



Making a difference for you

Annual Delivery Report 2021



You'll find us here



Te manawa whakahihiho

Energising our communities

At Powerco, we bring electricity to about 900,000 customers across homes, businesses and organisations in the North Island.

There's a lot that goes into bringing light and heat to your home or business, and we're proud to play an important part thanks to the lines and poles we own.

You buy electricity from your retailer (who you pay your power bill to) and we look after the lines that get it to you, safely and efficiently.

We're a diverse team, connected by our passion for serving our communities. From the technical experts who plan and design our network, to those who work with our customers to ensure they have a great experience when dealing with us, making a difference to our communities is at the heart of our 500 plus-strong Powerco whānau.

You'll see our crews out and about in your neighbourhood, working on our network to make sure it's safe and reliable now and into the future.



TSB Festival of Lights, New Plymouth.
Photo supplied by Matthew Dowman.



Replant for Tomorrow
tree-planting.



Girls With
Hi-Vis event.

Te rourou
**We're big but
we're local**

We're proud to be a part of the communities we work in. That's why we support a range of events and organisations throughout our network.

In the past year, we have supported more than 20 sponsorships as well as eight community events across five regions, enjoyed by over 35,000 people. These are a great way for us to give back and connect with our customers through local whānau-friendly events, or allow

our customers to have their say. We're passionate about our own backyard and preserving it for generations to come. Part of our conservation efforts include Replant for Tomorrow, a tree-planting initiative to redress the tree removal work we carry out to help keep our power lines clear and keep the lights on.

We also sponsor the Powerco Education Centre at Wildbase Recovery in Palmerston North, which runs programmes to teach tamariki about the importance of protecting our wildlife and the role they can play.

Supporting a more diverse workforce is another passion of ours. We promote initiatives such as Girls With Hi-Vis, which showcases industry career pathways to female high school students.



Bringing power to Stratford, Taranaki.

He mihi nā te tiamana

Message from our Chair

Kia ora koutou.

As Aotearoa's largest electricity distribution network by length, and the second largest by number of connections, we play an important role in keeping Kiwis connected now and into the future.

More than halfway through our five-year Customised Price-quality Path (CPP) investment programme, we are making excellent progress and are beginning to see the benefits that our work is bringing to customers.

Since we set out on our CPP journey in 2018, we have worked hard to deliver on our investment promises, with a focus on strengthening the reliability and resilience of our network during the third year of our CPP (1 April 2020 to 31 March 2021).

Working through the COVID-19 environment meant we had to adapt quickly and be flexible. The challenges faced across the country during this time emphasised the critical role that a safe and resilient electricity network plays in enabling the lives of our customers.

We're pleased to report on the progress we've made during our CPP Year Three and the difference it made to our communities.

Powering through a pandemic

Right from the outset last year, COVID-19 restrictions meant we could not deliver our CPP programme exactly as planned and we had to make some adjustments. Barring essential urgent maintenance work that ensured our network remained safe and reliable for households and essential services, we deferred our planned works programme where possible. Managing the risk to our crews and customers, and working safely while social distancing, was another key factor in our prioritisation of work.

With most people at home and often working remotely, avoiding further disruption to our communities was crucial. We therefore looked at the approaching winter months and how we could prepare our network to minimise the risk of outages caused by weather events. As a result, we implemented some new projects that, while not part of the CPP, helped improve connection reliability, such as smart sensor technology to relay real-time information about our equipment. We reviewed our strategy for maintaining critical spares to ensure we have sufficient stock to see us through periods of disrupted delivery. We also undertook community outreach work via a foodbank drive and partnered with an energy coaching service to support vulnerable customers experiencing energy hardship.

Working harder and smarter

Our delivery numbers, capital expenditure and number of assets replaced during the past investment year were strong. Thanks to our heightened focus on delivery, careful planning and the dedicated efforts of our crews, we made up the time lost during COVID-19 lockdowns.

We replaced 28% more conductors and 18% more poles than the previous year and spent 43% more on asset replacements and renewals. We met our network reliability standards, achieving fewer and shorter outages for our customers – a positive trend during the past three years. This shows that our investment in asset renewal programmes and increased vegetation spend, in particular, are bringing the intended outcomes to customers.

We have continued to improve our planning and investment decision-making with new tools and systems. Embedding these across the business is helping provide robust data for all our asset management decisions. We have also developed an innovative overhead renewal planning tool that uses geographic information systems and condition data to identify and prioritise equipment that we need to replace.

We have made good progress towards being recognised as leading asset managers as part of our drive to achieve ISO55001 certification. We have also implemented a cutting-edge investment prioritisation tool that enables us to make informed decisions that optimally balance risk, cost, and performance.

A few challenges and changes

The delivery of major projects is often subject to timing and takes into account complex factors such as land acquisitions, which often cause delays. Consequently, delivering on our promise to achieve our projects and major asset replacements within our CPP period is challenging and will be a key focus for the next two years.

The environment we are operating in has changed significantly since we prepared our CPP submission five years ago. Technology continues to develop at pace and New Zealand has strengthened its commitment to decarbonise the economy. These changes are causing us to question traditional approaches and will also create challenges and opportunities for our network. Changes in energy usage and customer expectations reinforce the need to think carefully about how we design and build our networks.

As a result, we have been exploring innovative approaches, where feasible, to secure the power supply for our communities at the lowest cost. An example of this is our Battery Energy Storage System (BESS), launched in Whangamatā in February 2020. As soon as an outage occurs on the network, the BESS kicks into action to power approximately 1,000 properties in and around the central business district. We see lots of potential for this kind of technology to replace traditional poles and wires.

Engaging with our customers and involving them in our decision-making is key to exploring these options. In the Coromandel region, we originally proposed new overhead lines to increase network capacity. Five years on and with the development of new technology, we are now exploring other options with the community to meet their priorities.

Across our network, we continue to reduce defects on our assets that cause outages. While we are well advanced on working to fix the critical defects identified at the start of our CPP, we have introduced new ways of inspecting our network. This includes the latest technologies, such as LiDAR (Light Detection and Ranging), which has given us much greater visibility of the areas that need attention. Capturing this data is extremely valuable and means we can prioritise and resolve defects quicker and more efficiently.

What's next?

As mentioned, heading into the final stretch of our CPP, we are focused on delivering the remaining major projects while continuing our renewals and defect reduction programme.

Meeting the needs of customers also means meeting the needs of our environment. As Aotearoa accelerates its move to a low-emissions future, we are preparing our networks for the change ahead to facilitate the energy transition for industrial and residential customers.

Our electricity and gas infrastructure will play a critical role in helping New Zealand achieve its zero-carbon goal, particularly as the demand for electricity increases and we look at implementing new and emerging technologies. Our current thinking is reflected in our latest Asset Management Plan, which sets out how we will design and deliver our networks for the future.

In terms of our business practices and priorities, our recently published net-zero roadmap and sustainability goals outline how we will get there and hold ourselves to account.

Our focus on delivering improvements has set a high bar and we are excited about working closely with our customers to provide a network that meets their changing needs and expectations.

We are pleased to reflect on our success of CPP Year Three. That we achieved what we did despite the unusual circumstances of the past year shows what is possible as we move into the final years of our investment plan.

Ngā mihi nui

John Loughlin, Chair



Safety inspection.

We get on with improving our network so you can get on with your day.



Keeping the lights on in Tauranga.

Ngā hua matua o te tau

Our year at a glance

Poles

4,811 poles replaced or reinforced,
18% more than the year before.

▲ 18%

Overhead lines

234km of overhead lines replaced,
28% more than the year before.

▲ 28%

Vegetation management

Over 14,300 tree sites managed,
30% more than the year before.

▲ 30%

Renewals and growth investment

\$469m invested in network renewal
and growth over the past three years.

\$469m

Keeping the lights on

We kept the electricity on
99.95% of the time.

99.95%



"I'm glad that this is going to get views to make people aware of power lines and the real risks involved if you get hit by electricity. I'd hate for anybody to go down the same journey I've been through over a split-second mistake."

- Troy Hall, electric shock survivor.

Toiora

Safety at the centre

Health and safety is at the core of everything we do, and as an essential service provider supporting our communities during COVID-19, this was front of mind more than ever.

We're always looking for improvement opportunities across our business and are committed to sharing our insights with others to keep people safe and well.

We've focused on what will make a real difference during the past year, such as supporting our team's wellbeing through mental health first aid training, safety on our roads and working with industry partners to reduce the risks related to driving.

We've continued to spend more time with our crews to understand their challenges better when working to keep the lights on for our customers. This has given us valuable insights and will enable us to achieve better outcomes through improving or simplifying our processes and systems.

Our ongoing public safety campaigns are helping to keep our communities safe around our network. Throughout the year, we educate people about the potential danger posed by electricity and the importance of putting safety first, from fruit pickers working in orchards to Kiwis doing DIY projects at home.

Look Up! Troy Hall's story of survival to educate others.

Hearing electric shock survivor Troy Hall relive his horrific accident brought home how powerful it is to share a real-life story. That's why we asked him to feature in our safety campaign.

In October 2011, Troy received two massive electric shocks when picking avocados at height on a cherry picker in a Matapihi, Tauranga orchard. In November last year, Troy shared his story in a short film for our public safety campaign that serves as a hard-hitting reminder about what can happen if you get too close to power lines.

The campaign was designed to target horticultural workers in the western Bay of Plenty, where we own and operate our electricity network. Troy teamed up with us to help us educate those working in orchards and others out in the community about staying well clear from power lines.

The power of Troy's story captured the attention of both the public and the electricity industry. After seeing the campaign, the industry training organisation (ITO) for New Zealand horticulturalists asked to include Powerco's orchard safety messaging in its latest NZQA-certified training material. Utilising our orchard safety messages, 4m clearance graphic, and link to our dedicated webpage in their training material will help future orchard workers stay safe.

In May, we were also proud to be recognised at the Public Relations Institute of New Zealand, the industry body for public relations and communication, for our campaign and the importance of sharing Troy's story to help save the lives of others.

We achieved a Total Recordable Injury Frequency Rate (TRIFR) of 9.01, which outperformed our target of 9.21. This measurement includes lost time injuries, medical treatment cases and restricted work cases per million hours worked and our results follow a continuous reduction of TRIFR over the past three years.



Bringing a reliable power supply to our customers.

Ngā puāwaitanga Seeing the benefits

Managing our assets effectively is our core business. It's how we bring a safe and reliable supply of power to all our customers.

More than halfway through our five-year CPP work programme, we've put up a lot of poles and wires as part of our renewal work and major projects – with plenty more still to go.

In the day-to-day, some customers may not see the difference our work is making. Depending on where you live and how much equipment we need to upgrade to secure your future power supply, you may experience more planned outages than others so that we can safely carry out our work.

We know there's never a good time to have an outage, but we can confidently say this work and the temporary disruption it causes in the short-term, means the network will be more reliable in the future. It's helping us keep your lights on for more of the time, and the positive impact of this increased investment is now starting to show.

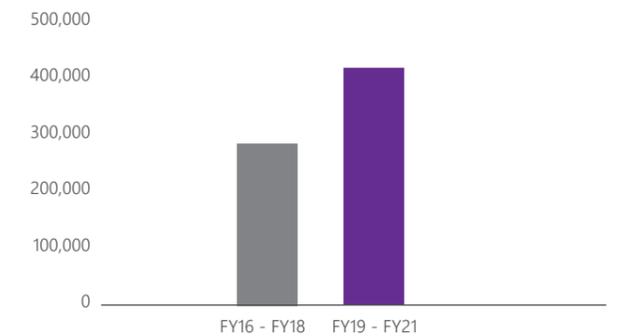
Our unplanned reliability performance was excellent, meaning fewer and shorter power outages for our customers. Our network is more resilient too; defective equipment faults are trending down, which means fewer outages for you. We're also delivering our planned works programme much more efficiently, further minimising disruption to customers.

In Taranaki our expenditure on renewals, planned maintenance and vegetation management for the first three years of our CPP, compared with the three prior years, has increased by 49% (see Figure 1). This investment in upgrades in areas such as Inglewood, Strathmore, Pātea and Pihama is improving our network reliability, fixing faults (see Figure 2) and ultimately decreasing the risk of power outages. In other areas, we've worked hard to identify and fix the equipment on our network that needed attention and we're happy that this is now trending down across our network (see Figure 3).

We know that in some parts of our network, ongoing projects and upgrades mean it will take longer to see the benefits of our work. Delivering these improvements for you remains our focus. With two more years of our CPP delivery programme to go, we look forward to seeing these positive outcomes.

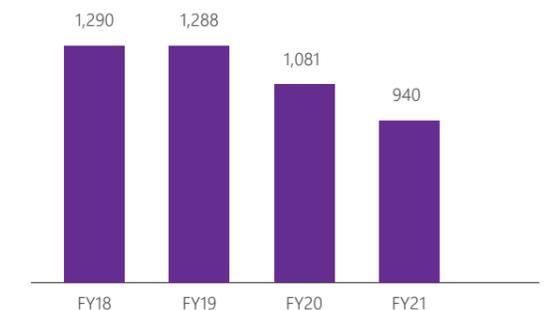
Taranaki expenditure \$k

(Figure 1)

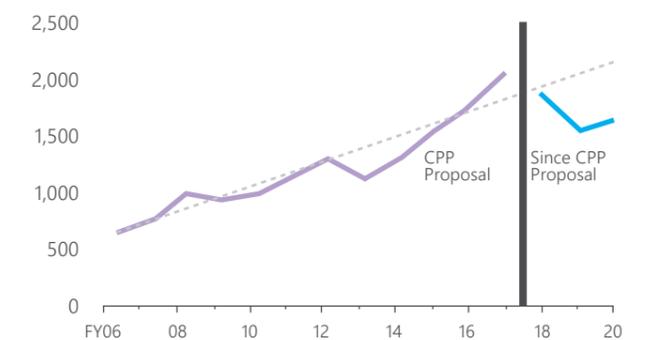


Total number of high voltage faults in Taranaki

(Figure 2)



Defective equipment faults have decreased over the past three years (Figure 3)





Taura tangata **Making connections**

Engaging closely with our communities during the past few years has given us valuable insights that have informed our decision-making and helped us to better understand and meet your needs and expectations.

Our focus on improving the experience for our customers has seen us expand our team, refine our processes, and collaborate more effectively with our stakeholders. We moved into the third year of our CPP with the confidence that we are better serving our customers – minimising the disruption caused by outages and keeping you better informed about our work and the benefits it brings to your community.

Our focus in the past year has been on working closely with the specific communities that experience greater levels of disruption while we upgrade the network for the long-term. By assessing the level of impact, such as the number and frequency of outages over a particular period and any associated road closures, our Customer Experience team tailors their outreach and engagement to best support those affected.

Meeting with our communities and involving customers in our planning processes has been successful in getting better outcomes. We're keen to work even closer with customers to get their input into the design of our network, wherever there's an opportunity to do so.

Helping our business customers during tough times

It's not just outages that cause disruption for our customers. COVID-19 and its associated restrictions put many businesses under financial strain. To help ease the pressure, we joined a group of electricity distributors and retailers to develop a payment deferral programme so that commercial customers had the flexibility to choose to pay their charges later in the year.

Working with Coromandel communities to shore up their power supply

The Coromandel is a beautiful part of our network, so it's no surprise it's a popular spot for residents and visitors. As the demand for power grows, so does the strain on our network, meaning there are now times when customers face an increasing risk of outages during peak periods, such as summer and public holidays.

Back in 2017, we'd proposed building overhead lines to increase our network capacity, but the rapid development of new technology means there are now other options, which could be delivered at a lower cost to our customers.

In the Coromandel, we're working closely with our communities to get their input, helping us select a solution that best meets their needs and priorities. Our engagement with customers over the past few years tells us there's a trade-off when it comes to landing a solution with the desired reliability that's also cost-effective, such as the time in which it can be delivered and any impact on the environment.

Given how much technology has developed over the years, we're working with industry partners to explore all the options when it comes to supporting our customers during times of peak demand on our network.

We're proud to be part of the Coromandel community and are excited to be working together.

Te ao matihiko

Smart use of data

Our electricity network is 28,000km in length – that’s a lot of lines and assets to keep on top of.

To be efficient and make sure we invest in the right areas at the right time, we need accurate data that tells us everything from the condition of our assets to the number of customers they connect to. This helps us make well-informed decisions for you and your community.

During the past year, we’ve continued to improve our planning and decision-making by embedding new tools and systems across the business, such as our Overhead Renewal Planning Tool. This tool uses geographic information systems to build visualisations of our network. From these, we can see what condition our assets are in and the risk of failure, so we know what we need to repair or replace.

With this information, our engineers can now plan renewal projects much further in advance – two years compared to three months as we did previously – and tasks that used to take months of manual work can now be done in days.

We’ve also explored pole top photography and LiDAR (Light Detection and Ranging) technology further to survey our electricity network. Following our initial trial during 2018-19, which focused on part of our network, we once again used low-flying helicopters equipped with LiDAR from November 2020 to February 2021, this time taking in more areas of our network. Taking high resolution digital photographs of overhead lines, poles and associated hardware, allows us to easily spot defects on our equipment.

In total, we surveyed 16,833km of overhead lines and 32,068 rural poles across Coromandel, Masterton, Wairarapa, Taranaki, western Bay of Plenty and south Waikato. We identified 160 previously unknown network defects that have now been fixed. Having a more efficient way to monitor the condition of our assets means we can better manage our maintenance and renewal programmes and identify and resolve potential issues before they cause an outage.

Another area of focus has been on continuing to embed our Enterprise Resource Planning (ERP) system across our business. Since its launch in 2019, we’ve been putting the right processes in place to get robust and consistent data as the basis for all our asset management decisions. It will also inform our network pricing. This drives improvement in our overall network resilience and helps us best meet our customers’ needs.

Having more accurate data at our fingertips has created other opportunities to do things better for our customers, particularly in the delivery of our planned works. We’ve been able to plan earlier, prioritise our work and collaborate with our crews and contractors to minimise planned outages and disruption to our customers.



Inspecting our network in Taranaki.



Kaitiakitanga Strengthening sustainability

As a business, we've been implementing sustainable practices for some time.

Over the past year, our focus has been on bringing them all together as part of a cohesive, business-wide strategy. Our first step in this direction was the establishment of a Corporate Sustainability Team in April 2020, which is responsible for identifying and championing new sustainability opportunities and initiatives.

Since then, we've implemented further initiatives that hold us to account and give our customers and stakeholders confidence that we're going in the right direction.

Sustainability at Powerco was published on our website in December 2020. Shaped by our five sustainability pillars, this document provides an overview of our approach to sustainability, our success so far and, importantly, our goals and targets for the future. Achieving these will require us to innovate, and we'll be sure to collaborate with our partners and the wider industry as we discover new ways to do so.

One of our key new initiatives highlighted in this document was our net-zero emissions target for 2030, which was finalised in September 2020. It reflects our commitment to reduce our environmental impact and outlines specific focus areas such as a 55% reduction in emissions in our vehicle fleet.

This project is just one of many sustainable operational practices increasingly becoming part of our business-as-usual. In doing so, we hope to achieve greater positive outcomes for our environment, our people and communities, and the financial health of our company.

A key part of our role in facilitating Aotearoa's move to a low-emissions future is preparing our networks for change and ensuring they continue to be safe and resilient as the energy sector transitions over the coming years.

Whanaketanga Supporting energy choices

With growing interest in sustainability and the emphasis on reducing Aotearoa's carbon footprint, the number of customers using alternative energy choices such as solar panels, batteries and electric vehicles (EVs) will increase.

The impact on our electricity network will be complex and considers many factors such as the effect of switching to renewable energy sources, particularly for heating and transport, as well as the ongoing drive to reduce energy costs.

Most of our infrastructure was designed 30-40 years ago, before the rapid advancement of new technology, and therefore didn't consider how these alternative options would affect the load on our network, particularly at different times of the day when demand peaks.

Our job is to ensure our network can support our customers' evolving energy needs. Understanding and preparing for these changes ensures that our investment has a life into the future and can benefit customers for years to come.

A better future for our residential network

The importance of having a reliable power supply at home was made even clearer during the COVID-19 lockdown period, and the subsequent shift to more flexible working options got us thinking about the reliability of our low voltage residential network.

While we have good visibility of what's happening on our high voltage network, we don't know about faults or outages impacting small groups of customers or individuals on our low voltage network. In fact, we rely on you to let us know about any disruptions to your supply. Given our low voltage network makes up 38% of



our total electricity network, we're committed to improving our visibility of it so we can better support our customers.

Understanding the performance of our low voltage network isn't just important now – it will help us understand how we can support our customers' use of new technologies in the future. To address this, we've been running a project since March 2020 to monitor our network in real-time.

This has seen our team install 430 specialised low voltage monitoring units in transformers in Taranaki, Palmerston

North and Tauranga. The units feed data back to our Network Operations Centre (NOC), providing visibility of what's happening on our low voltage network in these areas, as it's happening. Our NOC team can then use this information to see any outages on the low voltage network and proactively and more efficiently restore power for the customer.

Monitoring the loads on our network also means we can see any areas that are overloaded and struggling to cope with the level of supply. Being able to accurately assess the impact of loads such as the effects of new subdivisions,

means we can explore how to best use our low voltage network to support growing demand or to supply other areas where there may be a fault.

Having visibility of our low voltage network during an upgrade of equipment in New Plymouth's CBD from June to December 2020, meant we could keep the power on for businesses while we worked. By re-routing some of our cables from nearby transformers and keeping a close watch on the quality of our supply, we didn't have to disrupt our customers during the day.

Kōrero hōmiromiro

Behind the numbers

Our third year of CPP has been another busy one. We continued to power through our investment programme and have made strong progress in our asset renewal, vegetation management and defect programme. The achievements in these areas have contributed to the positive results we are seeing in the reliability of our network and our ability to keep the power on for our customers.

We know we'll have to work hard to deliver our major and minor projects to support growth across our network and ensure it's more secure for our customers, as well as the delivery of our CPP preventative maintenance programme. We're confident we can meet these challenges and reflecting over the last year, we're pleased with how we effectively managed the delivery of our investment programme during the changing and disruptive circumstances of COVID-19.

Asset management programme delivery

In CPP Year Three, we reinforced or replaced 18% more poles and 28% more overhead lines than the previous year. Our overhead line replacement was below our initial forecasts by 11% – this was a conscious risk-based decision based on more accurate information we had about the condition of these lines.

Exceeding our pole reinforcement and replacement targets for the year was also a deliberate decision based on the immediate and longer-term benefits it will bring our customers. We're pleased with this in light of the disruption caused to our contractors by the six-week COVID-19 lockdown during April and May 2020.

Our transformer replacement programme performed strongly compared with the previous year, and our vegetation programme saw us manage a record 14,389 tree sites – 30%



more than the year before and well above our CPP target of 8,000 tree sites. We continue to address defects at a rate that's ahead of our CPP targets and have introduced tools that allow us to identify defects faster and more accurately. This is having a positive effect on network reliability and we look forward to this bringing further benefits to our customers in the future.

We owe a lot of this year's achievements to the suite of new tools and information management systems we've implemented over the past three years. This has helped to streamline our processes, optimise resources and make good evidence-based decisions.

While the Level 4 lockdown initially slowed our vegetation management progress, our increased use of new techniques

such as mulching machinery kept us on schedule. LiDAR (Light Detection and Ranging) and pole top photography have also proven valuable to our tree management and defect management programmes. We now have a baseline of vegetation issues to resolve over the coming year, and accurate data for our defect analysis.

Our delivery of major and minor growth projects remains a challenge. While this past year has seen us significantly advance the Palmerston North CBD reinforcement project and the new Feilding to Sanson 33kV subtransmission link project, the complex nature of delivering major projects means others are progressing slower than anticipated. In particular, it's taking longer to finalise the start date for the construction of major projects to support the growth and

security of electricity supply on the Coromandel Peninsula and South Waikato. However, we're still confident we can progress most of our major projects to completion over the next two years.

Find the full set of numbers about our third year of CPP delivery in the companion numbers document at powercodeivering.co.nz

A reliable power supply

We're pleased to have met all our regulatory quality performance targets for both planned and unplanned outages this past year, and for the second year in a row.

Achieving this for planned outages required us to work hard and innovatively when planning and delivering our work. We focused on scheduling our planned outages in a way that minimised disruption to our customers. We did this by making sure work that might have affected the same customers occurred, if possible, at the same time. We also re-routed power to customers where possible, to minimise the size of any outage areas, and updated our use of generators policy.

We had fewer unplanned outages than the previous year. The benefits of our renewal work, defect remediation, network automation improvements and vegetation programme, all played a part in helping us remain under the regulatory limits, as did good weather conditions.

Planned	Limit	Actual
SAIDI	92.342	88.648
SAIFI	0.393	0.374

Unplanned	Limit	Actual
SAIDI	183.514	168.962
SAIFI	2.239	1.836

SAIDI = Average minutes without power.
SAIFI = Average number of outages.

Customer experience

Our priority last year was minimising the disruption caused by outages and keeping customers better informed about our work in their community. We've continued our drive from previous years to engage more closely with our communities and move towards a more collaborative approach to customer experience. We've refined our approach by providing a more focused level of support for those communities most disrupted by our work through improved customer segmentation, so to understand the impact of an outage. This saw us increase resources in our Customer Experience team, develop improved processes to share better information through our website, and be more visible and available to our communities by holding community drop-in sessions.

In total, we received 927 complaints last year. While this is an increase on the previous year, we've seen a positive improvement in our response rate to complaints, which has been a strong focus of the Customer Experience team. We responded to the majority of complaints (86%) in two days, with 65% resolved within 20 days and 86% resolved within 40 days. Eight complaints were referred to Utilities Disputes, the same number as last year. Beyond referred complaints, we also engaged with Utilities Disputes by participating in their online membership group webinars as well as participating in industry consultation around better promoting the scheme in our customer interactions.

Our investment

COVID-19 restrictions meant we had to adapt right from the outset of our investment year. However, our strong delivery meant our actual total expenditure for the year exceeded our forecast by \$12 million. We're tracking very close to total expenditure forecasts for the regulatory period to date. Our focus on corporate operating expenditure efficiencies saw us spend \$4.5 million less than forecast and \$685,000 less on facility costs. We will continue to strive to achieve non-network operating efficiencies where reasonable to do so.

Major and minor projects expenditure remain below annual and overall CPP forecasts. As with the previous year, scoping design and securing land is proving to be a significant challenge. Additionally, we've reviewed a number of the major projects to ensure they continue to make economic sense as construction costs grow. As a result, we've engaged with our customers and the wider industry over the past year to see if more effective alternative solutions to our initial proposals exist.

Renewal and reliability capital expenditure is above CPP Year Three forecasts. This is due to a number of factors including projects we introduced as a response to COVID-19, increased expenditure on network automation and new opportunities we identified to address specific network constraints as a result of load growth.

While our corrective maintenance and reactive maintenance operating expenditure is in line with forecasts, we continue to deliver our preventative maintenance below budget.

The preventative maintenance forecast is a good example (alongside routine capital expenditure and overhead conductors) of where forecasts developed pre-CPP are not fully aligned with the annual targets we set now, as these are based on better information. While this doesn't impact the overall five-year CPP expenditure forecast, it does cause year-on-year variances across different expenditure areas.

Industry learning

As we continue to build our knowledge, we're committed to sharing our expertise with the wider industry. In the past year, our team was recognised for our Overhead Renewal Planning Tool, winning the "See What Others Can't" competition for innovative use of Geographic Information Systems (announced at the New Zealand Esri User Conference in September 2020).

We're also leading the way to reduce incidents of vehicles hitting power poles on our network. Using our own data along with information from the New Zealand Transport Agency Waka Kotahi, we've developed a tool to identify power poles on our network that are at a higher risk of being hit in a car crash, using this to help us plan our future overhead assets. We shared our insights and presented the tool at a public safety working group hosted by the Electrical Engineers' Association (EEA) and have received interest from other lines companies.

We've also hosted more successful Contractor HSE Forums. This gives us an opportunity to collaborate more effectively with our service providers and share valuable insights.

We're pleased with all our achievements and progress in CPP Year Three and are excited to continue working closely with our customers to deliver our remaining investment plan over the next two years.



Keeping the lights on for customers.



Port Taranaki by Ron Coleman.



This booklet is printed on environmentally responsible paper, produced using Elemental Chlorine Free (ECF), Acid Free (PH), FSC® certified, Mixed Source Pulp from well managed forests, and manufactured under strict ISO14001 and ISO9002 Environmental Management Systems.