POWERCO THE NUMBERS ANNUAL DELIVERY REPORT 2020 QUANTITATIVE DATA **HERE FOR YOU**

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

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

It contains all data required to meet the regulatory annual quantitative reporting obligations Powerco's Customised Price-quality Path (CPP). On page 30 you will find a copy of the 'Director's Certificate' which certifies the quantitative information within this document, and the qualitative information presented in our 'Here for you' report and the website powercodelivering.co.nz.





POLES

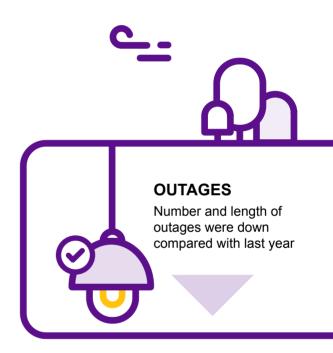
4,073 poles replaced or reinforced

Up on year before

Year Two

We have been busy improving the network while minimising the impact on you.





COMPLAINTS

Down 15% compared with last year



CONDUCTOR

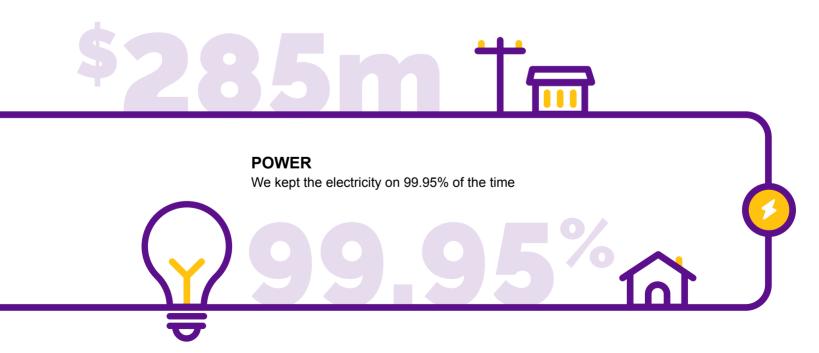
183km of overhead lines replaced

VEGETATION MANAGEMENT
Over 11,000 tree sites managed

Up on year before

RENEWALS & GROWTH INVESTMENT

Network renewal & growth over the last 2 years



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QUANTITATIVE DATA

Financial Summary

ADR reference 3.3a, 3.3b, 3.3c

	ACTUAL	ACTUAL	ACTUAL CPP REGULATORY	FORECAST	FORECAST	FORECAST CPP REGULATORY	VARIANCE	VARIANCE	VARIANCE CPP REGULATORY
\$000'S	FY19	FY20	PERIOD TO DATE	FY19	FY20	PERIOD TO DATE	FY19	FY20	PERIOD TO DATE
Total Expenditure (Totex)	274,575	254,125	528,700	273,252	271,385	544,637	(1,322)	17,260	15,937
Capital Expenditure (Capex)	186,815	164,342	351,156	180,867	173,755	354,622	(5,947)	9,413	3,466
Operational Expenditure (Opex)	87,760	89,784	177,544	92,385	97,630	190,015	4,625	7,846	12,471
	ACTUAL	ACTUAL	ACTUAL CPP REGULATORY	FORECAST	FORECAST	FORECAST CPP REGULATORY	VARIANCE	VARIANCE	VARIANCE CPP REGULATORY
\$000'S	FY19	FY20	PERIOD TO DATE	FY19	FY20	PERIOD TO DATE	FY19	FY20	PERIOD TO DATE
Network Opex									
Preventative Maintenance	9,733	7,575	17,308	11,751	12,935	24,686	2,018	5,361	7,378
Corrective Maintenance	13,571	16,754	30,325	13,133	14,731	27,864	(438)	(2,022)	(2,461)
Reactive Maintenance	7,271	7,459	14,730	7,524	7,788	15,312	253	329	582
Vegetation Management	10,589	10,184	20,773	10,367	9,840	20,207	(222)	(344)	(566)
SONS	16,048	16,443	32,491	15,202	16,238	31,440	(847)	(204)	(1,051)
Total	57,212	58,415	115,627	57,977	61,533	119,510	764	3,119	3,883
Business Support Costs									
Corporate	22,975	22,293	45,268	24,586	25,427	50,014	1,612	3,134	4,746
Facilities	1,355	1,429	2,784	2,062	2,024	4,086	707	595	1,302
Insurance and Governance	2,214	2,283	4,498	2,242	2,337	4,579	27	54	81
ICT Opex	4,003	5,364	9,367	5,518	6,308	11,827	1,515	945	2,460
Total	30,548	31,369	61,917	34,408	36,097	70,505	3,861	4,728	8,588

Total Growth and Security	61,267	49,179	110,445	63,720	58,929	122,649	2,454	9,750	12,204
Reliability	6,326	5,823	12,149	3,355	4,295	7,650	(2,971)	(1,528)	(4,499)
Communications	9,205	3,520	12,726	5,809	5,550	11,359	(3,397)	2,030	(1,367)
Routine	21,070	16,873	37,943	14,739	15,429	30,168	(6,331)	(1,444)	(7,775)
Minor Projects	6,244	4,206	10,450	11,053	9,511	20,564	4,808	5,305	10,113
Major Projects	18,421	18,756	37,177	28,765	24,144	52,909	10,344	5,388	15,732
Growth and Security									
\$000'S	ACTUAL FY19	ACTUAL FY20	ACTUAL CPP REGULATORY PERIOD TO DATE	FORECAST FY19	FORECAST	FORECAST CPP REGULATORY PERIOD TO DATE	VARIANCE FY19	VARIANCE FY20	VARIANCE CPP REGULATORY PERIOD TO DATE
Total	88,229	86,143	174,372	82,721	91,446	174,167	(5,508)	5,303	(205)
Secondary Systems	1,449	3,897	5,346	4,753	4,806	9,559	3,303	909	4,213
Distribution Switchgear	4,143	10,053	14,196	9,832	10,030	19,862	5,689	(23)	5,667
Distribution Transformers	10,488	7,529	18,017	9,272	9,874	19,146	(1,216)	2,345	1,129
Zone Substations	14,561	4,532	19,093	15,695	13,634	29,329	1,134	9,102	10,236
Cables	11,055	13,036	24,091	6,999	8,056	15,055	(4,055)	(4,980)	(9,035)
Overhead Conductors	6,287	7,228	13,515	7,173	9,123	16,296	885	1,895	2,780
Overhead Structures	40,246	39,869	80,115	28,998	35,923	64,921	(11,248)	(3,946)	(15,194)
Asset Replacement and Rene	wal								
\$000'S	FY19	FY20	PERIOD TO DATE	FY19	FY20	PERIOD TO DATE	FY19	FY20	PERIOD TO DATE
	ACTUAL	ACTUAL	ACTUAL CPP REGULATORY	FORECAST	FORECAST	FORECAST CPP REGULATORY	VARIANCE	VARIANCE	VARIANCE CPP REGULATORY

\$000'S	ACTUAL FY19	ACTUAL FY20	FORECAST FY19	FORECAST FY20	VARIANCE FY19	VARIANCE FY20
Major Projects						
Papamoa	154	50	259	-	105	(50)
Palmerston North	6,387	4,237	1,495	-	(4,892)	(4,237)
Putaruru	136	380	351	5,728	215	5,348
Whangamata	3,775	7,744	6,376	1,192	2,601	(6,552)
Omokoroa	-	331	1,376	7,060	1,376	6,729
Kopu-Tairua	153	249	3,963	3,412	3,810	3,163
Kopu-Kauaeranga	280	1,201	3,089	316	2,809	(885)
Moturoa	6,095	1,774	5,540	-	(555)	(1,774)
Kerepehi-Paeroa	6	-	-	-	(6)	-
Whenuakite	59	319	247	253	188	(66)
Matarangi	1	5	86	88	85	83
Putaruru-Tirau	-	127	-	2,492	-	2,365
Kaimarama-Whitianga	106	102	172	176	66	74
Kereone-Walton	38	45	-	-	(38)	(45)
Feilding-Sanson	100	465	241	-	141	(465)
Pyes Pa	1,128	1	2,995	-	1,867	(1)
Inglewood	4	1,727	2,574	3,426	2,570	1,699

\$000'S	ACTUAL FY19	ACTUAL FY20	ACTUAL CPP REGULATORY PERIOD TO DATE	FORECAST FY19	FORECAST FY20	FORECAST CPP REGULATORY PERIOD TO DATE	VARIANCE FY19	VARIANCE FY20	VARIANCE CPP REGULATORY PERIOD TO DATE
Other Network Capex									
Consumer Connection	11,746	12,593	24,339	11,946	12,152	24,098	200	(441)	(241)
Asset Relocations	2,011	236	2,247	821	855	1,676	(1,190)	619	(571)
Network Evolution	497	685	1,183	-	-	-	(497)	(685)	(1,183)
Total Other Network Capex	14,254	13,515	27,769	12,767	13,007	25,774	(1,487)	(508)	1,995
	ACTUAL	ACTUAL	ACTUAL	FORECAST	FORECAST	FORECAST	VARIANCE	VARIANCE	VARIANCE
\$000'S	FY19	FY20	CPP REGULATORY PERIOD TO DATE	FY19	FY20	PERIOD TO DATE	FY19	FY20	CPP REGULATORY PERIOD TO DATE
Non Network									
ICT	16,014	12,214	28,228	18,665	8,984	27,649	2,651	(3,230)	(579)
Facilities	7,051	3,292	10,343	2,994	1,389	4,383	(4,056)	(1,903)	(5,959)
Total Non Network	23,065	15,506	38,571	21,659	10,373	32,032	(1,406)	(5,133)	(6,538)

Note: Some prior year capital expenditure figures have been reclassified between categories to better reflect the actual spend.

Asset renewal

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

км	ACTUAL FY19	ACTUAL FY20	FORECAST FY19	FORECAST FY20	VARIANCE FY19	VARIANCE FY20
Conductor Replacement						
Western Region	93	140	134	149	(41)	(9)
Eastern Region	44	43	14	39	30	4
Total	136	183	148	188	(12)	(5)
NUMBER	ACTUAL FY19	ACTUAL FY20	FORECAST FY19	FORECAST FY20	VARIANCE FY19	VARIANCE FY20
Overhead Structures						
Concrete Poles / Steel Structure	2,093	2,680	1,930	2,373	163	307
Wood Poles	1,381	1,388	1,636	2,001	(256)	(613)
Other Pole Types	143	5	18	23	124	(18)
Total	3,616	4,073	3,585	4,397	31	(324)
Overhead Structures by Region						
Western Region	2,738	2,934	2,896	3,415	(158)	(481)
Eastern Region	878	1,139	689	982	189	157
Total	3,616	4,073	3,585	4,397	31	(324)
Zone Substation Switchgear						
Made up of:						
Outdoor circuit breakers	9	1	-	11	9	(10)
Indoor switchboards	1	3	5	5	(4)	(2)
Individual Indoor circuit break	5	-	-		5	-

Note: for conductor, pole and distribution transformer replacement quantities, between 13-27% of the replacement quantities are based on an estimate of the number of assets replaced from design and scope documentation, as the assets have been replaced but as-built records have not yet been completed in our GIS system. A further adjustment has been made to the conductor, pole, and distribution transformer replacement quantities for reactive and fault related jobs due to the absence of processed as-builts records at the time of preparing the Annual Delivery Report. Conservative assumptions have been used to ensure the replacement quantities are not overstated.

Unit rates

ADR reference 3.3g, 3.3h

\$000's	FY19 ACTUAL SUB-TRANSMISSION	FY19 ACTUAL DISTRIBUTION	FY19 ACTUAL LOW VOLTAGE	FY20 ACTUAL SUB-TRANSMISSION	FY20 ACTUAL DISTRIBUTION	FY20 ACTUAL LOW VOLTAGE
Average Unit Value per Renewed As	set					
Poles	6,335	3,569	4,674	n/a	4,141	5,356
Cross-Arm Assemblies	2,029	1,028	1,367	2,425	1,054	1,903
Conductor (per km)	n/a	40,162	58,628	n/a	40,545	n/a
\$000's	ACTUAL FY19	ACTUAL FY20				
Average Unit Value per Renewed As	set					
Power Transformers	n/a	n/a				
Distribution Transformers	12,281	15,379				
Zone Substation Switchgear	n/a	n/a				
NUMBER	ACTUAL FY19	ACTUAL FY20	FORECAST FY19	FORECAST FY20	VARIANCE FY19	VARIANCE FY20
Transformer Replacement						
Distribution Transformers (up to 22kV)	599	492	413	419	186	73
Power Transformers (22kV up to 110kV	/) 3	2	2	3	1	(1)

Note: an insufficient quantity of sub-transmission poles, conductor, power transformers and zone substation switchgear has been replaced, as-built and capitalised in FY20 to calculate an average unit rate. Also, the pole unit rate presented is exclusive of associated crossarm assemblies.

Defects

ADR reference 3.3k

	ACTUAL	ACTUAL	ACTUAL CPP REGULATORY
NUMBER	FY19	FY20	PERIOD TO DATE
Defect Backlog			
Material asset defects in backlog at start of the year	41,579	27,917	
New material defect identified	14,837	15,921	
Material defects remedied	28,499	13,131	41,630
Material asset defects in backlog at end of the year	27,917	30,707	

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

Inspections

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

	ACTUAL	ACTUAL	ACTUAL
NUMBER	FY19	FY20	CPP REGULATORY PERIOD TO DATE
Overhead Lines – Western Region			
Number of Poles	33,296	39,597	72,893
Estimated Line Length km	2,137	2,541	4,678
Overhead Lines – Eastern Region			
Number of Poles	13,645	13,301	26,946
Estimated Line Length km	876	853	1,729
Transformers – Western Region			
One Pole Mounted Transformers / Substations	2,757	2,837	5,594
Two Pole Mounted Transformers / Substations	93	52	145
Total	2,850	2,889	5,739
Ground Mounted Transformers	6,637	6,387	13,024
Transformers – Eastern Region			
One Pole Mounted Transformers / Substations	1,078	704	1,782
Two Pole Mounted Transformers / Substations	16	16	32
Total	1,094	720	1,814
Ground Mounted Transformers	10,971	8,009	18,980
Red Tag Poles			
Identified	57	55	112
Replaced	55	23	78

Vegetation Management

ADR reference 3.3q

	ACTUAL	ACTUAL	ACTUAL	FORECAST	FORECAST	VARIANCE	VARIANCE
\$000's	FY19	FY20	CPP REGULATORY PERIOD TO DATE	FY19	FY20	FY19	FY20
Vegetation Management							
Tree sites trimmed	3,367	3,862					
Tree sites removed	5,668	6,180					
Tree sites sprayed	1,746	1,048					
Total Tree Sites Managed	10,781	11,090	21,871	8,213	7,683	2,568	3,407
% of Work Cleared	131%	144%	53%				

Enterprise Resource Planning

ADR reference 3.3r

\$000's	ACTUAL FY19	ACTUAL FY20	FORECAST FY19	FORECAST FY20
Enterprise Resource Planning				
Expenditure	11,452	9,651	13,823	6,417

Staff Recruitment

ADR reference 3.3s

\$000's	ACTUAL FY19	ACTUAL FY20	FORECAST FY19	FORECAST FY20	VARIANCE FY19	VARIANCE FY20
Staff Recruitment						
Full-time equivalent staff recruited	41	32	30	14	(11)	(18)

Note: Additional FTEs recruited in FY20 were primarily in the following areas:

- · Electricity Asset Strategy and Investment
- Electricity Service Delivery and System Operations
- Customer Group
- · Health Safety, Environment and Quality
- Human Resources

Network Performance

ADR reference 3.3t, 3.3u,3.3v

Western Region 99.7 86.4 Eastern Region 66.5 51.7 Powerco SAIDI (Planned) 84.0 69.9 80.0 84.9 SAIFI (Planned)	MINUTES	ACTUAL FY19	ACTUAL FY20	LIMIT FY19	LIMIT FY20
Eastern Region 66.5 51.7 Powerco SAIDI (Planned) 84.0 69.9 80.0 84.9 SAIFI (Planned) Western Region 0.470 0.422 Eastern Region 0.341 0.261 Powerco SAIFI (Planned) 0.409 0.346 0.344 0.370 SAIDI (Unplanned) Western Region 233.8 207.0 Eastern Region 160.9 152.1 Powerco SAIDI (Unplanned) 197.3 181.0 191.4 187.4 SAIFI (Unplanned) Western Region 2.376 2.133 Eastern Region 2.376 2.133 Eastern Region 2.029 1.922 2.285 2.262 MINUTES ACTUAL FYER PETER PE	SAIDI (Planned)				
Powerco SAIDI (Planned) 84.0 69.9 80.0 84.9	Western Region	99.7	86.4		
SAIFI (Planned)	Eastern Region	66.5	51.7		
Western Region 0.470 0.422 Eastern Region 0.341 0.261 Powerco SAIFI (Planned) 0.409 0.346 0.344 0.370 SAIDI (Unplanned) SAIDI (Unplanned) Western Region 233.8 207.0	Powerco SAIDI (Planned)	84.0	69.9	80.0	84.9
Eastern Region 0.341 0.261 Powerco SAIFI (Planned) 0.409 0.346 0.344 0.370 SAIDI (Unplanned) Western Region 233.8 207.0 Eastern Region 160.9 152.1 Powerco SAIDI (Unplanned) 197.3 181.0 191.4 187.4 SAIFI (Unplanned) Western Region 2.376 2.133 Eastern Region 2.376 2.133 Eastern Region 1.685 1.688 Powerco SAIFI (Unplanned) 2.029 1.922 2.285 2.262 MINUTES ACTUAL FY19 ACTUAL FY20 ACTUAL FY19 ACTUAL FY19 ACTUAL FY19	SAIFI (Planned)				
Powerco SAIFI (Planned) 0.409 0.346 0.344 0.370	Western Region	0.470	0.422		
SAIDI (Unplanned) Western Region 233.8 207.0 Eastern Region 160.9 152.1 Powerco SAIDI (Unplanned) 197.3 181.0 191.4 187.4 SAIFI (Unplanned) Western Region 2.376 2.133 Eastern Region 1.685 1.688 Powerco SAIFI (Unplanned) 2.029 1.922 2.285 2.262 MINUTES ACTUAL FY18 FY20 Average Outage Duration Planned 6.6kV to 22kV 205 204 Planned 22kV to 110kV 338 116 Unplanned 6.6kV to 22kV 104 103	Eastern Region	0.341	0.261		
Western Region 233.8 207.0 Eastern Region 160.9 152.1 Powerco SAIDI (Unplanned) 197.3 181.0 191.4 187.4 SAIFI (Unplanned) SAIFI (Unplanned) Western Region 2.376 2.133 Eastern Region 1.685 1.688 Powerco SAIFI (Unplanned) 2.029 1.922 2.285 2.262 MINUTES ACTUAL FY19 A	Powerco SAIFI (Planned)	0.409	0.346	0.344	0.370
Eastern Region 160.9 152.1 Powerco SAIDI (Unplanned) 197.3 181.0 191.4 187.4 SAIFI (Unplanned) Western Region 2.376 2.133 Eastern Region 1.685 1.688 Powerco SAIFI (Unplanned) 2.029 1.922 2.285 2.262 MINUTES ACTUAL FY19 FY20 Average Outage Duration Planned 6.6kV to 22kV 205 204 Planned 22kV to 110kV 338 116 Unplanned 6.6kV to 22kV 104 103	SAIDI (Unplanned)				
Powerco SAIDI (Unplanned)	Western Region	233.8	207.0		
SAIFI (Unplanned) Western Region 2.376 2.133 Eastern Region 1.685 1.688 Powerco SAIFI (Unplanned) 2.029 1.922 2.285 2.262 MINUTES ACTUAL FY19 ACTUAL FY20 ACTUAL FY	Eastern Region	160.9	152.1		
Western Region 2.376 2.133 Eastern Region 1.685 1.688 Powerco SAIFI (Unplanned) 2.029 1.922 2.285 2.262 MINUTES ACTUAL FY19 ACTUAL FY20 Average Outage Duration Planned 6.6kV to 22kV 205 204 Planned 22kV to 110kV 338 116 Unplanned 6.6kV to 22kV 104 103	Powerco SAIDI (Unplanned)	197.3	181.0	191.4	187.4
Eastern Region 1.685 1.688 Powerco SAIFI (Unplanned) 2.029 1.922 2.285 2.262 MINUTES ACTUAL FY19 FY20 ACTUAL FY19 FY20 ACTUAL FY20	SAIFI (Unplanned)				
Powerco SAIFI (Unplanned) 2.029 1.922 2.285 2.262 MINUTES ACTUAL FY19 ACTUAL FY20 Average Outage Duration Planned 6.6kV to 22kV 205 204 Planned 22kV to 110kV 338 116 Unplanned 6.6kV to 22kV 104 103	Western Region	2.376	2.133		
ACTUAL FY19 ACTUAL FY20 Average Outage Duration V Planned 6.6kV to 22kV 205 204 Planned 22kV to 110kV 338 116 Unplanned 6.6kV to 22kV 104 103	Eastern Region	1.685	1.688		
Average Outage Duration 205 204 Planned 6.6kV to 22kV 338 116 Unplanned 6.6kV to 22kV 104 103	Powerco SAIFI (Unplanned)	2.029	1.922	2.285	2.262
Average Outage Duration 205 204 Planned 6.6kV to 22kV 338 116 Unplanned 6.6kV to 22kV 104 103		ACTUAL	ACTUAL		
Planned 6.6kV to 22kV 205 204 Planned 22kV to 110kV 338 116 Unplanned 6.6kV to 22kV 104 103	MINUTES				
Planned 22kV to 110kV 338 116 Unplanned 6.6kV to 22kV 104 103	Average Outage Duration				
Unplanned 6.6kV to 22kV 104 103	Planned 6.6kV to 22kV	205	204		
	Planned 22kV to 110kV	338	116		
Unplanned 22kV to 110kV 74 69	Unplanned 6.6kV to 22kV	104	103		
	Unplanned 22kV to 110kV	74	69		

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	n Index fo	r 10 Worst Feeders						
F1 FEEDER	INDEX	LOCATION	F2 FEEDER	INDEX	LOCATION	F3 FEEDER	INDEX	LOCATION
SULPHUR PT 2	4,996	Tauranga, HAMILTON STREET SUB	WATERWORKS RD	5,026	Wanganui, KAI IWI SUB	HUNTERVILLE 22KV	1,373	Wanganui, RATA SUB
TE PUKE QUARRY RD	1,755	Tauranga, ATUAROA AVE SUB	WINDFARM	871	Wairarapa, HAU NUI SUB	FACTORY	1,341	Wanganui, RATA SUB
MCKEE 1	1,187	Taranaki, MCKEE SUB	LINTON	729	Manawatu, TURITEA SUB	ST JOHNS	1,147	Wanganui, PEAT ST SUB
TATUANUI	851	Valley, FARMER ROAD SUB	AOKAUTERE	624	Manawatu, TURITEA SUB	EDITH ST	1,074	Wairarapa, AKURA SUB
MATAPU	692	Taranaki, KAPUNI SUB	CENTENNIAL DR	435	Taranaki, MOTUROA SUB	WYUNA BAY	1,071	Valley, COROMANDEL SUB
ORIGIN 2	654	Taranaki, WAIHAPA SUB	KATERE 11	403	Taranaki, KATERE SUB	ASHWORTH ST	939	Valley, BAIRD ROAD SUB
DEVON RD	537	Taranaki, BELL BLOCK SUB	SOUTH RD CHAPEL	396	Wairarapa, CHAPEL SUB	OPOUTERE	797	Valley, WHANGAMATA SUB
INGHAMS 1	450	Valley, INGHAMS SUB	OHAKEA	386	Manawatu, SANSON SUB	TOTARA	793	Valley, THAMES SUB
WAIHI GOLD	442	Valley, WAIHI SUB	PAHOIA	383	Tauranga, OMOKOROA SUB	REREATUKAHIA RD	789	Tauranga, KATIKATI SUB
AFFCO-QUEEN ST	420	Taranaki, WAITARA WEST SUB	18TH AVE	373	Tauranga, WAIHI ROAD SUB	MATAPIHI RD	786	Tauranga, MATAPIHI SUB

Number of feeders exceeding its interruption duration targets

F1	F2	F3
NUMBER	NUMBER	NUMBER
33	54	69

F4			F5		
FEEDER	INDEX	LOCATION	FEEDER	INDEX	LOCATION
STRATHMORE	6,417	Taranaki, DOUGLAS SUB	WAIONE	3,098	Manawatu, PONGAROA SUB
NGARIKI RD	1,859	Taranaki, NGARIKI SUB	ANNEDALE	2,771	Wairarapa, TINUI SUB
BUNNYTHORPE	1,722	Manawatu, MILSON SUB	BLAIRLOGIE	2,579	Wairarapa, AWATOITOI SUB
LEEDSTOWN 22KV	1,714	Wanganui, PUKEPAPA SUB	LANGDALE	2,478	Wairarapa, TINUI SUB
ROTOEHU	1,600	Tauranga, PONGAKAWA SUB	CASTLEPOINT	2,141	Wairarapa, TINUI SUB
HUIROA	1,571	Taranaki, DOUGLAS SUB	MANGAPAKEHA	2,118	Wairarapa, AWATOITOI SUB
HOROEKA	1,515	Manawatu, PONGAROA SUB	COAST ROAD	2,016	Manawatu, PONGAROA SUB
OLD COACH RD	1,457	Tauranga, PONGAKAWA SUB	TUTURUMURI	1,760	Wairarapa, HAU NUI SUB
RANGIWAHIA	1,374	Manawatu, KIMBOLTON SUB	CASTLEHILL	1,263	Manawatu, ALFREDTON SUB
DUTHIE RD	1,351	Taranaki, KAPONGA SUB	ROROKOKO	1,225	Wairarapa, AWATOITOI SUB

F4	F5
NUMBER	NUMBER
69	10

Interruption Freque	ency Index	for 10 Worst Feede	rs					
F1 FEEDER	INDEX	LOCATION	F2 FEEDER	INDEX	LOCATION	F3 FEEDER	INDEX	LOCATION
MATAPU	8	Taranaki, KAPUNI SUB	WATERWORKS RD	13	Wanganui, KAI IWI SUB	HUNTERVILLE 22KV	10	Wanganui, RATA SUB
TE PUKE QUARRY RD	8	Tauranga, ATUAROA AVE SUB	LINTON	9	Manawatu, TURITEA SUB	FACTORY	10	Wanganui, RATA SUB
MCKEE 1	8	Taranaki, MCKEE SUB	WILLOUGHBY ST	5	Valley, PAEROA SUB	TARATA	9	Taranaki, MOTUKAWA SUB
TATUANUI	6	Valley, FARMER ROAD SUB	PAHOIA	5	Tauranga, OMOKOROA SUB	WYUNA BAY	8	Valley, COROMANDEL SUB
DEVON RD	6	Taranaki, BELL BLOCK SUB	AOKAUTERE	5	Manawatu, TURITEA SUB	REVANS ST	8	Wairarapa, FEATHERSTON SUB
ARAPUNI ST	5	Valley, PUTARURU SUB	OHAKEA	4	Manawatu, SANSON SUB	HETHERINGTON RD	7	Valley, WHANGAMATA SUB
WOODS RD	4	Valley, FARMER ROAD SUB	HEWLETTS RD	4	Tauranga, TRITON SUB	EDITH ST	7	Wairarapa, AKURA SUB
ORIGIN 2	4	Taranaki, WAIHAPA SUB	WANGANUI EAST	4	Wanganui, WANGANUI EAST SUB	REREATUKAHIA RD	7	Tauranga, KATIKATI SUB
BLAKE ST	3	Taranaki, WAITARA WEST SUB	EASTOWN RD	3	Wanganui, WANGANUI EAST SUB	PORTLAND QUAY	6	Taranaki, LIVINGSTONE SUB
MCCABE ROAD	3	Valley, MIKKELSEN ROAD SUB	COLOMBO RD	3	Wairarapa, TE ORE ORE SUB	TOTARA	6	Valley, THAMES SUB

Number of feeders exceeding its interruption frequency targets

F1	F2	F3
NUMBER	NUMBER	NUMBER
36	48	89

F4 FEEDER	INDEX	LOCATION	F5 FEEDER	INDEX	LOCATION
STRATHMORE	17	Taranaki, DOUGLAS SUB	BLAIRLOGIE	19	Wairarapa, AWATOITOI SUB
LEEDSTOWN 22KV	14	Wanganui, PUKEPAPA SUB	LANGDALE	16	Wairarapa, TINUI SUB
TURAKINA	13	Wanganui, PUKEPAPA SUB	MANGAPAKEHA	16	Wairarapa, AWATOITOI SUB
BROOKLANDS	12	Manawatu, ALFREDTON SUB	ANNEDALE	13	Wairarapa, TINUI SUB
IHURAUA	12	Manawatu, ALFREDTON SUB	CASTLEPOINT	12	Wairarapa, TINUI SUB
NGARIKI RD	12	Taranaki, NGARIKI SUB	CASTLEHILL	11	Manawatu, ALFREDTON SUB
WAITUNA	11	Manawatu, KIMBOLTON SUB	MAIN RD MOTONUI	10	Taranaki, WAITARA EAST SUB
LOCKINGTON ROAD	11	Tauranga, AONGATETE SUB	ROROKOKO	10	Wairarapa, AWATOITOI SUB
SOUTH RD NGARIKI	11	Taranaki, NGARIKI SUB	PRINCESS ST	9	Taranaki, WAITARA EAST SUB
INLAND COAST	11	Taranaki, OAKURA SUB	OTARAOA RD	9	Taranaki, MCKEE SUB
				-	
	F4 NUMBER			F5 NUMBER	
	88			16	

F4	F5
NUMBER	NUMBER
88	16

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

ICP Outages – Distribution Transformer Performance

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

		F3			F2			F1
LOCATIO	DURATION MINUTES	TRANSFORMER	LOCATION	DURATION MINUTES	TRANSFORMER	LOCATION	DURATION MINUTES	TRANSFORMER
Valle WYUNA BA	4,511	TC1985:B	Wanganui, WATERWORKS RD	14,493	X2290:W	Tauranga, SULPHUR PT 2	4,996	BEW-T1:B
Valle WYUNA BA	4,511	TC2583:B	Wanganui, WATERWORKS RD	14,493	X2567:W	Valley, TATUANUI	4,081	TC1945:B
Wanganu HUNTERVILLE 22K	4,103	X4238:W	Wanganui, WATERWORKS RD	14,493	X2945:W	Valley, TATUANUI	4,081	TC184:B
Wanganu HUNTERVILLE 22K	4,026	X1293:W	Wanganui, WATERWORKS RD	14,131	X1764:W	Valley, TATUANUI	4,081	TC6472:B
Wanganu HUNTERVILLE 22K	4,026	X1292:W	Wanganui, WATERWORKS RD	14,131	X1765:W	Valley, TATUANUI	4,081	TP2045:B
Wanganı HUNTERVILLE 22K	4,026	X1294:W	Wanganui, WATERWORKS RD	14,131	X2939:W	Valley, TATUANUI	4,081	TP2400:B
Wanganı HUNTERVILLE 22K	4,026	X1299:W	Wanganui, WATERWORKS RD	14,017	X1761:W	Valley, TATUANUI	4,081	TP3370:B
Wanganı HUNTERVILLE 22K	4,026	X1300:W	Wanganui, WATERWORKS RD	14,017	X1762:W	Valley, TATUANUI	4,081	TC185:B
Wanganı HUNTERVILLE 22K	4,026	X1303:W	Wanganui, WATERWORKS RD	14,017	X1763:W	Valley, TATUANUI	4,081	TC4145:B
Wanganı HUNTERVILLE 22K	4,026	X1295:W	Wanganui, WATERWORKS RD	14,017	X2559:W	Valley, TATUANUI	4,081	TC4916:B
Wanganı HUNTERVILLE 22K	4,026	X2060:W	Wanganui, WATERWORKS RD	14,017	X1760:W	Valley, TATUANUI	4,081	TC655:B
Wanganı HUNTERVILLE 22K	4,026	X1296:W	Wanganui, WATERWORKS RD	13,734	X4185:W	Valley, TATUANUI	4,081	TP1237:B
Wanganı HUNTERVILLE 22K	4,026	X1298:W	Wanganui, WATERWORKS RD	12,804	X1757:W	Valley, TATUANUI	4,081	TP424:B
Wanganu HUNTERVILLE 22K	4,026	X1301:W	Wanganui, WATERWORKS RD	12,804	X2504:W	Valley, TATUANUI	4,081	TC4128:B
Wanganı HUNTERVILLE 22K	4,026	X1302:W	Wanganui, WATERWORKS RD	12,804	X2955:W	Valley, TATUANUI	4,081	TC183:B
Wanganı HUNTERVILLE 22K	4,026	X2522:W	Wanganui, WATERWORKS RD	12,804	X1758:W	Valley, TATUANUI	4,017	TC2188:B

ŀ	DURATION		F5	DURATION	
RANSFORMER	MINUTES	LOCATION	TRANSFORMER	MINUTES	LOCATION
2602:T	29,631	Taranaki, STRATHMORE	T47:M	6,021	Wairarapa, ANNEDALE
2554:T	13,927	Taranaki, STRATHMORE	T2603:M	5,829	Wairarapa, TUTURUMURI
3525:T	13,927	Taranaki, STRATHMORE	T2944:M	5,829	Wairarapa, TUTURUMURI
3300:T	13,143	Taranaki, STRATHMORE	T3862:M	5,829	Wairarapa, TUTURUMURI
2255:T	13,138	Taranaki, STRATHMORE	T4128:M	4,332	Wairarapa, LANGDALE
2624:T	13,138	Taranaki, STRATHMORE	X3170:T	4,260	Taranaki, MAIN RD MOTONUI
2699:T	13,138	Taranaki, STRATHMORE	T952:M	4,195	Wairarapa, BLAIRLOGIE
2817:T	13,138	Taranaki, STRATHMORE	T3835:M	4,148	Wairarapa, LANGDALE
3239:T	13,138	Taranaki, STRATHMORE	T135:M	4,145	Wairarapa, LANGDALE
3436:T	13,138	Taranaki, STRATHMORE	T3937:M	4,145	Wairarapa, LANGDALE
3700:T	13,138	Taranaki, STRATHMORE	T134:M	4,145	Wairarapa, LANGDALE
3705:T	13,138	Taranaki, STRATHMORE	T2903:M	4,145	Wairarapa, LANGDALE
2850:T	13,104	Taranaki, STRATHMORE	T3293:M	4,145	Wairarapa, LANGDALE
3250:T	13,104	Taranaki, STRATHMORE	T4229:M	4,145	Wairarapa, LANGDALE
2600:T	13,104	Taranaki, STRATHMORE	T4412:M	4,145	Wairarapa, LANGDALE
3323:T	13,104	Taranaki, STRATHMORE	T9/101:P	4,084	Manawatu, WAIONE
850:T 250:T 600:T	13,104 13,104 13,104	Taranaki, STRATHMORE Taranaki, STRATHMORE Taranaki, STRATHMORE Taranaki, STRATHMORE	T3293:M T4229:M T4412:M	4,145 4,145 4,145	Wairarapa LANGDALE Wairarapa LANGDALE Wairarapa LANGDALE Wairarapa LANGDALE

F1	DURATION		F2	DURATION		F3	DURATION	
TRANSFORMER	MINUTES	LOCATION	TRANSFORMER	MINUTES	LOCATION	TRANSFORMER	MINUTES	LOCATION
TE5-254:B	3,564	Tauranga, TE PUKE QUARRY RD	X1759:W	12,804	Wanganui, WATERWORKS RD	X2971:W	4,026	Wanganui, HUNTERVILLE 22KV
TE5-232:B	3,564	Tauranga, TE PUKE QUARRY RD	X2840:W	12,804	Wanganui, WATERWORKS RD	X1306:W	3,960	Wanganui, HUNTERVILLE 22KV
TE5-188:B	3,281	Tauranga, TE PUKE QUARRY RD	X4042:W	12,804	Wanganui, WATERWORKS RD	X1305:W	3,950	Wanganui, HUNTERVILLE 22KV
TE5-143:B	3,159	Tauranga, TE PUKE QUARRY RD	X1754:W	10,335	Wanganui, WATERWORKS RD	X4609:T	3,844	Taranaki, WEST QUAY

F1	FREQUENCY		F2	FREQUENCY		F3	FREQUENCY	
TRANSFORMER	MINUTES	LOCATION	TRANSFORMER	MINUTES	LOCATION	TRANSFORMER	MINUTES	LOCATION
K4038:E	16	Taranaki, MATAPU	X1754:W	27	Wanganui, WATERWORKS RD	TC1741:B	19	Valley, WYUNA BAY
X5125:E	16	Taranaki, MATAPU	X2290:W	26	Wanganui, WATERWORKS RD	T3/434:P	18	Manawatu, MAKINO
X5126:E	16	Taranaki, MATAPU	X2567:W	26	Wanganui, WATERWORKS RD	T3762:M	18	Wairarapa, REVANS ST
K4020:E	16	Taranaki, MATAPU	X2945:W	26	Wanganui, WATERWORKS RD	X4238:W	18	Wanganui, HUNTERVILLE 22KV
K4030:E	16	Taranaki, MATAPU	X1753:W	26	Wanganui, WATERWORKS RD	T3/89:P	18	Manawatu, MAKINO
K4035:E	16	Taranaki, MATAPU	X1757:W	25	Wanganui, WATERWORKS RD	X1292:W	17	Wanganui, HUNTERVILLE 22KV
K4040:E	16	Taranaki, MATAPU	X1758:W	25	Wanganui, WATERWORKS RD	X1294:W	17	Wanganui, HUNTERVILLE 22KV
TC1945:B	15	Valley, TATUANUI	X1759:W	25	Wanganui, WATERWORKS RD	X1299:W	17	Wanganui, HUNTERVILLE 22KV
TC2188:B	15	Valley, TATUANUI	X1764:W	25	Wanganui, WATERWORKS RD	X1300:W	17	Wanganui, HUNTERVILLE 22KV
TC183:B	15	Valley, TATUANUI	X1765:W	25	Wanganui, WATERWORKS RD	X1303:W	17	Wanganui, HUNTERVILLE 22KV
TC185:B	15	Valley, TATUANUI	X2504:W	25	Wanganui, WATERWORKS RD	T1391:M	17	Wairarapa REVANS ST
TC4145:B	15	Valley, TATUANUI	X2840:W	25	Wanganui, WATERWORKS RD	T1793:M	17	Wairarapa, REVANS ST

F4			F5		
TRANSFORMER	DURATION MINUTES	LOCATION	TRANSFORMER	DURATION MINUTES	LOCATION
X3526:T	13,104	Taranaki, STRATHMORE	T9/102:P	4,084	Manawatu, WAIONE
X4423:T	13,104	Taranaki, STRATHMORE	T9/106:P	4,084	Manawatu, WAIONE
X3180:T	13,104	Taranaki, STRATHMORE	T9/100:P	4,084	Manawatu, WAIONE
X3310:T	13,104	Taranaki, STRATHMORE	T9/104:P	4,084	Manawatu, WAIONE

F4	EDECHENOV		F5	EDEOLIENOV	
TRANSFORMER	FREQUENCY MINUTES	LOCATION	TRANSFORMER	FREQUENCY MINUTES	LOCATION
X3901:T	32	Taranaki, STRATHMORE	T166:M	23	Wairarapa, BLAIRLOGIE
TP2423:B	31	Tauranga, TE MATAI RD	T1145:M	23	Wairarapa, BLAIRLOGIE
TP2424:B	31	Tauranga, TE MATAI RD	T154:M	23	Wairarapa, BLAIRLOGIE
TP2425:B	31	Tauranga, TE MATAI RD	T158:M	23	Wairarapa, BLAIRLOGIE
TP2044:B	31	Tauranga, TE MATAI RD	T160:M	23	Wairarapa, BLAIRLOGIE
TG5-004:B	30	Tauranga, TE MATAI RD	T164:M	23	Wairarapa, BLAIRLOGIE
TP1383:B	30	Tauranga, TE MATAI RD	T165:M	23	Wairarapa, BLAIRLOGIE
TP1575:B	30	Tauranga, TE MATAI RD	T168:M	23	Wairarapa, BLAIRLOGIE
TP1671:B	30	Tauranga, TE MATAI RD	T169:M	23	Wairarapa, BLAIRLOGIE
TP1841:B	30	Tauranga, TE MATAI RD	T2115:M	23	Wairarapa, BLAIRLOGIE
TP1842:B	30	Tauranga, TE MATAI RD	T2436:M	23	Wairarapa, BLAIRLOGIE
TP2880:B	30	Tauranga, TE MATAI RD	T2484:M	23	Wairarapa, BLAIRLOGIE

F1	FREQUENCY		F2	FREQUENCY		F3	FREQUENCY	
TRANSFORMER	MINUTES	LOCATION	TRANSFORMER	MINUTES	LOCATION	TRANSFORMER	MINUTES	LOCATION
TC4916:B	15	Valley, TATUANUI	X2939:W	25	Wanganui, WATERWORKS RD	T773:M	17	Wairarapa, REVANS ST
TC6472:B	15	Valley, TATUANUI	X2955:W	25	Wanganui, WATERWORKS RD	X1295:W	17	Wanganui, HUNTERVILLE 22KV
TC655:B	15	Valley, TATUANUI	X4042:W	25	Wanganui, WATERWORKS RD	X1296:W	17	Wanganui, HUNTERVILLE 22KV
TP1237:B	15	Valley, TATUANUI	X1760:W	24	Wanganui, WATERWORKS RD	X1298:W	17	Wanganui, HUNTERVILLE 22KV
TP2045:B	15	Valley, TATUANUI	X1763:W	24	Wanganui, WATERWORKS RD	X1301:W	17	Wanganui, HUNTERVILLE 22KV
TP2400:B	15	Valley, TATUANUI	X2559:W	24	Wanganui, WATERWORKS RD	X1302:W	17	Wanganui, HUNTERVILLE 22KV
TP3370:B	15	Valley, TATUANUI	X393:W	24	Wanganui, WATERWORKS RD	X2060:W	17	Wanganui, HUNTERVILLE 22KV
TP424:B	15	Valley, TATUANUI	X394:W	24	Wanganui, WATERWORKS RD	X2522:W	17	Wanganui, HUNTERVILLE 22KV

Consumers with 5+ planned interruptions

F1 ACTUAL	F2 ACTUAL	F3 ACTUAL
NUMBER	NUMBER	NUMBER
113	65	805

F4			F5		
TRANSFORMER	FREQUENCY MINUTES	LOCATION	TRANSFORMER	FREQUENCY MINUTES	LOCATION
TP1629:B	30	Tauranga, TE MATAI RD	T2485:M	23	Wairarapa, BLAIRLOGIE
TG5-001:B	30	Tauranga, TE MATAI RD	T2535:M	23	Wairarapa, BLAIRLOGIE
X2255:T	29	Taranaki, STRATHMORE	T2562:M	23	Wairarapa, BLAIRLOGIE
X2624:T	29	Taranaki, STRATHMORE	T2595:M	23	Wairarapa, BLAIRLOGIE
X2699:T	29	Taranaki, STRATHMORE	T2870:M	23	Wairarapa, BLAIRLOGIE
X2817:T	29	Taranaki, STRATHMORE	T3081:M	23	Wairarapa, BLAIRLOGIE
X3239:T	29	Taranaki, STRATHMORE	T3417:M	23	Wairarapa, BLAIRLOGIE
X3436:T	29	Taranaki, STRATHMORE	T3571:M	23	Wairarapa, BLAIRLOGIE

F4 ACTUAL NUMBER	F5 ACTUAL NUMBER
909	483

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 FY19	ACTUAL FY20
% of Complaints responded to in 2 days	53%	57%
Number of Complaints received	980	831
% of Complaints resolved within 20 days	75%	81%
% of Complaints resolved within 40 days	87%	94%
Number of Complaints deadlocked and referred to Utilities Disputes Limited	9	8
% of Complaints deadlocked and referred to Utilities Disputes Limited	1%	1%

Note: in timing our response and resolution of complaints, day 1 is considered the first business day after the complaint is received.

MAJOR PROJECTS

Descriptions of our Major Projects, along with information on progress, risks and expenditure are presented below (meeting ADR requirement 3.3j).

PROJECT & DESCRIPTION	PROGRESS	2020 EXPENDITURE	EXPENDITURE TO DATE	CPP TOTAL FORECAST
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.	50 (CPP -)	1,757 (CPP 18,729)	18,729
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 2019. 11kV feeder reconfigurations progressed during FY20. Linton 33kV switchgear design and Linton to Fergusson route progressed.	4,237 (CPP -)	15,527 (CPP 14,548)	30,322
Putaruru Construct new 110/33kV substation adjacent to the existing Putaruru zone substation. Construct a new 110kV circuit from Arapuni hydro to the new substation.	110/33 kV substation conceptual design completed. Line and cable route issues progressed during FY20. Agreement in principle reached for route into Arapuni. Commencing detailed design in FY21.	380 (CPP 5,728)	3,486 (CPP 9,691)	28,788
Whangamata Install a battery energy storage solution (BESS) and integrated standby diesel generator at Whangamata zone substation.	BESS and diesel generator installation was completed in FY20, with commissioning in November 2019. Project complete.	7,744 (CPP 1,192)	12,362 (CPP 9,224)	20,800
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 FY20. Planning to start construction late FY21. Omokoroa substations works have been impacted by the Tauranga Northern Link highway project, with the works currently on hold.	331 (CPP 7,060)	384 (CPP 8,436)	13,552

PROJECT & DESCRIPTION	PROGRESS	2020 EXPENDITURE	EXPENDITURE TO DATE	CPP TOTAL FORECAST
Kopu-Tairua				
Reconductor the existing 66 kV 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.	249 (CPP 3,412)	521 (CPP 8,020)	9,765
	The reconductoring works is on hold while this updated options analysis is performed.			
Kopu-Kaueranga				
Reconductor the existing 66kV line between Parawai and Kauaeranga Valley and thermally upgrade the line between Kopu GXP and Parawai.	Reconductoring and thermal upgrade works now complete.	1,201 (CPP 316)	3,980 (CPP 5,477)	10,517
Construct a new 110kV overhead line from the Kopu GXP to the Kauaeranga Valley.	New 110kV line route consented, awaiting resolution of Treaty settlement claim. Timing being reconsidered alongside options re-evaluation for Kopu-Tairua.			
Moturoa – NPL GXP				
Install dual 33kV cable circuits from Carrington Street GXP to Moturoa zone substation.	New 33 kV cable circuits have been installed and were commissioned in August 2019. Project Complete.	1,774 (CPP -)	11,727 (CPP 9,158)	9,158
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.	- (CPP -)	50 (CPP 329)	7,092
	After reevaluating options, a backup generation solution at Kerepehi is now preferred.			
Whenuakite				
Construct a new zone substation at Whenuikite, south of Whitianga and install new 66kV line deviation off the existing Tairua-Whitianga circuit.	Substation and line route landowner negotiations progressed during FY20. Anticipate commencing detailed design and substation procurement during FY21.	319 (CPP 253)	378 (CPP 762)	8,364

PROJECT & DESCRIPTION	PROGRESS	2020 EXPENDITURE	EXPENDITURE TO DATE	CPP TOTAL FORECAST
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.	5 (CPP 88)	6 (CPP 174)	9,318
Putaruru-Tirau Install a new 33kV underground cable between Putaruru and Tirau substations.	Local road route selected. Detailed design and procurement scheduled for FY21, with construction FY22.	127 (CPP 2,492)	127 (CPP 2,492)	7,459
Kaimarama-Whitianga Construct a new gas insulated 66kV switchboard (GIS) at Kaimarama.	Landowner agreement in principal reached for GIS site. To commence detailed design and procurement of the GIS in FY21.	102 (CPP 176)	268 (CPP 389)	7,118
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.	45 (CPP -)	83 (CPP -)	7,223
Feilding-Sanson-Bulls 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 FY20. Long lead time procurment items ordered for substation works. Customer requirements have brought forward the planned works.	465 (CPP -)	565 (CPP 241)	7,142
Pyes Pa Construct a new 33/11kV zone substation at Pyes Pa, Tauriko.	The Pyes Pa substation was commissioned in May 2018.	1 (CPP -)	6,978 (CPP 5,644)	5,644
Inglewood Convert Inglewood substation to 11kV by upgrading the remaining 6.6kV/415V distribution transformers.	First stage of transformer conversions commenced in FY20. Subsequent stages are planned for FY21 and FY22.	1,727 (CPP 3,426)	1,731 (CPP 6,000)	6,910

DIRECTORS CERTIFICATE

Certificate for Annual Delivery Report

CERTIFICATE FOR ANNUAL DELIVERY REPORT

We,	John Loughlin	and	Michael Cummings
	ctors of Powerco Limited certify the the attached Annual Delivery Re		reasonable enquiry, to the best of ouited is true and accurate.
			llud
Director		— — Director	
3 Se	eptember 2020	3 Sept	tember 2020
Date		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.

