

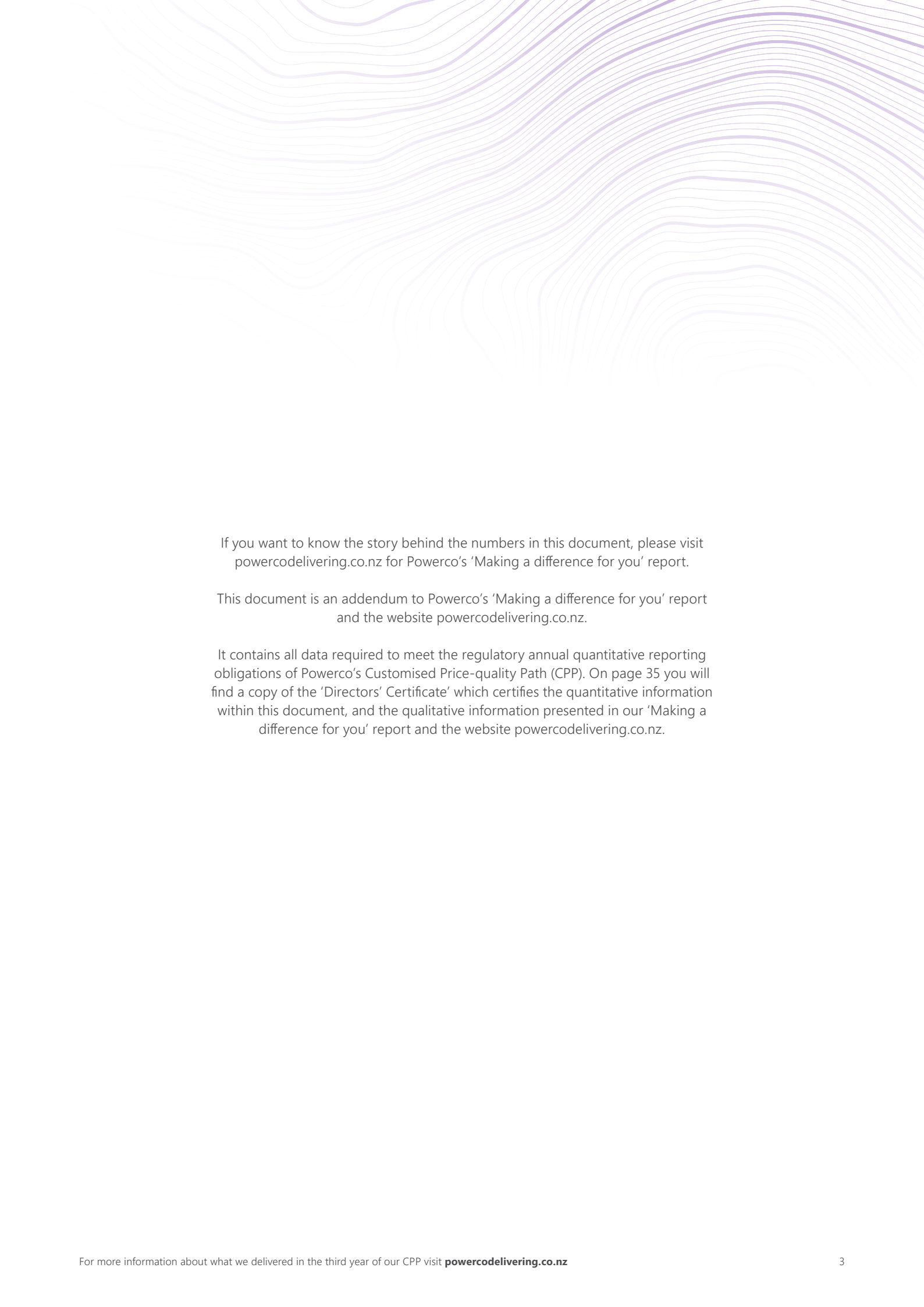


The numbers

Annual Delivery Report 2021 - Quantitative data







If you want to know the story behind the numbers in this document, please visit powercodelivering.co.nz for Powerco's 'Making a difference for you' report.

This document is an addendum to Powerco's 'Making a difference for you' report and the website powercodelivering.co.nz.

It contains all data required to meet the regulatory annual quantitative reporting obligations of Powerco's Customised Price-quality Path (CPP). On page 35 you will find a copy of the 'Directors' Certificate' which certifies the quantitative information within this document, and the qualitative information presented in our 'Making a difference for you' report and the website powercodelivering.co.nz.

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

Keeping the lights on in Tauranga.



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%

Financial summary

ADR reference 3.3a, 3.3b, 3.3c

| \$000 | Actual FY21 | Actual CPP Regulatory period to date | Forecast FY21 | Forecast CPP Regulatory period to date | Variance FY21 | Variance CPP Regulatory period to date |
|--------------------------------|----------------|--|------------------|--|------------------|--|
| Total expenditure (totex) | 305,272 | 833,972 | 292,936 | 837,574 | (12,335) | 3,602 |
| Capital expenditure (capex) | 214,326 | 565,482 | 193,277 | 547,899 | (21,049) | (17,583) |
| Operational expenditure (opex) | 90,946 | 268,490 | 99,660 | 289,675 | 8,714 | 21,185 |

| \$000 | Actual FY21 | Actual CPP Regulatory period to date | Forecast FY21 | Forecast CPP Regulatory period to date | Variance FY21 | Variance CPP Regulatory period to date |
|--|----------------|--|------------------|--|------------------|--|
| Network opex | | | | | | |
| Preventative maintenance | 7,841 | 25,149 | 13,512 | 38,198 | 5,671 | 13,049 |
| Corrective maintenance | 16,055 | 46,380 | 15,058 | 42,923 | (997) | (3,457) |
| Reactive maintenance | 6,303 | 21,033 | 8,058 | 23,371 | 1,755 | 2,337 |
| Vegetation management | 10,752 | 31,525 | 9,742 | 29,949 | (1,010) | (1,576) |
| System operations and network support (SONS) | 16,863 | 49,354 | 16,831 | 48,271 | (32) | (1,083) |
| Total | 57,813 | 173,440 | 63,202 | 182,712 | 5,389 | 9,271 |

| \$000 | Actual FY21 | Actual CPP Regulatory period to date | Forecast FY21 | Forecast CPP Regulatory period to date | Variance FY21 | Variance CPP Regulatory period to date |
|---|----------------|--|------------------|--|------------------|--|
| Business support costs | | | | | | |
| Corporate | 21,009 | 66,277 | 25,453 | 75,467 | 4,444 | 9,190 |
| Facilities | 1,543 | 4,327 | 2,227 | 6,313 | 685 | 1,986 |
| Insurance and governance | 2,759 | 7,256 | 2,432 | 7,011 | (326) | (245) |
| Information communication technology (ICT) opex | 7,822 | 17,189 | 6,344 | 18,171 | (1,477) | 982 |
| Total | 33,133 | 95,049 | 36,458 | 106,963 | 3,325 | 11,913 |

| \$000 | Actual FY21 | Actual CPP Regulatory period to date | Forecast FY21 | Forecast CPP Regulatory period to date | Variance FY21 | Variance CPP Regulatory period to date |
|--------------------------------------|----------------|--|------------------|--|------------------|--|
| Asset replacement and renewal | | | | | | |
| Overhead structures | 77,756 | 157,871 | 39,040 | 103,961 | (38,716) | (53,910) |
| Overhead conductors | 5,334 | 18,849 | 12,566 | 28,862 | 7,232 | 10,012 |
| Cables | 14,890 | 38,981 | 7,584 | 22,639 | (7,307) | (16,342) |
| Zone substations | 6,514 | 25,606 | 16,393 | 45,722 | 9,879 | 20,115 |
| Distribution transformers | 5,358 | 23,374 | 10,037 | 29,182 | 4,679 | 5,808 |
| Distribution switchgear | 9,408 | 23,603 | 10,206 | 30,069 | 799 | 6,466 |
| Secondary systems | 4,351 | 9,697 | 4,510 | 14,068 | 159 | 4,371 |
| Total | 123,610 | 297,982 | 100,335 | 274,502 | (23,275) | (23,480) |

| \$000 | Actual FY21 | Actual CPP Regulatory period to date | Forecast FY21 | Forecast CPP Regulatory period to date | Variance FY21 | Variance CPP Regulatory period to date |
|----------------------------------|----------------|--|------------------|--|------------------|--|
| Growth and security | | | | | | |
| Major projects | 15,787 | 52,964 | 28,288 | 81,197 | 12,501 | 28,233 |
| Minor projects | 6,711 | 17,162 | 13,317 | 33,881 | 6,606 | 16,719 |
| Routine | 26,233 | 64,176 | 15,951 | 46,119 | (10,282) | (18,057) |
| Communications | 1,801 | 14,527 | 1,966 | 13,325 | 165 | (1,202) |
| Reliability | 10,405 | 22,554 | 4,211 | 11,861 | (6,193) | (10,693) |
| Total growth and security | 60,937 | 171,383 | 63,733 | 186,383 | 2,796 | 15,000 |



Major projects

ADR reference 3.3j

These are multi-year projects, so the annual figures don't reflect the status of the project. For more detail go to www.powercodelivering.co.nz and look for the project page.

| Project and description | Progress | \$000 | Actual FY21 | Forecast FY21 | Variance FY21 |
|--|--|-------|-------------|---------------|---------------|
| Papamoa Install two 33kV cable circuits from Te Matai GXP to Papamoa east, construct a new zone substation at Papamoa east (Wairakei) and a new 33kV indoor switchboard at Te Matai GXP. | Cables, substation and switchboard installed and commissioned in FY19. Project complete. | | 327 | - | (327) |
| Palmerston North Install new 33kV cables in the Palmerston North CBD to reinforce supply. Construct a new zone substation (Ferguson) and install new 33kV circuits between Linton GXP and the new substation. Construct a new 33kV indoor switchboard at Linton GXP. | Ferguson St zone substation was commissioned in mid 2019. 11kV feeder reconfigurations progressed during FY20. Linton 33kV switchgear design and Linton to Ferguson route progressed. | | 6,399 | - | (6,399) |
| Putāruru Construct new 110/33kV substation adjacent to the existing Putāruru zone substation. Construct a new 110kV circuit from Arapuni hydro to the new substation. | 110/33kV substation conceptual design completed. Line and cable route issues progressed during FY21. Agreement in principle reached for route into Arapuni. Detailed design well underway. | | 1,503 | 9,604 | 8,102 |
| Whangamatā Install a battery energy storage solution (BESS) and integrated standby diesel generator at Whangamatā zone substation. | BESS and diesel generator installation was completed in FY20, with commissioning in November 2019. Project complete. | | 385 | 64 | (321) |
| Omokoroa Install a 33kV cable from Wairoa Rd to the Omokoroa substation, and another between Greerton switching station and Bethlehem substation. Construct a new 33kV indoor switchboard at the Omokoroa substation. Install a new capacitor bank at Aongatete. | Detailed design and landowner negotiations progressed for the cabling works in FY21. Construction has started (approx. 20% completion). Omokoroa substation works have been impacted by the Tauranga Northern Link highway project, with works currently on hold. | | 129 | 4,103 | 3,973 |
| Kopu-Tairua Reconductor the existing 66kV line between Kopu GXP and Tairua substation. | Updated cost estimates show this project is now significantly more expensive than originally forecast and we are now re-evaluating options, including looking at generation solutions. The reconductoring works is on hold while this updated options analysis is performed. | | 28 | 1,745 | 1,716 |
| Kopu-Kauaeranga Reconductor the existing 66kV line between Parawai and Kauaeranga Valley and thermally upgrade the line between Kopu GXP and Parawai. Construct a new 110kV overhead line from the Kopu GXP to the Kauaeranga Valley. | Reconductoring and thermal upgrade works now complete. New 110kV line route consented, awaiting resolution of Treaty settlement claim. Timing being reconsidered alongside options re-evaluation for Kopu-Tairua. | | 697 | 322 | (375) |

| Project and description | Progress | \$000 | Actual FY21 | Forecast FY21 | Variance FY21 |
|---|---|--------------|------------------------|--------------------------|--------------------------|
| Moturoa-New Plymouth GXP Install dual 33kV cable circuits from Carrington Street GXP to Moturoa zone substation. | New 33kV cable circuits have been installed and were commissioned in August 2019. Project complete. | | 198 | - | (198) |
| Kerepehi-Paeroa Install backup diesel generation at Kerepehi. | The preferred CPP option of a new 33kV line between Kerepehi and Paeroa is no longer viable. After re-evaluating options, a backup generation solution at Kerepehi is now being investigated. | | - | 1,798 | 1,798 |
| Whenuakite Construct a new zone substation at Whenuakite south of Whitianga and install new 66kV line deviation off the existing Tairua-Whitianga circuit. | Substation and line route landowner negotiations progressed during FY21. Detailed design largely complete. Anticipate commencing line construction and substation procurement during FY22. | | 525 | 257 | (268) |
| Matarangi Construct a new zone substation at Matarangi and install a new 66kV circuit from Whitianga substation to the new substation. | Project delayed due to landowner concerns with securing land and line route. Options being re-evaluated alongside Kopu-Tairua, including backup generation. | | 6 | 1,559 | 1,553 |
| Putāruru-Tirau Install a new 33kV underground cable between Putāruru and Tirau substations. | Local road route selected. Detailed design and procurement complete, with construction scheduled for FY22. | | 144 | 4,967 | 4,823 |
| Kaimarama-Whitianga Construct a new gas insulated 66kV switchboard (GIS) at Kaimarama. | Landowner agreement in principle reached for GIS site. To complete detailed design and procurement of the GIS in FY22, and begin substation civil works. | | 200 | 1,659 | 1,459 |
| Kereone-Walton Install a new 33kV cable link between the Kereone Tee and the Walton zone substation. Construct a new 33kV switchboard and a 5MVAR switched capacitor bank at Walton substation. | Conceptual design reports have been completed. Commencing detailed design in FY21. Potential hold-ups to address wetland incursion issues. | | 181 | 1,300 | 1,120 |
| Feilding-Sanson Construct a new 33kV subtransmission link between the Sanson and Bulls substations. Construct a new 33/11kV zone substation at the Ohakea airbase. Install new 33kV switchgear at Sanson and Bulls substations. Thermally upgrade a section of the existing 33kV line between Marton and Bulls. | Detailed designs commenced during FY21. Long lead time procurement items ordered for substation works. Customer requirements have brought forward the planned works. | | 3,470 | - | (3,470) |
| Pyes Pa Construct a new 33/11kV zone substation at Pyes Pa, Tauriko. | The Pyes Pa substation was commissioned in May 2018. | | - | - | - |
| Inglewood Convert Inglewood substation to 11kV by upgrading the remaining 6.6kV/415V distribution transformers. | Second stage of transformer conversions commenced in FY21. Final stage is planned for FY22. | | 1,593 | 910 | (683) |

Supporting material: In addition to the documents mentioned in the narrative above, all projects are further discussed in Chapter 15 and Appendix 8 of the 2021 Asset Management Plan. Project overview documents describing the major projects as at the time of the CPP submission are available on the Commerce Commission's website.



Crew member in the field.

| \$000 | Actual FY21 | Actual CPP Regulatory period to date | Forecast FY21 | Forecast CPP Regulatory period to date | Variance FY21 | Variance CPP Regulatory period to date |
|----------------------------------|----------------|--|------------------|--|------------------|--|
| Other network capex | | | | | | |
| Consumer connection | 13,788 | 38,127 | 12,173 | 36,271 | (1,615) | (1,857) |
| Asset relocations | 627 | 2,874 | 874 | 2,550 | 246 | (324) |
| Network evolution | 305 | 1,487 | - | - | (305) | (1,487) |
| Total other network capex | 14,720 | 42,489 | 13,046 | 38,820 | (1,673) | (3,668) |

| \$000 | Actual FY21 | Actual CPP Regulatory period to date | Forecast FY21 | Forecast CPP Regulatory period to date | Variance FY21 | Variance CPP Regulatory period to date |
|--------------------------|----------------|--|------------------|--|------------------|--|
| Non network | | | | | | |
| ICT | 11,095 | 39,323 | 14,314 | 41,963 | 3,219 | 2,640 |
| Facilities | 3,963 | 14,306 | 1,847 | 6,231 | (2,116) | (8,075) |
| Total non network | 15,058 | 53,629 | 16,161 | 48,194 | 1,103 | (5,435) |



Safety inspection.

Asset renewal

ADR reference 3.3d, 3.3e, 3.3f, 3.3i

| km | Actual FY21 | Forecast FY21 | Variance FY21 |
|--|----------------|------------------|------------------|
| Conductor replacement by region | | | |
| Western region | 135 | 189 | 54 |
| Eastern region | 99 | 75 | (24) |
| Total | 234 | 264 | 30 |

Number

Overhead structures

| | | | |
|----------------------------------|--------------|--------------|--------------|
| Concrete poles / steel structure | 2,822 | 2,686 | (136) |
| Wood poles | 1,930 | 1,974 | 43 |
| Other pole types | 59 | 31 | (27) |
| Total | 4,811 | 4,691 | (120) |

Number

Overhead structures by region

| | | | |
|----------------|--------------|--------------|--------------|
| Western region | 3,117 | 3,514 | 397 |
| Eastern region | 1,694 | 1,177 | (517) |
| Total | 4,811 | 4,691 | (120) |

Number

Zone substation switchgear

Made up of:

| | | | |
|---------------------------------|---|---|-----|
| Outdoor circuit breakers | 8 | 7 | (1) |
| Indoor switchboards | 2 | 5 | 3 |
| Individual indoor circuit break | - | - | - |

Number

Transformer replacement

| | | | |
|--|-----|-----|------|
| Distribution transformers (up to 22kV) | 480 | 424 | (56) |
| Power transformers (22kV up to 110kV) | 4 | 3 | (1) |

Note: Conductor, pole and distribution transformer replacement quantities are based on an estimate of the number of assets replaced from design and as-built documentation but are not yet completed in our GIS system. Conservative assumptions have been used to ensure the replacement quantities are not overstated.

Unit rate

ADR reference 3.3g, 3.3h

| \$ | Actual FY21 Sub-transmission | Actual FY21 Distribution | Actual FY21 Low voltage |
|----|------------------------------------|--------------------------------|-------------------------------|
|----|------------------------------------|--------------------------------|-------------------------------|

Average unit value per renewed asset

| | | | |
|---------------------|-------|--------|--------|
| Poles | 6,664 | 6,629 | 5,972 |
| Crossarm assemblies | 2,631 | 1,565 | 1,308 |
| Conductor (per km) | n/a | 15,831 | 27,980 |

| \$ | Actual FY21 |
|----|----------------|
|----|----------------|

Average unit value per renewed asset

| | |
|----------------------------|--------|
| Power transformers | n/a |
| Distribution transformers | 12,848 |
| Zone substation switchgear | n/a |

Note: There were no replacements of sub-transmission conductors in FY21. An insufficient quantity of power transformers and zone substation switchgear have been replaced, as built and capitalised in FY21 to calculate an average unit rate. Also, the pole unit rate presented is exclusive of associated crossarm assemblies.

Defects

ADR reference 3.3k, 3.3p

| Number | Actual FY21 | Actual CPP Regulatory period to date |
|--|------------------------|---|
| Defect backlog | | |
| Material asset defects in backlog at start of the year | 30,707 | |
| New material defect identified | 16,909 | |
| Material defects remedied | 15,428 | 57,058 |
| Material asset defects in backlog at end of the year | 32,188 | |

| Number | Actual FY21 | Actual CPP Regulatory period to date |
|----------------------|------------------------|---|
| Red tag poles | | |
| Identified | 48 | 160 |
| Replaced | 62 | 140 |

Note: Defects remedied include both defects closed through field work and defects cancelled through data cleansing programmes.



Inspections

ADR reference 3.3l, 3.3m, 3.3n, 3.3o

| Number | Actual FY21 | Actual CPP Regulatory period to date |
|---|----------------|--|
| Overhead lines - Western region | | |
| Number of poles | 34,742 | 107,635 |
| Estimated line length km | 2,228 | 6,907 |
| Overhead lines - Eastern region | | |
| Number of poles | 21,619 | 48,565 |
| Estimated line length km | 1,387 | 3,116 |
| Transformers - Western region | | |
| One pole mounted transformers / substations | 3,511 | 9,105 |
| Two pole mounted transformers / substations | 98 | 243 |
| Total | 3,609 | 9,348 |
| Ground mounted transformers | 7,525 | 20,549 |
| Transformers - Eastern region | | |
| One pole mounted transformers / substations | 2,880 | 4,662 |
| Two pole mounted transformers / substations | 47 | 79 |
| Total | 2,927 | 4,741 |
| Ground mounted transformers | 9,513 | 28,493 |

Vegetation management

ADR reference 3.3q

| Number | Actual FY21 | Actual CPP Regulatory period to date | Forecast FY21 | Variance FY21 |
|---------------------------------|----------------|--|------------------|------------------|
| Vegetation management | | | | |
| Tree sites trimmed | 3,815 | | | |
| Tree sites removed | 10,185 | | | |
| Tree sites sprayed | 390 | | | |
| Total tree sites managed | 14,389 | 36,260 | 7,471 | (6,918) |
| % of work cleared | 193% | 87% | | |

Enterprise resource planning

ADR reference 3.3r

| \$000 | Actual FY21 | Forecast FY21 |
|-------------------------------------|----------------|------------------|
| Enterprise resource planning | | |
| Expenditure | 3,209 | 2,776 |

Staff recruitment

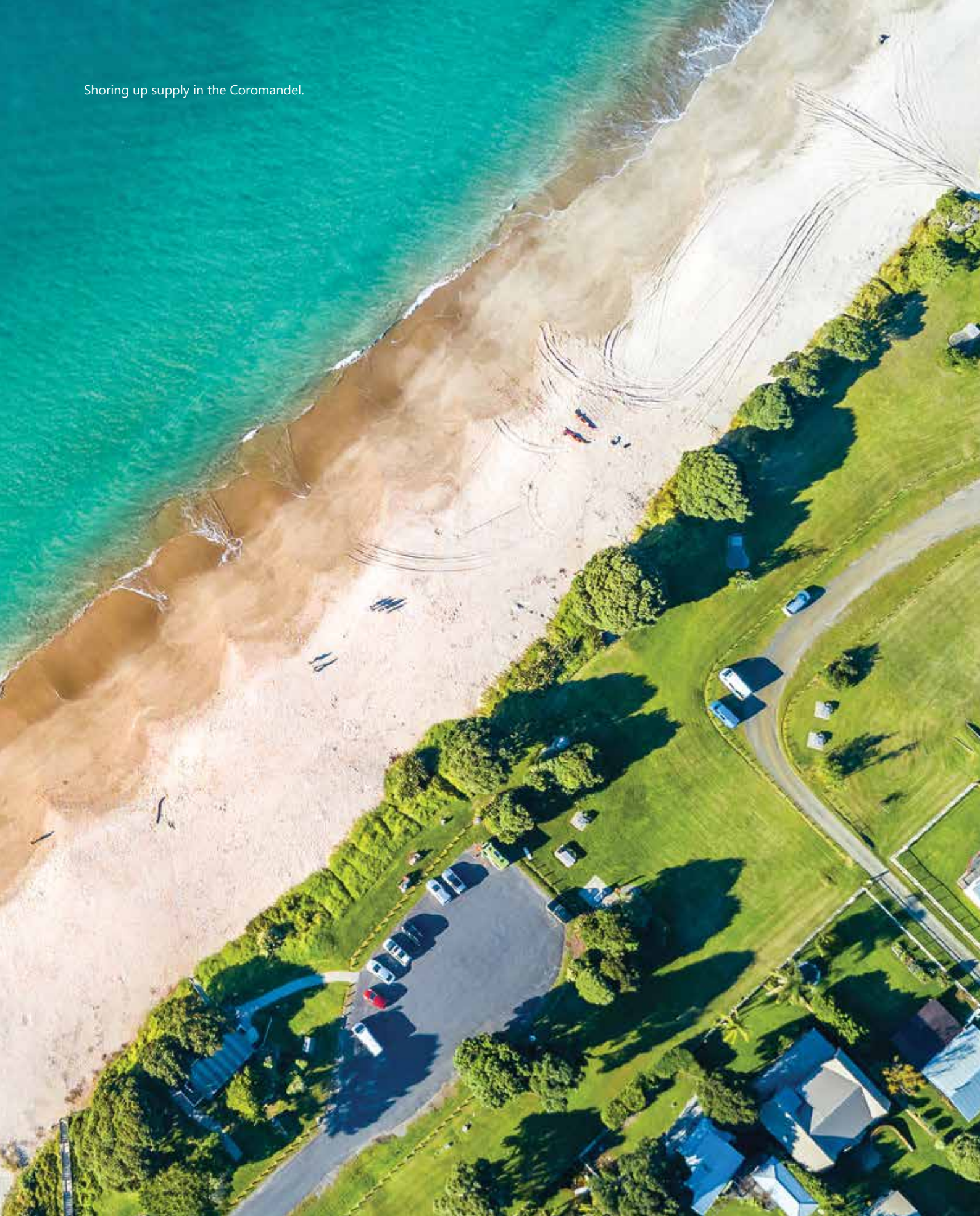
ADR reference 3.3s

| Number | Actual FY21 | Forecast FY21 | Variance FY21 |
|---|----------------|------------------|------------------|
| Staff recruitment | | | |
| Full-time equivalent staff recruited (FTEs) | 18 | 2 | (16) |

Note: Additional FTEs recruited in FY21 were primarily in the following areas:

- Electricity Asset Strategy and Investment
- Electricity Service Delivery and System Operations
- Finance and Business Services

Shoring up supply in the Coromandel.



Network performance

ADR reference 3.3t, 3.3u, 3.3v

| Minutes | Actual FY21 | Limit FY21 |
|----------------------------------|----------------|----------------|
| SAIDI (Planned) | | |
| Western region | 99.678 | |
| Eastern region | 76.459 | |
| Powerco SAIDI (Planned) | 88.648 | 92.342 |
| SAIFI (Planned) | | |
| Western region | 0.427 | |
| Eastern region | 0.315 | |
| Powerco SAIFI (Planned) | 0.374 | 0.393 |
| SAIDI (Unplanned) | | |
| Western region | 170.366 | |
| Eastern region | 167.410 | |
| Powerco SAIDI (Unplanned) | 168.962 | 183.514 |
| SAIFI (Unplanned) | | |
| Western region | 1.964 | |
| Eastern region | 1.696 | |
| Powerco SAIFI (Unplanned) | 1.836 | 2.239 |
| Minutes | | |
| Average outage duration | | |
| Planned 6.6kV to 22kV | 237.191 | |
| Planned 22kV to 110kV | 233.371 | |
| Unplanned 6.6kV to 22kV | 97.998 | |
| Unplanned 22kV to 110kV | 68.036 | |

Note: Eastern and Western SAIDI/SAIFI figures presented are in respect to the number of ICPs in the Eastern and Western networks respectively and will not sum to the total Powerco network SAIDI/SAIFI.

Feeder performance

ADR reference 3.3w (i) (ii) (iii) (iv)

Interruption duration index for 10 worst feeders

| F1 Feeder | Index | Location |
|--------------|-------|--------------------------|
| Origin 2 | 1,190 | Taranaki, Waihapa Sub |
| Origin 1 | 1,177 | Taranaki, Waihapa Sub |
| Fert Works | 917 | Tauranga, Triton Sub |
| McKee 1 | 586 | Taranaki, McKee Sub |
| Imlay | 534 | Whanganui, Beach Rd Sub |
| Lorne St | 524 | Valley, Morrinsville Sub |
| Matapu | 514 | Taranaki, Kapuni Sub |
| Arapuni St | 481 | Valley, Putāruru Sub |
| Rangiuru | 468 | Tauranga, Te Puke Sub |
| NZDG Tirau 1 | 468 | Valley, Tirau Sub |

Number of feeders exceeding its interruption duration targets

| | |
|----|----|
| F1 | 34 |
|----|----|

| F4 Feeder | Index | Location |
|--------------|-------|---------------------------|
| Mauriceville | 2,124 | Manawatū, Parkville Sub |
| Strathmore | 1,969 | Taranaki, Douglas Sub |
| Burnside | 1,897 | Wairarapa, Tuhitarata Sub |
| Patea | 1,699 | Taranaki, Livingstone Sub |
| Hoe-O-Tainui | 1,691 | Valley, Tahuna Sub |
| Huiroa | 1,640 | Taranaki, Douglas Sub |
| Putorino | 1,580 | Whanganui, Rata Sub |
| Horoeka | 1,545 | Manawatū, Pongaroa Sub |
| Rongomai | 1,539 | Manawatū, Alfredton Sub |
| Matakana Rd | 1,536 | Tauranga, Aongatete Sub |

| | |
|----|----|
| F4 | 52 |
|----|----|

| F2 Feeder | Index | Location |
|--------------------|-------|---------------------------|
| Waterworks Rd | 1,289 | Whanganui, Kai Iwi Sub |
| Worksop Rd | 966 | Wairarapa, Chapel Sub |
| Windfarm | 512 | Wairarapa, Hau Nui Sub |
| Linton | 490 | Manawatū, Turitea Sub |
| Horahora | 479 | Valley, Putāruru Sub |
| Roads | 464 | Tauranga, Te Puke Sub |
| Colombo Rd | 402 | Wairarapa, Te Ore Ore Sub |
| Bent St | 395 | Valley, Putāruru Sub |
| Holdsworth | 383 | Wairarapa, Norfolk Sub |
| Taihape Town South | 350 | Whanganui, Taihape Sub |

| | |
|----|----|
| F2 | 47 |
|----|----|

| F5 Feeder | Index | Location |
|--------------|-------|---------------------------|
| Castlepoint | 2,299 | Wairarapa, Tinui Sub |
| Coast Road | 1,817 | Manawatū, Pongaroa Sub |
| Blairlogie | 1,792 | Wairarapa, Awatoitoi Sub |
| Mangapakeha | 1,468 | Wairarapa, Awatoitoi Sub |
| Langdale | 1,135 | Wairarapa, Tinui Sub |
| Tuturumuri | 905 | Wairarapa, Hau Nui Sub |
| Irirangi | 830 | Whanganui, Waiouru Sub |
| Weraiti | 826 | Wairarapa, Te Ore Ore Sub |
| Annedale | 678 | Wairarapa, Tinui Sub |
| Otaraoa Rd | 555 | Taranaki, McKee Sub |

| | |
|----|---|
| F5 | 5 |
|----|---|

| F3 Feeder | Index | Location |
|-------------------|-------|---------------------------|
| Portland Quay | 2,634 | Taranaki, Livingstone Sub |
| Elliot St | 1,616 | Taranaki, Inglewood Sub |
| Wyuna Bay | 1,366 | Valley, Coromandel Sub |
| Toko | 1,244 | Taranaki, Douglas Sub |
| Factory | 1,147 | Whanganui, Rata Sub |
| West St | 984 | Wairarapa, Kempton Sub |
| Huntermville 22kv | 956 | Whanganui, Rata Sub |
| Whiritoa | 902 | Valley, Whangamatā Sub |
| Papanui St | 779 | Valley, Baird Road Sub |
| Eketāhuna | 748 | Manawatū, Parkville Sub |
| F3 | 79 | |



Line maintenance.

Feeder performance

ADR reference 3.3w (i) (ii) (iii) (iv)

Interruption frequency index for 10 worst feeders

| F1 Feeder | Index | Location |
|--------------------|-------|--------------------------|
| Matapu | 7 | Taranaki, Kāpuni Sub |
| Devon rd | 6 | Taranaki, Bell Block Sub |
| Origin 2 | 6 | Taranaki, Waihapa Sub |
| Origin 1 | 5 | Taranaki, Waihapa Sub |
| Lorne st | 4 | Valley, Morrinsville Sub |
| Arapuni st | 4 | Valley, Putāruru Sub |
| Rangiuru | 3 | Tauranga, Te Puke Sub |
| Manaia | 3 | Taranaki, Manaia Sub |
| Ruahine | 3 | Manawatū, Milson Sub |
| De Havilland south | 3 | Taranaki, Bell Block Sub |

Number of feeders exceeding its interruption frequency targets

| | |
|----|----|
| F1 | 35 |
|----|----|

| F2 Feeder | Index | Location |
|--------------------|-------|---------------------------|
| Linton | 5 | Manawatū, Turitea Sub |
| Waterworks Rd | 5 | Whanganui, Kai Iwi Sub |
| Ruapehu Dr | 4 | Manawatū, Turitea Sub |
| Horahora | 4 | Valley, Putāruru Sub |
| Ohakea | 4 | Manawatū, Sanson Sub |
| Colombo Rd | 3 | Wairarapa, Te Ore Ore Sub |
| Taihape Town South | 3 | Whanganui, Taihape Sub |
| Willoughby St | 3 | Valley, Paeroa Sub |
| Katere 12 | 3 | Taranaki, Katere Sub |
| Roads | 3 | Tauranga, Te Puke Sub |

| | |
|----|----|
| F2 | 42 |
|----|----|

| F4 Feeder | Index | Location |
|--------------------|-------|---------------------------|
| Burnside | 17 | Wairarapa, Tuhitarata Sub |
| Pātea | 14 | Taranaki, Livingstone Sub |
| Maketu | 11 | Tauranga, Paengaroa Sub |
| Putorino | 11 | Whanganui, Rata Sub |
| Waitotara | 11 | Whanganui, TP, Waverley |
| Cambridge Rd Tirau | 11 | Valley, Tirau Sub |
| Pirinoa | 11 | Wairarapa, Tuhitarata Sub |
| Otautu | 11 | Taranaki, Livingstone Sub |
| Rongomai | 10 | Manawatū, Alfredton Sub |
| Strathmore | 10 | Taranaki, Douglas Sub |

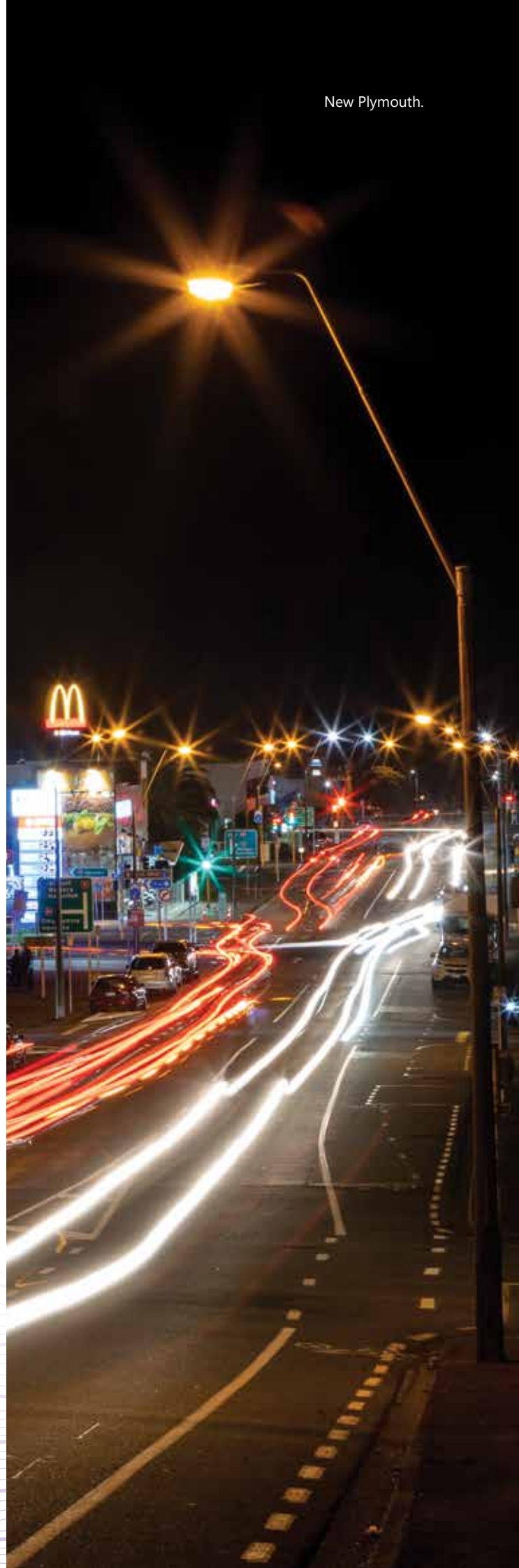
| | |
|----|----|
| F4 | 67 |
|----|----|

| F5 Feeder | Index | Location |
|--------------|-------|---------------------------|
| Castlepoint | 19 | Wairarapa, Tinui Sub |
| Coast Road | 9 | Manawatū, Pongaroa Sub |
| Blairlogie | 8 | Wairarapa, Awatoitoi Sub |
| Langdale | 8 | Wairarapa, Tinui Sub |
| Mangapakeha | 7 | Wairarapa, Awatoitoi Sub |
| Annedale | 7 | Wairarapa, Tinui Sub |
| Castlehill | 7 | Manawatū, Alfredton Sub |
| Irirangi | 6 | Whanganui, Waiouru Sub |
| Weraiti | 5 | Wairarapa, Te Ore Ore Sub |
| Rorokoko | 4 | Wairarapa, Awatoitoi Sub |

| | |
|----|---|
| F5 | 8 |
|----|---|

Note: Feeder duration and interruption index represent the average duration and number of interruptions a feeder experiences in a given year.

| F3 Feeder | Index | Location |
|-------------------|-------|---------------------------|
| Portland Quay | 17 | Taranaki, Livingstone Sub |
| Toko | 14 | Taranaki, Douglas Sub |
| Wyuna Bay | 10 | Valley, Coromandel Sub |
| Tarata | 10 | Taranaki, Motukawa Sub |
| Huntermville 22kV | 10 | Whanganui, Rata Sub |
| Factory | 9 | Whanganui, Rata Sub |
| Eketāhuna | 7 | Manawatū, Parkville Sub |
| Kapanga Road | 6 | Valley, Coromandel Sub |
| Keith St 23 | 6 | Manawatū, Keith St Sub |
| Whiritoa | 5 | Valley, Whangamatā Sub |
| <hr/> | | |
| F3 | 92 | |





Our partners.

ICP outages distribution transformer performance

ADR reference 3.3w (v) (vi) (viii)

Duration of outages experienced per distribution transformer for the 20 worst served distribution areas

| F1 Transformer | Duration Minutes | Location | F2 Transformer | Duration Minutes | Location |
|-------------------|---------------------|-----------------------------|-------------------|---------------------|--------------------------|
| K4215:E | 2,253 | Taranaki, Matapu | X1765:W | 7,020 | Whanganui, Waterworks Rd |
| K4220:E | 2,253 | Taranaki, Matapu | X1764:W | 6,510 | Whanganui, Waterworks Rd |
| TC4364:B | 2,053 | Valley, Kopu | X2290:W | 6,510 | Whanganui, Waterworks Rd |
| TC4534:B | 2,053 | Valley, Kopu | X2567:W | 6,510 | Whanganui, Waterworks Rd |
| TC4668:B | 2,053 | Valley, Kopu | X2945:W | 6,510 | Whanganui, Waterworks Rd |
| X3070:T | 1,943 | Taranaki, Mangatoki | X2939:W | 5,889 | Whanganui, Waterworks Rd |
| X3353:T | 1,844 | Taranaki, Mangatoki | X1761:W | 4,454 | Whanganui, Waterworks Rd |
| X3354:T | 1,844 | Taranaki, Mangatoki | X1762:W | 4,454 | Whanganui, Waterworks Rd |
| TE5-306:B | 1,539 | Tauranga, Te Puke Quarry Rd | X1760:W | 4,454 | Whanganui, Waterworks Rd |
| TP1634:B | 1,539 | Tauranga, Te Puke Quarry Rd | X1763:W | 4,454 | Whanganui, Waterworks Rd |
| TC6047:B | 1,525 | Valley, Lorne St | X2559:W | 4,454 | Whanganui, Waterworks Rd |
| X2212:T | 1,488 | Taranaki, Mangatoki | X4185:W | 4,095 | Whanganui, Waterworks Rd |
| X3358:T | 1,488 | Taranaki, Mangatoki | X1758:W | 4,090 | Whanganui, Waterworks Rd |
| X3362:T | 1,488 | Taranaki, Mangatoki | X1759:W | 4,090 | Whanganui, Waterworks Rd |
| X2213:T | 1,488 | Taranaki, Mangatoki | X1757:W | 4,090 | Whanganui, Waterworks Rd |
| X2274:T | 1,488 | Taranaki, Mangatoki | X2504:W | 4,090 | Whanganui, Waterworks Rd |
| X2404:T | 1,488 | Taranaki, Mangatoki | X2955:W | 4,090 | Whanganui, Waterworks Rd |
| X3069:T | 1,488 | Taranaki, Mangatoki | X182:W | 3,985 | Whanganui, Guyton |
| X3141:T | 1,488 | Taranaki, Mangatoki | TE5-041:B | 2,534 | Tauranga, Roads |
| X3355:T | 1,488 | Taranaki, Mangatoki | T1405:M | 2,473 | Wairarapa, Worksop Rd |

| F3 Transformer | Duration Minutes | Location |
|---------------------------|-----------------------------|-----------------------------|
| TC4543:B | 7,987 | Valley, Thames Coast |
| TC4679:B | 7,888 | Valley, Thames Coast |
| X1293:W | 5,893 | Whanganui, Hunterville 22kV |
| X1617:W | 5,881 | Whanganui, Hunterville 22kV |
| X1294:W | 5,847 | Whanganui, Hunterville 22kV |
| X1299:W | 5,783 | Whanganui, Hunterville 22kV |
| X1300:W | 5,783 | Whanganui, Hunterville 22kV |
| X1303:W | 5,783 | Whanganui, Hunterville 22kV |
| X1296:W | 5,783 | Whanganui, Hunterville 22kV |
| X1298:W | 5,783 | Whanganui, Hunterville 22kV |
| X1301:W | 5,783 | Whanganui, Hunterville 22kV |
| X1302:W | 5,783 | Whanganui, Hunterville 22kV |
| X2522:W | 5,783 | Whanganui, Hunterville 22kV |
| X4238:W | 5,783 | Whanganui, Hunterville 22kV |
| X2060:W | 5,783 | Whanganui, Hunterville 22kV |
| TC1985:B | 5,778 | Valley, Wyuna Bay |
| TC2583:B | 5,778 | Valley, Wyuna Bay |
| TB2-030:B | 5,712 | Tauranga, Mural Town |
| X1289:W | 5,654 | Whanganui, Hunterville 22kV |
| X1291:W | 5,654 | Whanganui, Hunterville 22kV |

| F4 Transformer | Duration Minutes | Location |
|---------------------------|-----------------------------|------------------------|
| X1560:W | 8,691 | Whanganui, Waitōtara |
| X1561:W | 8,681 | Whanganui, Waitōtara |
| X1557:W | 8,652 | Whanganui, Waitōtara |
| X1559:W | 8,626 | Whanganui, Waitōtara |
| X1562:W | 8,471 | Whanganui, Waitōtara |
| X1558:W | 8,471 | Whanganui, Waitōtara |
| X4962:W | 8,471 | Whanganui, Waitōtara |
| TE5-226:B | 8,409 | Tauranga, Te Matai Rd |
| TP254:B | 8,409 | Tauranga, Te Matai Rd |
| X3828:T | 8,229 | Taranaki, Strathmore |
| T5/80:P | 7,319 | Manawatū, Rangiwahia |
| T7/115:P | 7,225 | Manawatū, Mangatainoka |
| T7/120:P | 7,225 | Manawatū, Mangatainoka |
| X811:W | 6,884 | Whanganui, Makirikiri |
| X812:W | 6,847 | Whanganui, Makirikiri |
| X2290:T | 6,838 | Taranaki, Huiroa |
| X3825:T | 6,771 | Taranaki, Strathmore |
| X808:W | 6,701 | Whanganui, Makirikiri |
| X2923:W | 6,701 | Whanganui, Makirikiri |
| X2934:W | 6,701 | Whanganui, Makirikiri |

| F5 Transformer | Duration Minutes | Location |
|-------------------|---------------------|------------------------|
| T2115:M | 52,533 | Wairarapa, Blairlogie |
| T169:M | 46,767 | Wairarapa, Blairlogie |
| T3417:M | 46,612 | Wairarapa, Blairlogie |
| T3571:M | 46,612 | Wairarapa, Blairlogie |
| T168:M | 46,612 | Wairarapa, Blairlogie |
| T2098:M | 46,612 | Wairarapa, Blairlogie |
| T3081:M | 10,322 | Wairarapa, Blairlogie |
| 7255:P | 7,578 | Manawatū, Coast Road |
| T9/216:P | 7,515 | Manawatū, Coast Road |
| T9/217:P | 7,515 | Manawatū, Coast Road |
| T9/219:P | 7,515 | Manawatū, Coast Road |
| T9/221:P | 7,515 | Manawatū, Coast Road |
| T9/222:P | 7,515 | Manawatū, Coast Road |
| T9/224:P | 7,515 | Manawatū, Coast Road |
| T9/225:P | 7,515 | Manawatū, Coast Road |
| T9/226:P | 7,515 | Manawatū, Coast Road |
| T9/228:P | 7,515 | Manawatū, Coast Road |
| T9/220:P | 7,515 | Manawatū, Coast Road |
| T9/223:P | 7,515 | Manawatū, Coast Road |
| T2570:M | 6,233 | Wairarapa, Castlepoint |





Bringing power to Stratford, Taranaki.

Frequency of outages experienced per distribution transformer for the 20 worst served distribution areas

| F1 Transformer | Frequency Number | Location |
|----------------|------------------|------------------|
| K4215:E | 16 | Taranaki, Matapu |
| K4220:E | 16 | Taranaki, Matapu |
| K4225:E | 13 | Taranaki, Matapu |
| X5244:E | 13 | Taranaki, Matapu |
| K4210:E | 13 | Taranaki, Matapu |
| K4227:E | 13 | Taranaki, Matapu |
| K4200:E | 13 | Taranaki, Matapu |
| K4035:E | 11 | Taranaki, Matapu |
| K4006:E | 10 | Taranaki, Matapu |
| K4013:E | 10 | Taranaki, Matapu |
| K4014:E | 10 | Taranaki, Matapu |
| K4020:E | 10 | Taranaki, Matapu |
| K4030:E | 10 | Taranaki, Matapu |
| K4038:E | 10 | Taranaki, Matapu |
| K4108:E | 10 | Taranaki, Matapu |
| K4115:E | 10 | Taranaki, Matapu |
| K4125:E | 10 | Taranaki, Matapu |
| K4135:E | 10 | Taranaki, Matapu |
| K4140:E | 10 | Taranaki, Matapu |
| K4142:E | 10 | Taranaki, Matapu |

| F2 Transformer | Frequency Number | Location |
|----------------|------------------|--------------------------|
| T2/294:P | 14 | Manawatū, Linton |
| T2/391:P | 14 | Manawatū, Linton |
| T2/810:P | 14 | Manawatū, Linton |
| T2/943:P | 14 | Manawatū, Linton |
| T2/964:P | 14 | Manawatū, Linton |
| X1765:W | 14 | Whanganui, Waterworks Rd |
| X1761:W | 13 | Whanganui, Waterworks Rd |
| X1762:W | 13 | Whanganui, Waterworks Rd |
| X1760:W | 13 | Whanganui, Waterworks Rd |
| X1763:W | 13 | Whanganui, Waterworks Rd |
| X1764:W | 13 | Whanganui, Waterworks Rd |
| X2290:W | 13 | Whanganui, Waterworks Rd |
| X2559:W | 13 | Whanganui, Waterworks Rd |
| X2567:W | 13 | Whanganui, Waterworks Rd |
| X2939:W | 13 | Whanganui, Waterworks Rd |
| X2945:W | 13 | Whanganui, Waterworks Rd |
| X1757:W | 12 | Whanganui, Waterworks Rd |
| X1758:W | 12 | Whanganui, Waterworks Rd |
| X1759:W | 12 | Whanganui, Waterworks Rd |
| X2504:W | 12 | Whanganui, Waterworks Rd |

Number of consumers with 5+ planned interruptions

| | |
|----|---|
| F1 | 0 |
|----|---|

| | |
|----|---|
| F2 | 0 |
|----|---|

| F3 Transformer | Frequency Number | Location |
|---------------------------|-----------------------------|-----------------------------|
| L3155:E | 27 | Taranaki, Portland Quay |
| Y2741:T | 22 | Taranaki, Toko |
| Y4343:T | 22 | Taranaki, Toko |
| Y3332:T | 22 | Taranaki, Toko |
| X1296:W | 22 | Whanganui, Hunterville 22kV |
| X1298:W | 22 | Whanganui, Hunterville 22kV |
| X1301:W | 22 | Whanganui, Hunterville 22kV |
| X1302:W | 22 | Whanganui, Hunterville 22kV |
| X1617:W | 22 | Whanganui, Hunterville 22kV |
| X2060:W | 22 | Whanganui, Hunterville 22kV |
| X2522:W | 22 | Whanganui, Hunterville 22kV |
| X4238:W | 22 | Whanganui, Hunterville 22kV |
| Y2529:T | 22 | Taranaki, Toko |
| Y4364:T | 22 | Taranaki, Toko |
| X1294:W | 22 | Whanganui, Hunterville 22kV |
| X1299:W | 22 | Whanganui, Hunterville 22kV |
| X1300:W | 22 | Whanganui, Hunterville 22kV |
| X1303:W | 22 | Whanganui, Hunterville 22kV |
| Y2738:T | 22 | Taranaki, Toko |
| Y2740:T | 22 | Taranaki, Toko |

Number of consumers with 5+ planned interruptions

F3 727

| F4 Transformer | Frequency Number | Location |
|---------------------------|-----------------------------|---------------------|
| T1173:M | 31 | Wairarapa, Burnside |
| T4440:M | 31 | Wairarapa, Burnside |
| T1305:M | 31 | Wairarapa, Burnside |
| T2450:M | 30 | Wairarapa, Burnside |
| T2451:M | 30 | Wairarapa, Burnside |
| T1168:M | 29 | Wairarapa, Burnside |
| T1170:M | 29 | Wairarapa, Burnside |
| T139:M | 29 | Wairarapa, Burnside |
| T1711:M | 29 | Wairarapa, Burnside |
| T1933:M | 29 | Wairarapa, Burnside |
| T3431:M | 29 | Wairarapa, Burnside |
| T3594:M | 29 | Wairarapa, Burnside |
| T3709:M | 29 | Wairarapa, Burnside |
| T3807:M | 29 | Wairarapa, Burnside |
| T421:M | 29 | Wairarapa, Burnside |
| T598:M | 29 | Wairarapa, Burnside |
| T1171:M | 29 | Wairarapa, Burnside |
| T1934:M | 29 | Wairarapa, Burnside |
| T2951:M | 27 | Wairarapa, Burnside |
| T1502:M | 27 | Wairarapa, Burnside |

F4 1,535

| F5 Transformer | Frequency Number | Location |
|---------------------------|-----------------------------|------------------------|
| T1691:M | 28 | Wairarapa, Castlepoint |
| T415:M | 28 | Wairarapa, Castlepoint |
| T826:M | 28 | Wairarapa, Castlepoint |
| T1671:M | 28 | Wairarapa, Castlepoint |
| T2570:M | 28 | Wairarapa, Castlepoint |
| T3534:M | 28 | Wairarapa, Castlepoint |
| T2809:M | 25 | Wairarapa, Castlepoint |
| T1401:M | 24 | Wairarapa, Castlepoint |
| T1:M | 24 | Wairarapa, Castlepoint |
| T3188:M | 24 | Wairarapa, Castlepoint |
| T3259:M | 24 | Wairarapa, Castlepoint |
| T3705:M | 24 | Wairarapa, Castlepoint |
| T3885:M | 24 | Wairarapa, Castlepoint |
| T4083:M | 24 | Wairarapa, Castlepoint |
| T4366:M | 24 | Wairarapa, Castlepoint |
| T5:M | 24 | Wairarapa, Castlepoint |
| T1759:M | 24 | Wairarapa, Castlepoint |
| T3267:M | 22 | Wairarapa, Castlepoint |
| T33:M | 22 | Wairarapa, Castlepoint |
| T3605:M | 22 | Wairarapa, Castlepoint |

F5 155

Note: For those transformers with the same performance level, alphabetical ordering has been applied to determine their inclusion in the top 20.



Complaints

ADR reference 3.3x

| | Actual FY21 |
|--|----------------|
| % of complaints responded to in 2 days | 86% |
| Number of complaints received | 927 |
| % of complaints resolved within 20 days | 65% |
| % of complaints resolved within 40 days | 86% |
| Number of complaints deadlocked and referred to Utilities Disputes Limited | 8 |
| % of complaints deadlocked and referred to Utilities Disputes Limited | 1% |

Note: In timing our response and resolution of complaints, day one is considered the first business day after the complaint is received.

Directors' certificate

Certificate for Annual Delivery Report

We, **John Loughlin** and **Michael Cummings**
being Directors of Powerco Limited certify that, having made all reasonable enquiry, to the best of our knowledge the attached Annual Delivery Report of Powerco Limited is true and accurate.



Director



Director

 19 August 2021

Date

 19 August 2021

Date

Note: Section 103(2) of the Commerce Act 1986 provides that no person shall attempt to deceive or knowingly mislead the Commission in relation to any matter before it. It is an offence to contravene section 103(2) and any person who does so is liable on summary conviction to a fine not exceeding \$100,000 in the case of an individual or \$300,000 in the case of a body corporate.



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