL network.

KEY FACTS

- PROJECT MANAGERS -MARK ZWIES AND VIKAS SHARMA
- PROJECT COST \$12.3
 MILLION
- REPLACES THE OLD DOON STREET SUBSTATION
- FOUR YEARS TO
 COMPLETE

Link Box Relocation Project Continues

Electricity Invercargill Limited operates a 400V link box network in the Invercargill Central Business District.

Link boxes are important in distributing power to different parts of the city as they provide a means of tying between transformers and help to minimise outage times during fault situations. The PowerNet technical team has been replacing underground link boxes for several years, but Technical Services Manager, Trevor Simmonds says a new, more aggressive programme is now in place to bring the remaining 58 underground boxes above ground.

"The aim of the project is to make the city's power supply even safer and more reliable, with the relocation of two link boxes per month. Four below ground link boxes have been replaced since the start of April with another two in progress. The above ground boxes are easier and safer for our staff to work on," Trevor said.

Updating all the ageing underground low voltage boxes is expected to take

about three years and will mean a total of 130 above ground link boxes in the network. Trevor explained that shifting a link box sometimes involves an unscheduled switching outage of around 10 or 15 minutes while the box is isolated and reinstated from the main substation.

"Our technical field services team work with individual customers to minimise the impact of disruption to their power supply. This often means working outside business hours, so it's less likely people will be affected," Trevor says.

PowerNet's New Intranet Comes To Life

PowerNet's new Intranet powered by SharePoint went live on Monday 23 May, delivering a modern, clean, fresh look and feel to all comptuer users within the company.

The benefits don't stop at just the look and feel says PowerNet's Database Administrator Steve Labes. The new SharePoint Intranet is a way to centralise access to the company's information and applications.

"It is a tool that will help PowerNet manage its internal communications, applications and information more easily," Steve says.

Designed and deployed by contracting company Intergen, the Microsoft product SharePoint took approximately six months to configure and install. The SharePoint software provides a platform to launch all PowerNet's web applications, which is the way future software is heading.

"It also displays dashboards and reports really well, interacting with our current Document Management System (DMS)."

The new Intranet will be an important part of PowerNet's technology road map and it will assist in the centralising of information making it easy for staff and stakeholders to access. The old intranet was based on the DMS and was restricted to only being able to perform certain functions. The new Intranet will allow a platform to deliver rich information such as video, mobility in the field, displaying graphs and pictures automatically and interconnect automatically to other applications like Smartrak and Yammer.

"SharePoint uses modern technology and is scalable to move as PowerNet grows. The next step for us is to build a Data Warehouse which will allow better access to data and reports for staff. This is essential to display dashboards and other reports like Key Performance Indicators," Steve says.

Unlike the old intranet, SharePoint will have 21 in-house content contributors, all trained to keep the site's content up-todate.

"Prior to the launch, PowerNet's Infrastructure Manager, Claire Wallis and I visited the depots providing training to staff on SharePoint and Smartrack. The site is easy to navigate so most people can find their way around without too much training, but with our trained contributors help should always be close at hand for anyone who gets "stuck" along the way," he says.



The old underground link box (rear) and its lid (front) from lower Esk Street

Isla Bank Substation Complete



Photo: Isla Bank Substation

The electricity supply to those in the Western Southland area has been improved and future proofed following the commissioning of a new substation at Isla Bank.

KEY FACTS

- PROJECT MANAGER
 NATHAN DONNELLY
- PROJECT COST \$4.8
 MILLION
- BUILT TO SUPPORT THE GROWTH IN DAIRYING IN THE AREA IN WESTERN SOUTHLAND
- SUBSTATION CAPACITY
 5MVA
- CURRENTLY RUNNING AT
 11kV
- 18 MONTHS TO COMPLETE

The Power Company Limited's \$4.8 million Fairfax to Isla Bank line upgrade and new Isla Bank Substation project was completed on 31 March 2016. PowerNet commenced the line upgrade work in 2014, which entailed the construction of an 11kV and 66kV overhead line, as well as an 11kV underground feeder cable from the new substation. The line runs about nine kilometres from the 66kV Riverton-Otautau line at Fairfax to the new substation on Boundary Road. With the work undertaken around other PowerNet projects, contractors Decom Electrical Limited constructed the new substation over a period of 18 months.

PowerNet Project Manager, Nathan Donnelly said the line and substation were built to meet increasing demand for electricity in the Western Southland region.

- "The current demand and predicted future demand is largely due to the growth of dairying in the area," he said.
- The substation capacity is 5MVA and, as Nathan explains, it has been constructed to allow for future upgrades if required.
- "It is currently running at 11kV, but should the network change to 22kV it can operate at that voltage with minimal work needed," he said.
- Nathan was pleased with the high standard of work and safety carried out during the project as well as the project schedule.

"I would like to thank Decom Electrical Ltd and their subcontractors for their hard work in achieving this milestone and also our Winton crew for building the line supplying this new asset."

The substation is now fully operational and is providing a safer and more reliable power supply to the region.

Barry Woodrow's mission to Papua New Guinea



PowerNet's Barry Woodrow

PowerNet's Distribution Line Mechanic, Barry Woodrow has recently returned from a Christian mission trip to Papua New Guinea (PNG).

Barry, along with four other volunteers from St Mark's Anglican Family Church in Balclutha, travelled to Kapuna to work on the upgrade of the remote jungle Kapuna Rural Hospital based in the Gulf Province, 320km south of Port Moresby.

The mission group have travelled to the remote area twice a year since 2014, but this was Barry's first time with the group.

"It was my first time in PNG and just after I arrived I came down with gastroneneritis. The sickness lasted for eight days."

That hasn't put Barry off as he plans to return back with the next mission group to continue with the upgrade.

Let's just say the place is infectious, so I will be back " Barry jokes.

Around The Networks And Depots

Electricity Southland Network

New Hotel Opens

Peak Power Services Limited (PPSL) can proudly say it had a part in the construction of Queenstown's newest hotel.

Ramada Hotel & Suites opened earlier this month making it the first new hotel in Queenstown in five years as well as the first accommodation complex in Remarkables Park.

PPSL provided electricity supply to the four-storey hotel development on behalf of Electricity Southland Limited (ESL).

In order to effectively support the development, the ESL network has been boosted with a 750kVA transformer, a 22kV underground cable and an extension to the existing ring main unit situated within the site.

The hotel complex took little more than 12 months to construct and boasts 72 beds, 56 car parks and retail, food and beverage outlets.

It is the first of three accommodation developments already planned by developer Robert Neil's Safari Group within the 150ha Remarkables Park Zone, with a 98 bed hotel expected to start in March 2017, followed by 55 adjacent residential apartments.

Wakatipu High School

Wakatipu High School is moving to a new school site at Remarkables Park across Red Oakes Drive from the Ramada Hotel.

ESL will need to extend the distribution network to supply electricity to the school.

A temporary supply is currently installed from the transformer adjacent to the Ramada Hotel to assist with construction, and it is likely a new transformer, ring main unit and interconnection with the existing 22kV network will also be required long-term.

Further requirements and timeframes are still to come, but the project is intended to be completed in time for the start of the 2018 school year.

Shotover Country Update

PPSL have been making great progress on the long-term ESL Shotover Country project.

The installation of underground cables and associated transformers for stages 11 (49 sections) and 12 (42 sections) is now underway at the planned 'kiwi-style' residential neighbourhood.

The development is located on State Highway 6 close to Ladies Mile and Lake Hayes. A 500-pupil primary school has already been completed and, when finished, the area will cater for about 1,000 homes and possibly a newly proposed retirement village.

A further two or three stages are still to be constructed within the subdivision.

Winton, Te Anau and Lumsden Depots

The Winton Depot team have been working on maintenance contracts around Alton Valley and the Centre Bush Substation areas. In April, staff attended the celebration evening held in Invercargill for their assistance in the completion of the Isla Bank line build. 5S Lean Management is beginning to make its presence felt in Winton with the depot now looking tidy and staff very pleased with how the 5S system is working.

Te Anau and Lumsden Depot teams have joined forces to work on a line build for a new dairy shed on Gallagher Road. The new line includes a river crossing over the Oreti River, pole erections and an installation of a 75kVA transformer. Maintenance is also being completed around the Dipton/Mossburn area with replacements of poles, cross arms and fuses along with dropout changes.

Gore Depot teams are nearing completion of maintenance work on the Waikaka 3 feeder. Assistance provided from the Winton team will allow the completion of this maintenance work. Their assistance will also ensure the required shutdowns are kept to a minimum. The Gore team are also working on stage four of the maintenance work on North Gore 5 feeder. Both maintenance jobs will ensure the lines remain in a reliable condition. The Gore team are almost finished replacing the red tagged poles around their area.

Around The Networks And Depots Continued

Balclutha, Palmerston and Ranfurly Depots

Palmerston and Ranfurly Depot staff are busy with general maintenance and the replacement of red tagged poles.

Stage 2 of the Kilmog 11kV line rebuild was completed in April by a combined effort from the Balclutha and Palmerston teams. This work, involving communication and coordination with the land occupiers along the route, was assisted by Mike Harris, Easements and Way Leaves Officer.

Another new 7.5km of 11kV line was erected up Waipiata-Kyeburn Road. The new line will ensure a reliable electricity supply is delivered to the residents in the Kyeburn area. The line was designed and project managed by Mark Hastie with easement assistance from Mike Harris.

The staff at Balclutha Depot have been working on Clutha River Road, building a new 6km 11kV line which will connect Clydevale to Tuapeka Mouth. This new line will provide a good ring feed to the many dairy farms and irrigators north of Clydevale. The line has been designed and project managed by Operations (Distribution)Project Manager East, Mark Hastie.

Operations (Distribution) Project Manager East, Shane Cochrane designed and managed two difficult jobs in Balclutha and Waihola. Both jobs involved pole changes and in some instances underground cable feeds. Shane is also looking at a number of transformers around the two towns that require replacement fuses and maintenance on earth wiring.

Between Clarks and Hindon the Balclutha team have been replacing 33kV poles, with much of this work completed as live line. A generator has been installed to supply the 22kV Single Wire Earth Returns (SWER) systems from Clarks Substation. The installation of the SWER systems will allow the last of the most difficult poles on the route to be replaced. This project has been managed by Operations (Distribution) Project Manager East, Graeme Hills and Power Systems Technician, Phil Ramage.

Integration update

The 18-month-long process to integrate Otago Power Services Limited with PowerNet was successfully completed on 31 March 2016.

The final team changes and new teams were established in time for the beginning of the new financial year, with any outstanding issues to be resolved in the coming months. PowerNet's Business Improvement Manager, Rachael Watt and Field Services Manager, Jim Matheson have been instrumental in bringing the teams together and leading positive change.

PowerNet's Service Delivery & Integration Manager, Justin Peterson's role was to provide leadership for the Otago Power Services Limited (OPSL) staff and to ensure a smooth "two-way" integration into the PowerNet team.

He said that the staged integration process allowed PowerNet to firstly discover how OPSL operated and what their culture was like before deciding how to best incorporate their positives into the business.

"We have brought in a well-established, experienced workforce with its own strong culture. OPSL was well managed and commercially focused, so we are now able to incorporate those values into PowerNet. Combining best practice processes from each company will help ensure the future success of PowerNet," he says.

Justin is pleased with how the integration has been implemented and is impressed with how well the PowerNet and OPSL teams adjusted to the change and made it work seamlessly.

"One of the highlights was getting to know everyone from OPSL, including the Board. The people there are great and they are very good at what they do. Also, taking the teams through PowerNet's Shared Vision Programme and showing them where we are heading as a team was exciting," he says.

Justin noted structural changes, union negotiations and the introduction of new systems as the main hurdles throughout the process, but said the teams pulled together very well to overcome these challenges.

"A lot has happened over the past 18 months and everybody involved should be very proud of what has been achieved."

Now with the integration complete Justin is excited to look forward to a brighter future for PowerNet.

"We are a relatively new business and we will always need to continually improve. Over the next two years we will be focusing on process improvement, culture, safety systems, growth and delivery what the customer wants. There are a number of strategies that we are all working on that involve making PowerNet a leader in the industry."

Challenging Maintenance Work completed



Left: Gene Brookland and Ione Pau compacting the ground around a pole Right: Line restringing preparation across State Highway 1

Maintenance on the 11kV and 33kV line on State Highway 1 near Bluff has now been completed. The project spanned a distance of 10.4km and involved three stages of line, equipment and conductor upgrades.

Work was completed on stage one (3.2 km of line) earlier in 2015, with stages two and three (over 7.2 km of line) commencing late in 2015.

PowerNet's Line Mechanic Team Leader, Gene Brookland says the maintenance was timely as a large number of poles along the route were either leaning or had been red tagged.

"Weather conditions are particularly harsh on this part of The Power Company Limited's network and over the 10.4km route we straightened or replaced over 110 poles," Gene says.

The job had added challenges along the way with the whole length of the project being on swamp land. Gene believes this maintenance work was on the lowest piece of land between Invercargill and Bluff; in some places as quick as a pole hole was dug it would fill up with tidal water.

"We had a lot of access issues to deal with; in some cases our only option was to build temporary roads which allowed us to get both ourselves and the equipment to the poles."

Vegetation around each pole was also removed to enable the work to be completed.

Good communication between PowerNet and the rural property occupiers was vital throughout all the maintenance stages.

"It was important for us to have good communication with the affected land occupiers. In one case we worked with a farmer to relocate a whole fence because it was just in the way."

The planned outages were kept to a minimum by having consecutive outages, all of which were pre-arranged with those affected.

Another important focus during the maintenance project was the upgrade of the 11kV from squirrel conductor to iodine conductor. To support the new larger conductor load an upgrading of cross arms and pole equipment was required. The line restring was pulled over 60 poles and in one section crossed over State Highway 1.

"The old squirrel conductor wasn't able to tie between Bluff Circuit Breaker (CB)3, Colyer Road CB9 and Seaward Bush CB6. The conductor upgrade will ensure network security and reliability to the region," Gene says.

"I would like to thank the teams from Onslow, Gore and Winton depots for their help over the three maintenance stages. Also thank you to our contractors Noel MacIntyre Drainage and Traffic Management Services Limited, all of whom stepped up to face the project challenges along the way," Gene says.

Promapp

A new cloud based software programme will soon be used to improve the recording abilities, understanding and execution of PowerNet's in-house business processes.

The forthcoming introduction of 'Promapp' is the result of a change initiative project from the Centre for Vision and Leadership Programme, championed by Sally McLeod, Mary-Anne Bricknell, Roy Duffin and Daniel Wijkstra.

Rachael Watt and Justin Peterson have been named Primary Process Champions and will head the roll out of the system over the coming months. They will be supported by Daniel Wijkstra, Quinn Aicken, Phil Hartley, Faye McLeod, Dyson Gentle, Claire Wallis, Graeme Webby, Stewart Cornhill and Maree Hallgath as Process Champions as well as Tony Corkill as Process Master.

Rachael Watt said the system will help ensure the consistency and conformity of PowerNet process documentation and provide an avenue for any knowledge held in the heads of employees to be recorded and managed through a reliable system.

"The benefit of using a system like this is that it is much more efficient and reliable, saving the time and costs involved in updating processes the old way. As a result, it also improves the ability to deliver better service levels to internal and external customers,"



PowerNet's staff in training on the Promapp system

Rachael said.

The process champions received their training in June and have been allowed several weeks to create some processes and feel comfortable with ProMapp before the official launch at the six-monthly team briefs in August. From there, the process champions will select process owners and experts and give them training.

"After we have a 'bank' of processes, we will be able to give all staff access and training. Then, once it's fully in use, all PowerNet staff with an internet connection will be able to access and update the system from anywhere within the business."

ProMapp is a New Zealand based company that is currently expanding into Australia, America and the United Kingdom. Some of their major customers include McDonalds, Fisher and Paykel, Thrifty Rentals, Ricoh, Vodafone and more than 1,000 local government agencies and councils.

Rachael assures all staff that ProMapp is a simple, easy to use system that will be accessible through, and integrated with, the existing Sharepoint Intranet system.

"Those who are not computer confident will be able to access ProMapp processes through 'mini-mode', which is a cache version of the ProMapp process that will be made available on the

Sharepoint Intranet system. The links to documentation and forms will also be available there, so this should make access easier without the need for strong computer skills."

The recorded processes, along with process activities, tasks and supporting information, can also be printed if required.

The official launch of ProMapp is planned for all staff at the six-monthly team briefs on 8-9 August. At the launch staff will be given an overview of the system and its governance structure, and taken through an example of process mapping.

"We expect this will be an ongoing journey, therefore we encourage staff to talk with the Promapp champions and experts. They are there to help achieve our end goal with ProMapp, which is that anyone at PowerNet will be able to refer to the system to find a documented process for anything we do," Rachael said.



Thanks to: Sharon Johnston, Sally Mcleod, Roger Paterson, Kathryn McCoy, Lisa Terepai, Waric Cross, Helana Middlemiss, Rose Snell and Mary-Anne Smith for representing PowerNet and collecting at The Batch and NZ Post for this year's St John Annual Appeal in April. (pictured right: Rose Snell and Helana Middlemiss)



Come Join The Fun At PowerNet's Social Club



Tuesday 26 July at 7pm Eastern Suburbs Tavern, Glengarry Prizes for placegetters and a mystery prize for the Special PowerNet trivia round Teams of 4 or come along and we will put you in a team Confirm your interest with Paul 03 2118824, Helana 03 21118192 or Faye 03 2118816 by Wednesday 20 July



Left to right: Phil Johnson (Decom), Don Nicolson, Doug Fraser (PowerNet Directors) and Jason Franklin (PowerNet Chief Executive) being inducted onto the Waikiwi Substation construction site.



Left to right: Tim Brown, (PowerNet) Peter Leith (Decom) and Alan Harper (PowerNet Director) in the enclosed T1 transformer room



Left to right: Alan Harper and Maryann Macpherson (PowerNet Directors) and Peter Leith (Decom)

The first stage of the Waikiwi Substation upgrade was completed with the livening of 11.5-23 MVA transformer 1 (T1) in late April.

PowerNet Directors and members of the Senior Leadership Team attended the official livening and prior to the load switchover the group took a quick tour. (above photos)

Construction of the transformer 2 (T2) room is on schedule with the walls erected and roof completed. (photo to the right)



The project will be finished late in November 2016.

St John Staff Visit System Control And The Waikiwi Substation Upgrade





Over the last two months PowerNet has hosted staff from St John on-site.

In May, St John Southern Region (Invercargill) Senior Tutor, Paul Colvin and Community Educator, St John in Schools, Jo Babe (pictured left) visited PowerNet's System Control. System Controller, Geoff Gibbs and System Control Manager, Kana Shanmuganathan talked the pair through PowerNet's outage procedures. The visitors also learnt about PowerNet's safety control systems for staff working on the networks.

Jo Babe said meeting Geoff and Kana was a great opportunity to see the similarities of Powernet's system control and the St John 111 call centre.

"I wanted to have knowledge on how the Powernet system works in coordination with St John, particularly when there is a car accident involving a power pole. This information is important to use in the classroom or when students ask questions regarding these types of emergencies," Jo says.

I found the visit to Powernet Control system very worthwhile as it was good to see first hand how St John and Powernet work side by side.

"In June, St John staff from Southern Region (Christchurch) Charizabel Sapiandante (Chill) and Debbie Pipson (pictured right) attended the six monthly sponsorship progress meeting. Whilst in Invercargill they visited the Waikiwi Substation Upgrade project. The pair were hosted by Roger Scott (pictured right).

St John Fundraising and Marketing Manager, Debbie Pipson says it was insightful to visit the new Waikiwi Substation and see the installation of some of the walls.

"Roger Scott explained how the substation transports electricity to the industrial, commercial and residential customers in an efficient, reliable, safe process and with quality standards that benefit the community." says Debbie.

Teams To Head To Work On The Waitaki Network

PowerNet is teaming up with Network Waitaki to assist with the build of subtransmission lines near Oamaru.

The network approached Field Services Manager Jim Matheson recently, requesting an experienced crew of four line mechanics plus equipment for 3-5 months beginning early July.

PowerNet's Service Delivery and Integration Manager Justin Peterson said PowerNet formed a strong relationship with Network Waitaki when teams from each company worked together on a similar project in Kurow for six months last year. He sees great benefit in building strong working relationships with other networks around the South Island.

"It helps build the experience of the teams and allows us all to call upon each other when added resource is required," Justin says.

A four man team from the Balclutha Depot, headed by Team Leader Gavin Anderson, will be stationed in Oamaru to get the job started with other teams from across Southland and Otago rotated as required.

The line mechanics will be constructing new lines and assisting with faults if required. A crane truck, bucket truck and light utility vehicle will also be supplied by PowerNet.

PowerNet's Social Club Members Try Clay Target Shooting



10

Fun was had by all 25 who attended the PowerNet Social Club's Clay Target Shooting event back in April.

PowerNet's Technical Project Manager, Mort MacIntosh says the event was held at the Southland Clay Target club in Otatara. The club held a safety briefing to start with, and supplied three club members to run the event and see that all was done safely.

The group of PowerNet employees, partners, friends and family had a great afternoon shooting and finished the day with a BBQ.

"We had a great range of ability, some people were familiar with how to use a gun whereas some had never given the sport a try," Mort says.

Six ladies, three of which were PowerNet staff gave the sport a go.

"PowerNet's HSEQ Officer, Amanda Milne set the best example of shooting five target hits out of five, giving her a 100 percent average," he says.

Above photo: PowerNet's Orion Gallagher, Gene Brookland, Matt (John Murphy's friend), Mort MacIntosh, Tauira Patterson and Sam Maurangi.

Below left: Carike Kelbrick, Sam Maurangi, Ione Pau and Mort MacIntosh.

Below right: Clay Target member Jan Manson and Bevan Cooper.

New Zealand Oil & Gas Supports The Southland Warm Homes

Neil Boniface, Chairman of the Southland Warm Homes Trust (SWHT), is pleased to announce that in February New Zealand Oil and Gas Limited confirmed its support of the Warm Homes project with a two year commitment of funding, possibly extending to another year. This funding, which qualifies for matching under the Energy Efficiency and Conservation Authority's (EECA) Healthy Homes Programme, could result in leveraging other third party funding, which could result in an additional 46 Southland homes being insulated over the next two years.

This partnership was recommended for support from New Zealand Oil & Gas by the company's Southern Community Panel (The Panel), which brings together youth, business, environmental, social services and Maori perspectives from across Otago and Southland. The Panel provides a voice for the Southern community to give feedback to New Zealand Oil & Gas on their activities in the southern region. The Panel and the company collaborate to identify local projects to support, such as the work carried out by the SWHT and its counterpart the Cosy Homes Trust in Otago; delivering home insulation solutions for households in need.

Both New Zealand Oil & Gas and the Panel have been impressed with the work done by SWHT to date, making Southland homes warmer and healthier, and acknowledge there is still work to be done.

"Poor home insulation has significant health, social, energy savings and economic impacts for many Kiwi households. It remains a big social issue for the country. We're very pleased to support the Trusts to deliver home insulation and be part of the solution," says New Zealand Oil & Gas CEO Andy Knight.

Find out more about the Southern Community Panel visit their website www.southern.communitypanel.org.nz/. The Panel welcomes feedback and engagement with the Southern community.

Neil Boniface would like to thank all community funders including Electricity Invercargill Ltd, Southland Power Trust, local Councils, Environment Southland, The Community Trust of Southland, The Southern Trust and New Zealand Oil & Gas for their continued support.

For more details, contact the SWHT on 0800 WARM SOUTH or 0800 927 676.

Welcome To Our New Staff



Matthew Brown Line Mechanic Winton Depot



Michael Mackway-Jones Management Accountant Racecourse Road



Jack Wadworth

Substation Engineer

Onslow Depot



Paul Ashby Apprentice Line Mechanic Gore Depot



Leighton Bagrie Apprentice Line Mechanic Gore Depot

Welcome Back Tyler Brouwer Apprentice Line Mechanic (Balclutha)

Congratulations On Your Appointments

Justine Greig (Racecourse Road) as People Capability Framework Project Manager.

John Bauer on his permanent appointment to Maximo System Developer.

PowerNet Structure Changes Within The Teams-

Staffing changes within the Onslow and Winton Depot team structures have now been completed. The Senior Leadership Team believed the changes were required to allow for the future growth and success of PowerNet.

We wish everyone well in their new roles and thank those who have stepped up to take on their new responsibilities.

Farewell

Gary Prichard and Rob Ivory (Onslow Depot) and Mike Kavanagh (Balclutha).

Congratulations

Neil Boniface being made a companion of the Queens Service Order for services to the local government and the community.

Matthew Barton Apprentice Line Mechanic Balclutha Depot

Congratulations

Paul Templeton (Winton) on his marriage to Sarah Fleming in April.

Paul Davis (Balclutha) on his marriage to Heather Kennett also in April.

Deahan Maloney (Balclutha) on his engagement to Danielle Graves

Happy Retiremement

Jock Dawe (Gore) and Keith Burns (Onslow Depot)

Baby Congratulations

Ryan Griffiths and partner Tuesday Wilson on the birth of their baby girl Willow Evelyn (9lb 6oz) on Saturday 21 May.

'Grandad' Greg Buzzard on the birth of Marissa Grace Wang (7lb 7 oz) on 25 June.

'GD' Roger Paterson on the birth of grandson Micah James Stewart Paterson (8lb 5oz) on 24 March.