

PowerNet wins prestigious RFUANZ Industry Excellence Award

PowerNet project manager Roger Scott has won the Radio Frequency Users Association of NZ (RFUANZ) Project of the Year Award 2021 for his stewardship of the Oreti Valley microwave radio network & associated works project.

The award was handed out at the RFUANZ Industry Excellence Awards dinner held in Wellington in May. The awards celebrate outstanding achievement by individuals in the radio frequency industry.

Scott said the win was a really satisfying achievement for everyone involved in the project, that was part of the broader Oreti Valley project.

"I'm delighted to accept this award, which recognises the innovative thinking and collaboration of all the people involved in modernising the communications infrastructure in the area."

The Oreti Valley project was a large scale, \$27.3 million, five-year project that upgraded and extended electricity supply through central, western and northern Southland, giving local communities increased capacity, greater reliability and a future-proofed power supply.

This project also strengthens the Southland networks by improving visibility and maintainability of the region's critical infrastructure.

PowerNet chief executive Jason Franklin said the entire PowerNet team was proud of Roger and that the win was fantastic recognition for the leadership he and his team have shown throughout the Oreti Valley project.

"With the project now completed, the distribution network in the region is ready for future load growth and will meet the needs of PowerNet's customers for generations to come," Jason said.

Scott wanted to acknowledge the input of Angus Henderson from Mitton Electronet for work on the project, for nominating PowerNet for the award, and for putting together the bulk of the award entry.

Graeme Hillas, from Ventia, PowerNet's communications contractor, was runner-up in the RFUANZ Employee of the Year award category, which was great acknowledgement of his stellar work on the project, Scott said.

The improved visibility and functionality of the system was already proving its value at PowerNet, Scott said.

Having the high-capacity network has enabled rapid response to faults and the ability to remotely interrogate complex issues across the network. This meant a more reliable and manageable network overall, he said.



Roger Scott's award certificate and trophy.



The Communications tower being installed at the Centre Bush Zone substation.

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Great data enabling PowerNet to better manage networks

More comprehensive collection of network data is allowing PowerNet to stay well ahead of the maintenance curve, chief operating officer Justin Peterson says.

On 1 April 2021 a new department was formed to focus solely on asset inspections. The team, led by field inspection & data manager Chris Conway, is shaping the way PowerNet collects and manages asset data into the future.

An example of this is the data captured from pole inspections. With 170,000 poles across the networks, the better the information about the state of the poles, cross arms, fuses, wire and insulators, the better the ability to manage and maintain these crucial assets.

"By making sure we have good systems to capture and use the data as well as possible, we are able to make sure that data is adding value to the business," Justin says.

It means the assets team can make informed decisions and field teams can be better deployed to maintain assets across the networks.

"Essentially we're using technology to save time in the field, and ultimately further improve our safe, efficient and reliable delivery of power to customers," he said.



Chris Conway.

Connexis Annual Connection Competition

PowerNet's team to compete in the Connexis Annual Connection Line and Cable Jointing Competition in Christchurch in September has been selected and training is under way.

The competition is being held from 21-23 September at the Air Force Museum of NZ at Wigram, Christchurch.

Annual Connection connects, celebrates, and showcases the people and companies of the electricity supply industry. The best cable jointers and line mechanics come together, from across New Zealand, for the competition and event.

PowerNet's team is:



DAN GROEN

Distribution line mechanic
and Connexis Competition
team leader



LINCOLN DEANS

Distribution
line mechanic



MATT BARTON

Distribution
line mechanic



JAYDEN DOVEY

Apprentice
line mechanic



CRAIG GREENALL

Substation maintainer



JOEL MARQUES

Apprentice cable joiner



The PowerNet team participating in the 2019 Connexis Annual Connections competition.



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Apprentices flourishing at PowerNet

High demand for apprenticeships combined with ongoing professional development is proving a winner for PowerNet.

PowerNet chief operating officer Justin Peterson said 21 new apprentices joined the distribution team during 2020, as well as three trainee field asset inspectors this year.

"This recruitment is vital to our plan of supporting our field teams by bringing new skilled staff into the business to replace those who are, or soon will be retiring."

Interest was very high in PowerNet apprenticeships, with more than 60 people applying, which was a real positive for the company in terms of people seeing the industry as a great career option.

"We're always on the look out for people with a great work ethic and a base understanding of electrical theory, who aren't afraid to get their hands dirty," Justin said.

The roles offered a nice blend of theory and on-job practical learning, with lots of camaraderie and learning, and a mix of day-time and night-time work.

One of those apprentices is Lee Allan, who previously played rugby for Otago and the Highlanders as an openside flanker.

"I went to an induction day and really enjoyed the way the company spoke about developing leaders," he said.

Lee, who is based in Balclutha, said he really liked the team culture at PowerNet and the variety of work a line mechanic gets to do.

"I checked it out and really enjoyed it. Loved it."

There was heaps to learn and he was enjoying working towards becoming a qualified line mechanic.

While he doesn't play rugby anymore, he has coached professionally in New Zealand and is currently helping out with some coaching at the Kaitangata Rugby Club.

Ongoing professional development of PowerNet staff was a high priority, Justin said.

This year 10 team members have completed the New Zealand Certificate in Electricity Supply Line Mechanic Distribution Level 4 in the most recent course in Mosgiel in February.

The course provides staff with the knowledge, practical skills and experience required to gain registration with the Electrical Workers Registration Board.

"Graduates of this qualification will be able to work safely as line mechanics to industry standards, taking responsibility for their work, and be capable of working independently whilst ensuring public safety."

Line mechanics then train towards holding switching competencies and eventually work independently on faults rosters. Those that demonstrate high safety and work standards are then considered for high voltage live line training, Justin said.



PowerNet apprentice line mechanic, Lee Allan.

Depots apply innovative solutions to pole transport challenge

PowerNet's Gore depot has taken the idea of a safety chain on a trailer and applied it as an innovative, failsafe solution for securing poles on vehicles.

Field teams were set the challenge to develop a failsafe method for securely transporting poles that, in the event of the primary tie-downs failing, would stop a pole from detaching and posing a health and safety risk to the public.

PowerNet chief operating officer Justin Peterson said the Gore depot took up this challenge, using a safety chain that acts in the same manner as a safety chain on a trailer, stopping the pole from detaching from the vehicle.

"This method had a number of challenges in design and development and required the Gore team to work closely with a local engineering firm to ensure the failsafe method was fit for purpose."

In addition, the Onslow Street depot identified an additional technique that enhances the traditional way of securing poles with webbing strops – this method uses a rated C-Clamp that helps secure the webbing strop around the pole and equalises the force applied by the strops.

"This can also be used in the form of an additional tie-down where there are no holes present in the pole preventing the application of the failsafe method developed by the Gore team," Justin said.

Health, safety & environment compliance and assurance manager Brett Coradine worked with the crews on the innovative solutions.

This procedure was sent to depot supervisors for circulation to their teams for feedback. The procedure was approved and fleet vehicles across PowerNet are progressively being fitted with the failsafe method, Justin said.



Depots apply innovative solutions to pole transport challenge.



Risk Mentor programme a game-changer for PowerNet safety reporting

A new critical risk assessment tool is revolutionising the way PowerNet crews work in the field.

The tablet-based Risk Mentor system ensures safety checks are done before crews undertake jobs that involve critical risks - such as vehicle movements both on and off road, working with electricity, working in confined spaces, lifting loads, trimming trees, and working at heights.

PowerNet critical risk project manager Graeme Webby says the software is very intuitive meaning staff in the field can use their tablets to seamlessly get details of the job, run through a checklist to ensure critical controls are in place, and sign off the job when completed.

"We've jumped from a paper form buried in the back of the truck to a framework that focuses on critical controls and provides active verification as close to real time as possible," he said.

PowerNet GM health, safety and environment Rangī Solomon says the Risk Mentor system was helping to take the company's safety standards to an even higher level.

"I think we're leading the way. There's a lot of interest in our Risk Mentor system from other lines companies"

Getting team leaders and supervisors on board had been crucial to the programme gaining traction, he says.

The other key factor in the success of the rollout across the workforce has been health, safety & environment compliance and assurance manager Brett Coradine's hands-on involvement with the teams and his positive approach to their feedback.

Graeme says most of PowerNet depots' line crews, technicians and arborists are already using it and it will likely be embedded across the vast majority of field staff by the end of June.

While any new tool can take a little bit of time to get up to speed with, users had been very positive so far, he says.

"The feedback has been really gratifying."

The programme's easy to read dashboard was able to be checked by people throughout the business.

"It's given the supervisors a tool to check what controls the teams are putting in place on a job."

The data coming through was also available to board members, giving them more insight into day to day operations, and the ability to make more informed governance decisions, Graeme says.

Rangī says he's never seen the level of engagement from directors that he's seen from PowerNet's directors picking up the Risk Mentor tool and running with it.

PowerNet teams have to comply with more than 800 regulatory and compliance expectations across all areas of work, and Risk Mentor provides dashboards for supervisors and other leaders to monitor usage and compliance.

"It allows active verification of not only safety procedures being followed, but also compliance reporting for the likes of the Health and Safety Work Act 2015. Essentially this is active compliance."

Early indications are that Risk Mentor is making a significant difference to PowerNet's safety reporting, Rangī says.



L/R: Hamish Prentice and Marlon McLean, using the Risk Mentor system on site.

Several challenging major projects completed on PowerNet networks

PowerNet's Athol – Kingston 22kV upgrade project has bolstered power supply in the rapidly growing area.

PowerNet chief operating officer Justin Peterson said the project was to improve the quality of power supply into Kingston region, complementing the Oreti Valley project.

Crews had helped keep local cafes and other businesses busy during the extensive project, he said.

"There's a real positive contribution to those local economies, which is great for them."

The project was a great example of PowerNet's pro-active asset maintenance programme to ensure supply can cope with the residential growth in the area, Justin said.

The Athol – Kingston 22kV upgrade included: 100 crossarms, 20 poles, 300 insulators, 27 new poles plus 40 crossarm changes, 4km of new line strung (x3) so 12km of conductor, over 200 22kV insulators.

There was no way to back feed north of Athol substation, so generators were connected at Fairlight and Garston, and outages were managed to minimise disruption, he said.

"Working along a state highway required professional traffic management, plus some crews encountered some challenging Southland weather."

The cooperation between crews under the leadership of Murray Dickie from Balclutha was fantastic, Justin said.

Likewise, the Riverton CB 2- Feeder Rebuild project has been another massive project completed with fantastic leadership and coordination, across 4700 staff hours.

The two main challenges were managing outages on the east side of the river. This work site included two schools and half the business district, we eliminated disruption to these customers by having night time shutdowns, Justin said.

On the west side of the river the rock proved challenging for excavation and limiting pole sitting options.

Team leader Craig McBurney did a great job keeping the multiple projects moving forward and especially in organising the main night shutdown, Justin said.

"It was quite a big job, because it was in an urban environment. "Keeping the electricity supply to customers during the rebuild was quite a challenge due to the urban environment. To minimise disruptions we worked at night and brought in crews from other depots to assist."

The Edendale Protection upgrade was another challenging project completed with staff working across four different interconnected locations: 11kv switch room, 33kv switch room, injection station and Fonterra's Edendale Site.

Justin said the Ranfurly and Paerau disconnecter replacements project highlighted the team work between all staff across Balclutha, technical, and the Ranfurly distribution team.

Finally, the undergrounding of cable undercrossings near Palmerston to accommodate the duplexing/capacity increasing of the Transpower lines was successfully completed by the Ranfurly and Balclutha teams, Justin said.



Aaron McCallum and Joseph Wynne working on the protection upgrade at Edendale Zone Substation.

PowerNet supporting business innovation in its growth journey

Significant growth in network capability is happening as PowerNet works alongside commercial customers looking to switch to electric power supply to decarbonise their businesses, PowerNet GM business and customer growth Kewal Bagal says.

Networks managed by PowerNet continue to grow with large commercial load increases planned due to commercial customers decarbonising, he said.

“PowerNet is considering a variety of options to accelerate the drive to decarbonisation for commercial customers.”

The company has grown its workforce capability to cope with this demand, and to be well positioned to take advantage of both new network and business diversification opportunities, he said.

In Queenstown, PowerNet has repositioned the Electricity Southland Ltd (Lakeland network) as a co-developer in the region with in excess of \$30 million already invested in the area’s development, and plans for approximately \$5 million per year, Kewal said.

In Queenstown, Lakeland network has secured the Ngāi Tahu development Te Pā Tāhuna and Cone Burn near Hanley Farms.

Kewal said Te Pā Tāhuna gives Lakeland network a footprint in the Central Business District in Queenstown.

Lakeland network is also in Cromwell, with its first subdivision, Wooing Tree.

PowerNet’s new energy team was well placed to provide good advice and direction as part of the management of the Stewart Island Network, he said.

“PowerNet will continue its growth journey by developing all of the networks it manages and expanding PowerNet services to wider markets, commercialisation of various innovations in the organisation, and perusing selective acquisition and investment opportunities.”

PowerNet has successfully commercialised two of its innovations in the past year.

The first, PowerNet Connect, is a billing software solution developed with a local software developer Digital Stock. PowerNet has successfully commercialised this with first sale already achieved and several other prospects in the pipeline.

PowerNet has also commercialised its award-winning Pole Grab Innovation jointly developed with SEC Engineering and Design Ltd, Kewal said.

“This innovation brings new levels of safety in the field. The launch is imminent.”

The new opportunities developed have both positive reputational and commercial benefits to PowerNet. Growing staff capability and retaining talent are two of the wider benefits of PowerNet diversifying its business, Kewal said



Pole Grab.

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Operations Team Change Proposal delivering benefits

PowerNet has grown significantly during the past five years and looking to the future, its senior leadership team recognised they needed to build on the 'one team, one way of working' philosophy.

PowerNet chief operating officer Justin Peterson said the Operations Team Change Proposal gave them the ability to reconfigure teams using the existing skills and experience within PowerNet to set the company up for ongoing success.

A lot of thinking was done over the course of a year around managing large teams across large geographical regions, and ensuring they had the right resources in the right areas.

They identified several opportunities to further improve operational systems and processes, Justin said.

Another positive change was the creation of two new business roles; health, safety & environment compliance and assurance manager and the operational excellence business partner.

"These roles are already identifying areas for improvement, improving collaboration across other functions and making positive changes to the reliability, efficiency and safety of the operational team," Justin said.

"I have to personally thank the operations team for the maturity shown during the change proposal. There was a great amount of feedback and some really good changes made to ensure we got the right result. It proves we have a great team, and people in the organisation that are willing to embrace positive change."



Justin Peterson.

PowerNet and St John partnership continuing to deliver wide-spread benefits

After seven years partnering with St John, PowerNet renewed and expanded our sponsorship for a further three years in August 2020. The expanded sponsorship changed focus from physical first aid training and automated external defibrillators (AEDs) in our community towards mental health and resilience education.

PowerNet chief executive Jason Franklin said partnering with St John has been hugely rewarding, as have the opportunities to jointly promote health and safety in the community.

"We are immensely proud to partner with St John in providing free community education. Recently we became principal sponsor of St John Mental Health First Aid training (MHFAT) and the St John Whātua te Waiora Weaving Wellbeing programme." says Jason.

To date, our new sponsorship focus has skilled 147 members of the public on how to learn and support work colleagues, friends and family members experiencing mental distress as well as learning how to identify understand and respond to signs for mental health issues. Eight MHFAT sessions have been held in six locations (Invercargill, Queenstown, Balclutha, Winton, Gore and Stewart Island).

Our principal sponsorship of the St John Weaving Wellbeing programme has delivered the programme to 334 year 7 and 8 students from six southern schools. The 10 week programme focuses on building resilience and coping skills for children.

St John South Island fundraising and marketing manager Debbie Pipson says the relationship has continually given individuals and communities the confidence to help save lives and showed what an amazing supporter PowerNet was of St John in the southern region.

Recently the promotion of the sponsorship has increased with the advertising of the partnership through the digital billboard in the Invercargill CBD. We are also in the process of creating a PowerNet promotional video for St John to run at our sponsored training courses, and 'Pass it forward' vouchers for attendees to distribute to their friends, family or work colleagues.



PowerNet's sponsorship of St John was beamed out on this huge digital billboard in Invercargill. Checking it out are (L-R) Felicia McCrone, Symarah Bennett-Young, Hector Diamond, Jessie Wynne and Kate Sherriff.



Jessie Wynne attending a session of the St John Whātua te Waiora Weaving Wellbeing programme.



Kathryn McCoy (left) with Abbie March (far right) collecting for the Heart of Gold Annual Appeal.

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Live-line work across networks benefitting PowerNet customers

A return to live-line work means fewer power outages for customers, PowerNet chief operating officer Justin Peterson says.

All three of the company's large depots - Invercargill, Gore and Balclutha - were now capable for doing live-line glove and barrier work across PowerNet's managed networks.

"It has been a huge piece of work for our operational excellence business partner Danny Leonard and previous H&S manager Phil Johnson who was able to deliver this training in-house."

About five years ago, members of the electricity distribution industry, including PowerNet, took a pause from doing live-line work because of an increased focus around the processes and procedures involved in planning and carrying out such work.

Live-line work can significantly reduce the time taken to carry out planned line maintenance but safety is PowerNet's highest priority - and the company recognised change was needed.

The Electricity Engineers' Association set out new criteria around live-line work.

A thorough and robust risk approval process to determine whether live-line work was safe to undertake was developed, and has been embraced by crews and management, he said.

"It allows us to do live-line work when it's safe to do so. From a customer perspective we keep the power on if it's live-line work being done."

Justin said the safety of PowerNet staff was paramount as doing live-line work came with its risks, but the company thoroughly ensured the right training and processes were in place to minimise risks.



In-house live-line training.

Wellbeing programme off to a great start in 2021

The health and wellbeing programme has started well in 2021 with plenty of active fun for the PowerNet team.

HR partner and health and wellbeing team member Faye McLeod says between the ICC Surf to City event, the Aotearoa Bike Challenge and a visit from wellbeing consultant Lance Burdett there has been a variety of calendar events with something to suit everybody.

"We had 39 entries for the ICC Surf to City event and it was a brilliant day," she says.

"We had bikers, walkers, runners and families - it was a family event. We had a corporate tent and a barbecue, and everyone that entered did really, really well."

Team-member Anton Booyzen came home third on his bike, adding to the excitement of the day.

In February, thirty PowerNet riders took part in the Aotearoa Bike Challenge and together they rode a total of 8,000km

"Our team finished 26th in the 200-500 Staff Sector and 3rd in the Utilities and Communication Sector," she says.

"The team did an amazing job - there were some people that hadn't ridden a bike for many years - there were a huge amount of personal challenges, we're very proud of them."

"It's certainly promoted physical, social and mental wellbeing keeping us all healthy and provides a good work-life balance. It's good to get to know our team members and colleagues out of work."

Coach, consultant, author and former Police negotiator Lance Burdett visited at the end of April with sessions in Balclutha, Gore, Invercargill and Lumsden.

"He talked about his journey, resilience, coping with change and managing stress levels. Lance also provided tip and tools to manage sleep." Faye says.

"We received positive feedback on the sessions with people benefiting from his sleep tips, and gaining more confidence about having courageous conversations. Even if one conversation makes a difference in a person's life, its worth it."

Finally, around 16 people attended the Admin Professionals' Day Luncheon at the Ascot Park Hotel, with guest speaker Liam Malone.

"Everyone thoroughly enjoyed their day, getting to meet other people and having a bit of fun," she says.

The health and wellbeing team will continue to focus on planning activities for the rest of the year, she says.



Attendees at the Admin Professionals' Day Luncheon.



Ben Williams and Bella Robert at the ICC Surf to City event.

Welfare Support Programme

The Psychological First Aid programme developed in 2019 was proving popular with staff who have embraced the support programme. PowerNet GM health, safety and environment Rangī Solomon said the traction the programme had achieved was seen through increased numbers of staff being connected to agencies offering professional help. "We're a pathway to get people to those professional services," he said. The upturn in referrals was likely to be related to the impact of Covid-19, he said.

