Annual Compliance Statement

For the Year End 31 March 2023

Electricity Distribution Services Default Price-Quality Path Determination
Services Default Price-Quality Path Determination 2020

Contents

1. Introduction

The Lines Company Limited (The Lines Company – TLC) is subject to price-quality regulation under Part 4 of the Commerce Act 1986. The Commerce Commission has set a Default Price-Quality Path (DPP) which applies to The Lines Company from 1 April 2020.

This annual compliance statement is published in accordance with clause 11.4 of the 2020 DPP Determination and applies to the third assessment period, commencing 1 April 2022 and ending 31 March 2023.

2. Date prepared[1]

This statement was prepared and certified on 31 August 2023.

[1] Because of the many detailed calculations required, rounding occurs within this document.

3. Wash-up amount

3.1 Statement of compliance

Table 1 details, consistent with clause 8.6 of the 2020 DPP Determination, that The Lines Company has complied with the wash-up amount calculation for the third assessment period.

3.2 Wash-up amount calculation

Table 1

Wash-up amount RY2023		
Term	Description	Value ($000)
Actual allowable revenue (AAR)	Sum of actual net allowable revenue, actual pass-through and recoverable costs and revenue wash-up draw down amount	46,682
Actual revenue (AR)	Sum of actual revenue from prices plus other regulated income	42,340
Revenue foregone (RV)	Actual net allowable revenue x (revenue reduction percentage - 20%) when revenue reduction percentage is greater than 20%, otherwise nil	-
Wash-up amount	AAR - AR - RV	4,342

Further information supporting actual allowable revenue is included in Section 3.2.1.

Further information supporting actual revenue is included in Section 3.2.2.

Further information supporting revenue foregone is included in Section 3.3.3.

Commentary supporting the wash-up amount is included in Appendix A.

3.2.1 Actual allowable revenue

Table 2 details TLC's actual allowable revenue for the assessment period consistent with Schedule 1.6 of the 2020 DPP Determination.

Table 2

Actual allowable revenue RY2023		
Term	Description	Value ($000)
Actual net allowable revenue previous ($ANAR_{previous}$)	$ANAR_{previous}$ is the actual net allowable revenue of the previous assessment period	36,547
ΔCPI_t	is the dervied change in CPI to be applied for the assessment period	7.10%
X	X Factor is the annual rate of change specified in Schedule 1.2 of the Determination	0.00%
Actual net allowable revenue (ANAR)	ANAR for the third assessment period is the amount calculated using the formula $ANAR_{previous}$ * (1 + ΔCPI_t) * ((1 - X)	39,141
Actual pass-through costs	Sum of all pass-through costs that were incurred or approved by the Commission in the assessment period	531
Actual recoverable costs	Sum of all recoverable costs that were incurred or approved by the Commission in the assessment period	4,426
Revenue wash-up draw down amount	Opening wash-up account balance	2,585
Total actual allowable revenue (AAR)	Actual net allowable revenue + actual pass-through costs and actual recoverable costs – pass-through balance	46,682

Further information supporting the derived change in CPI, actual pass-through costs and actual recoverable costs are included in Appendix A.

3.2.2 Actual revenue

Table 3 details TLC's actual revenue for the assessment period consistent with clause 4.2 of the 2020 DPP Determination.

Table 3

Actual revenue RY2023		
Term	Description	Value ($000)
Actual revenue from prices	Actual prices between 1 April 2022 and 31 March 2023 multiplied by actual quantities for the assessment period	42,295
Other regulated income	Other income associated with supply of electricity distribution services	44
Total actual revenue (AR)	Sum of actual revenue from prices plus other regulated income	42,340

Further information supporting actual revenue from prices is included in Appendix B.

3.2.3 Revenue foregone

Table 4 details TLC's revenue foregone consistent with clause 4.2 of the 2020 DPP Determination.

Table 4

Revenue foregone RY2023		
Term	Description	Value ($000)
Actual net allowable revenue (ANAR)	Amount specified as forecast net allowable revenue for the third assessment period	39,141
Revenue reduction percentage (RRP)	1 - (actual revenue from prices / forecast revenue from prices)	1.13%
Revenue foregone (RV)	Actual net allowable revenue x (RRP-20%) when RRP is greater than 20%, otherwise nil	-

4. Quality standards

4.1 Statement of compliance with planned interruptions quality standards

The Lines Company is subject to planned accumulated:

- System Average Interruption ***Duration*** Index (SAIDI) limits, and;
- System Average Interruption ***Frequency*** Index (SAIFI) limits.

These are assessed for the DPP regulatory period per clause 9.2 of the 2020 DPP Determination.

Tables 5 and 6 detail the planned accumulated SAIDI and SAIFI limits for TLC for the DPP regulatory period and the planned SAIDI and SAIFI assessed values for the third assessment period.

Table 5

Planned interruptions quality standard - SAIDI	
Sum of planned SAIDI assessed values ≤ Planned accumulated SAIDI limit	
Planned accumulated SAIDI limit	1,331.68
Planned SAIDI assessed value for the third assessment period	115.63
Planned accumulated SAIDI assessed value	315.51
Compliance result	Compliant

Table 6

Planned interruptions quality standard - SAIFI	
Sum of planned SAIFI assessed values ≤ Planned accumulated SAIFI limit	
Planned accumulated SAIFI limit	8.7527
Planned SAIFI assessed value for the third assessment period	0.6209
Planned accumulated SAIFI assessed value	1.6299
Compliance result	Compliant

Further information supporting planned SAIDI and SAIFI assessed values are included in Section 4.1.1.

4.1.1 Planned SAIDI and SAIFI assessed values

Tables 7 and 8 detail TLC's planned SAIDI and SAIFI assessed values for the assessment period.

Table 7

Planned SAIDI assessed value RY2023		
Term	Description	Value
Class B non-notified interruptions		0.40
Class B notified interruptions falling outside window		14.61
$SAIDI_B$	Sum of Class B non-notified interruptions	15.01
Class B notified interruptions falling inside window		195.26
Class B intended interruptions cancelled without notice		5.97
Class B intended interruptions cancelled with notice		-
$SAIDI_N$	Sum of Class B notified interruptions	201.23
Planned SAIDI assessed value	$SAIDI_B + (SAIDI_N / 2)$	115.63

Table 8

Planned SAIFI assessed value RY2023		
Term	Description	Value
Planned SAIFI assessed value	Sum of Class B interruptions commencing within the assessment period	0.6209

4.2 Statement of compliance with unplanned interruptions quality standards

Tables 9 and 10 detail, consistent with clause 9.7 of the 2020 DPP Determination, that TLC has ***not complied*** with the unplanned interruptions quality standards for SAIDI and SAIFI for RY2023.

Table 9

Unplanned interruptions quality standard RY2023 - SAIDI		
Unplanned SAIDI assessed value ≤ Unplanned SAIDI limit		
Unplanned SAIDI limit		181.48
Unplanned SAIDI assessed value	Sum of normalised SAIDI values for Class C interruptions commencing within the assessment period	238.94
Compliance result		Not Compliant

Table 10

Unplanned interruptions quality standard RY2023 - SAIFI		
Unplanned SAIFI assessed value ≤ Unplanned SAIFI limit		
Unplanned SAIFI limit		3.2715
Unplanned SAIFI assessed value	Sum of normalised SAIFI values for Class C interruptions commencing within the assessment period	3.4377
Compliance result		Not Compliant

Information about policies, procedures and calculations for measuring planned and unplanned interruptions during the assessment period is in Appendix C.

4.2.1 Major events

Tables 11 and 12 detail the unplanned SAIDI and SAIFI values attributed to major events which occurred during the assessment period. The Lines Company experienced six SAIDI and one SAIFI major events during RY2023.

Further information about major events is included in Appendix D.

Table 11

Unplanned SAIDI major events RY2023			
Start	End	Pre-normalised	Normalised
19/05/2022 17:30	21/05/2022 16:59	35.54	2.36
12/06/2022 16:30	13/06/2022 22:29	12.38	3.37
5/10/2022 12:30	7/10/2022 11:59	15.83	0.60
11/11/2022 11:00	13/11/2022 10:29	17.41	1.20
12/02/2023 17:00	17/02/2023 7:59	338.00	11.93
28/03/2023 10:00	30/03/2023 9:29	17.79	0.41

Table 12

Unplanned SAIFI major events RY2023			
Start	End	Pre-normalised	Normalised
12/02/2023 23:00	15/02/2023 2:59	0.6362	0.0917

4.3 Statement of compliance with extreme event standard

Table 13 details, consistent with clause 9.9 of the 2020 DPP Determination, that TLC has complied with the extreme event standard.

Table 13

Extreme event standard RY2023	
Unplanned SAIDI value ≤ 120 minutes, and customer interruption minutes ≤ six million during any 24-hour period, excluding unplanned interruptions from major external factors	
Number of extreme	Compliance result
	Compliant

4.4 Quality Incentive Adjustment

Table 14 details TLC's quality incentive adjustment for the assessment period.

Table 14

Quality Incentive Adjustment RY2023		
Term	Description	Value ($000)
SAIDI planned adjustment	(SAIDIplanned, target - SAIDIplanned, assessed) x 0.5 x IR	(51)
SAIDI unplanned adjustment	(SAIDIunplanned, target - SAIDIunplanned, assessed) x IR	(147)
Total adjustment	SAIDI planned adjustment + SAIDI unplanned adjustment	(198)
Revenue at risk	0.02 * ANAR	783
Total reward/(penalty)		(198)
67th percentile estimate of post-tax WACC		4.23%
Quality incentive adjustment		(216)

Table 15 details TLC's quality incentive adjustment inputs which are consistent with Schedule 4 of the 2020 DPP Determination.

Table 15

Quality Incentive Adjustment Inputs RY2023					
Planned			Unplanned		
Term	Units	Value	Term	Units	Value
SAIDI planned interruption cap	minutes	266.34	SAIDI unplanned interruption cap	minutes	181.48
SAIDI planned interruption collar	minutes	-	SAIDI unplanned interruption collar	minutes	-
SAIDI planned interruption target	minutes	88.78	SAIDI unplanned interruption target	minutes	143.04
Planned SAIDI assessed value	minutes	115.63	Unplanned SAIDI assessed value	minutes	238.94
Incentive rate	$	3,827	Incentive rate	$	3,827
Actual net allowable revenue (ANAR)	$000	39,141	Actual net allowable revenue (ANAR)	$000	39,141
SAIDI planned interruption target	minutes	88.78	SAIDI unplanned interruption target	minutes	143.04
Minimum of the planned SAIDI cap and assessed value	minutes	115.63	Minimum of the unplanned SAIDI cap and assessed value	minutes	181.48
Planned SAIDI subject to incentive	minutes	(26.85)	Unplanned SAIDI subject to incentive	minutes	(38.44)
Adjustment (IR x 0.5)	$	1,913.50	Adjustment (IR)	$	3,827.00
SAIDI planned adjustment	$000	(51.37)	SAIDI unplanned adjustment	$000	(147.11)

5. Transactions

The Lines Company has not entered into any agreements with another EDB or Transpower for an amalgamation, merger, major transaction or transfer in the assessment period.

6. Director's certification

A Director's certificate in the form set out in Schedule 7 of the 2020 DPP Determination is Appendix E.

7. Assurance report

An assurance report meeting the requirements of Schedule 8 of the 2020 DPP Determination is Appendix F.

Appendix A – Derived change in CPI, pass-through and recoverable costs

Derived change in CPI

Table 16 details the derived change in CPI to be applied for the assessment period:

Table 16

ΔCPI_{RY2023}			
Denominator		Numerator	
$CPI_{Jun2021}$	1082	$CPI_{Jun2022}$	1161
$CPI_{Sep2021}$	1106	$CPI_{Sep2022}$	1186
$CPI_{Dec2021}$	1122	$CPI_{Dec2022}$	1203
$CPI_{Mar2022}$	1142	$CPI_{Mar2023}$	1218
$\Delta CPI_{2022/23}$	7.10%		

Pass-through costs

Table 17 details TLC's pass-through costs for the assessment period:

Table 17

Actual and forecast pass-through costs RY2023			
Actual pass-through costs	Actual ($000)	Forecast ($000)	Forecast variance
Rates on system fixed assets	311	358	(47)
Commerce Act levies	135	122	13
Electricity Authority levies	68	76	(8)
Utilities Disputes levies	17	36	(19)
Total actual pass-through costs	531	592	(61)

Rates on system fixed assets were less than anticipated, as were customer complaints through Utilities Disputes.

Recoverable costs

Table 18 details TLC's recoverable costs for the assessment period:

Table 18

Actual and forecast recoverable costs RY2023			
Actual recoverable costs	Actual ($000)	Forecast ($000)	Forecast variance
IRIS opex incentive adjustment	(1,771)	(1,771)	-
IRIS capex incentive adjustment	184	431	(247)
Transmission charges	5,252	5,252	(0)
New investment contract charges	-	-	-
System operator services charges	-	-	-
Avoided transmission charges	-	-	-
Distributed generation allowance	1,075	1,038	37
Claw-back	-	-	-
Catastrophic event allowance	-	-	-
Extended reserves allowance	-	-	-
Quality incentive adjustment	(125)	(125)	-
Capex wash-up adjustment	(205)	(487)	282
Reconsideration event allowance	-	-	-
Quality standard variation engineers fee	-	-	-
Urgent project allowance	-	-	-
Fire and Emergency NZ levies	16	43	(27)
Innovation project allowance	-	-	-
Total actual recoverable costs	4,426	4,381	45

The forecast IRIS (incremental rolling incentive scheme) capex adjustment had not anticipated the effect non-network asset lifetimes would have on the calculation.

The capex wash-up adjustment required updated commissioned asset and operating expenditure values from TLC's RY2019 Information Disclosure document that was restated on 27 October 2020. This resulted in a variance in the actual adjustment to forecast of $282K.

Appendix B – Prices and quantities

Table 19 details the actual prices and quantities for actual revenue from prices for the third assessment period.

Table 19

Actual revenue from prices RY2023					
Description	**Price Category**	**Unit**	**Price**	**Actual quantity***	**Actual revenue ($000)***
Daily fixed price	RTLFCHC	$/day	$ 0.3000	4,292	$ 470
Daily fixed price	RTLFCLC	$/day	$ 0.3000	967	$ 106
Daily fixed price	RTLFCHU	$/day	$ 0.3000	1,164	$ 127
Daily fixed price	RTLFCLU	$/day	$ 0.3000	321	$ 35
Daily fixed price	RTSTDHC	$/day	$ 0.8663	4,043	$ 1,278
Daily fixed price	RTSTDLC	$/day	$ 1.6170	1,398	$ 825
Daily fixed price	RTSTDHU	$/day	$ 0.8663	1,050	$ 332
Daily fixed price	RTSTDLU	$/day	$ 1.6170	394	$ 233
Daily fixed price	GT15HC	$/day	$ 1.4835	504	$ 273
Daily fixed price	GT15LC	$/day	$ 2.1016	258	$ 198
Daily fixed price	GT15HU	$/day	$ 1.4835	2,029	$ 1,099
Daily fixed price	GT15LU	$/day	$ 2.1016	1,785	$ 1,369
Daily fixed price	GT30HC	$/day	$ 2.9670	61	$ 66
Daily fixed price	GT30LC	$/day	$ 3.8942	13	$ 18
Daily fixed price	GT30HU	$/day	$ 2.9670	244	$ 265
Daily fixed price	GT30LU	$/day	$ 3.8942	58	$ 82
Daily fixed price	GT70H	$/day	$ 6.6758	132	$ 322
Daily fixed price	GT70L	$/day	$ 8.9010	19	$ 63
Daily fixed price	GT150H	$/day	$ 13.9079	46	$ 236
Daily fixed price	GT150L	$/day	$ 18.2965	4	$ 27
Daily fixed price	DT15HC	$/day	$ 1.3860	13	$ 7
Daily fixed price	DT15LC	$/day	$ 1.9635	6	$ 5
Daily fixed price	DT15HU	$/day	$ 1.3860	13	$ 6
Daily fixed price	DT15LU	$/day	$ 1.9635	9	$ 7
Daily fixed price	DT30HC	$/day	$ 2.7143	27	$ 27
Daily fixed price	DT30LC	$/day	$ 3.5228	11	$ 14
Daily fixed price	DT30HU	$/day	$ 2.7143	25	$ 25
Daily fixed price	DT30LU	$/day	$ 3.5228	19	$ 25
Daily fixed price	DT70H	$/day	$ 5.9483	125	$ 271
Daily fixed price	DT70L	$/day	$ 7.9118	152	$ 439
Daily fixed price	DT150H	$/day	$ 12.4163	19	$ 86
Daily fixed price	DT150L	$/day	$ 16.1700	35	$ 207
Daily fixed price	TT15HC	$/day	$ 2.2444	2,162	$ 1,771
Daily fixed price	TT15LC	$/day	$ 3.1894	149	$ 174
Daily fixed price	TT15HU	$/day	$ 2.2444	1,134	$ 929
Daily fixed price	TT15LU	$/day	$ 3.1894	212	$ 247
Daily fixed price	TT30HC	$/day	$ 4.5478	48	$ 80
Daily fixed price	TT30LC	$/day	$ 5.9653	8	$ 17
Daily fixed price	TT30HU	$/day	$ 4.5478	49	$ 82
Daily fixed price	TT30LU	$/day	$ 5.9653	22	$ 48
Daily fixed price	TT70H	$/day	$ 10.0406	35	$ 128
Daily fixed price	TT70L	$/day	$ 13.4072	29	$ 142
Daily fixed price	TT150H	$/day	$ 20.6719	9	$ 68
Daily fixed price	TT150L	$/day	$ 27.7594	2	$ 20
Daily fixed price	RNLFCHC	$/day	$ 0.3000	179	$ 20
Daily fixed price	RNLFCLC	$/day	$ 0.3000	35	$ 4
Daily fixed price	RNLFCHU	$/day	$ 0.3000	22	$ 2
Daily fixed price	RNLFCLU	$/day	$ 0.3000	7	$ 1
Daily fixed price	RNSTDHC	$/day	$ 0.8663	134	$ 42
Daily fixed price	RNSTDLC	$/day	$ 1.6170	24	$ 14
Daily fixed price	RNSTDHU	$/day	$ 0.8663	14	$ 5
Daily fixed price	RNSTDLU	$/day	$ 1.6170	3	$ 2
Daily fixed price	GN15HC	$/day	$ 1.4835	25	$ 13
Daily fixed price	GN15LC	$/day	$ 2.1016	7	$ 5
Daily fixed price	GN15HU	$/day	$ 1.4835	96	$ 52
Daily fixed price	GN15LU	$/day	$ 2.1016	47	$ 36
Daily fixed price	GN30HC	$/day	$ 2.9670	3	$ 4

Actual revenue from prices RY2023					
Description	**Price Category**	**Unit**	**Price**	**Actual quantity***	**Actual revenue ($000)***
Daily fixed price	GN30LC	$/day	$ 3.8942	1	$ 1
Daily fixed price	GN30HU	$/day	$ 2.9670	23	$ 24
Daily fixed price	GN30LU	$/day	$ 3.8942	1	$ 1
Daily fixed price	GN70H	$/day	$ 6.6758	16	$ 39
Daily fixed price	GN70L	$/day	$ 8.9010	-	$ -
Daily fixed price	GN150H	$/day	$ 13.9079	-	$ -
Daily fixed price	GN150L	$/day	$ 18.2965	1	$ 7
Daily fixed price	DN15HC	$/day	$ 1.3860	-	$ -
Daily fixed price	DN15LC	$/day	$ 1.9635	-	$ -
Daily fixed price	DN15HU	$/day	$ 1.3860	-	$ -
Daily fixed price	DN15LU	$/day	$ 1.9635	-	$ -
Daily fixed price	DN30HC	$/day	$ 2.7143	-	$ -
Daily fixed price	DN30LC	$/day	$ 3.5228	-	$ -
Daily fixed price	DN30HU	$/day	$ 2.7143	1	$ 1
Daily fixed price	DN30LU	$/day	$ 3.5228	-	$ -
Daily fixed price	DN70H	$/day	$ 5.9483	1	$ 2
Daily fixed price	DN70L	$/day	$ 7.9118	-	$ -
Daily fixed price	DN150H	$/day	$ 12.4163	-	$ -
Daily fixed price	DN150L	$/day	$ 16.1700	1	$ 6
Daily fixed price	TN15HC	$/day	$ 2.2444	52	$ 42
Daily fixed price	TN15LC	$/day	$ 3.1894	3	$ 3
Daily fixed price	TN15HU	$/day	$ 2.2444	8	$ 7
Daily fixed price	TN15LU	$/day	$ 3.1894	5	$ 6
Daily fixed price	TN30HC	$/day	$ 4.5478	3	$ 5
Daily fixed price	TN30LC	$/day	$ 5.9653	-	$ -
Daily fixed price	TN30HU	$/day	$ 4.5478	2	$ 3
Daily fixed price	TN30LU	$/day	$ 5.9653	-	$ -
Daily fixed price	TN70H	$/day	$ 10.0406	2	$ 7
Daily fixed price	TN70L	$/day	$ 13.4072	1	$ 5
Daily fixed price	TN150H	$/day	$ 20.6719	-	$ -
Daily fixed price	TN150L	$/day	$ 27.7594	-	$ -
Daily fixed discount	RTLFCHC	$/day	-$ 0.0574	2,125	-$ 45
Daily fixed discount	RTLFCLC	$/day	-$ 0.0574	649	-$ 14
Daily fixed discount	RTLFCHU	$/day	-$ 0.0574	375	-$ 8
Daily fixed discount	RTLFCLU	$/day	-$ 0.0574	192	-$ 4
Daily fixed discount	RTSTDHC	$/day	-$ 0.1657	2,173	-$ 131
Daily fixed discount	RTSTDLC	$/day	-$ 0.3093	1,029	-$ 116
Daily fixed discount	RTSTDHU	$/day	-$ 0.1657	339	-$ 21
Daily fixed discount	RTSTDLU	$/day	-$ 0.3093	244	-$ 28
Daily fixed discount	GT15HC	$/day	-$ 0.2837	242	-$ 25
Daily fixed discount	GT15LC	$/day	-$ 0.4020	159	-$ 23
Daily fixed discount	GT15HU	$/day	-$ 0.2837	1,123	-$ 116
Daily fixed discount	GT15LU	$/day	-$ 0.4020	1,275	-$ 187
Daily fixed discount	GT30HC	$/day	-$ 0.5675	33	-$ 7
Daily fixed discount	GT30LC	$/day	-$ 0.7448	9	-$ 2
Daily fixed discount	GT30HU	$/day	-$ 0.5675	126	-$ 26
Daily fixed discount	GT30LU	$/day	-$ 0.7448	43	-$ 12
Daily fixed discount	GT70H	$/day	-$ 1.2768	67	-$ 31
Daily fixed discount	GT70L	$/day	-$ 1.7024	16	-$ 10
Daily fixed discount	GT150H	$/day	-$ 2.6601	22	-$ 21
Daily fixed discount	GT150L	$/day	-$ 3.4994	1	-$ 1
Daily fixed discount	DT15HC	$/day	-$ 0.2651	12	-$ 1
Daily fixed discount	DT15HU	$/day	-$ 0.2651	12	-$ 1
Daily fixed discount	DT15LC	$/day	-$ 0.3755	6	-$ 1
Daily fixed discount	DT15LU	$/day	-$ 0.3755	7	-$ 1
Daily fixed discount	DT30HC	$/day	-$ 0.5191	27	-$ 5
Daily fixed discount	DT30HU	$/day	-$ 0.5191	25	-$ 5
Daily fixed discount	DT30LC	$/day	-$ 0.6738	11	-$ 3
Daily fixed discount	DT30LU	$/day	-$ 0.6738	16	-$ 4
Daily fixed discount	DT70H	$/day	-$ 1.1377	116	-$ 48
Daily fixed discount	DT70L	$/day	-$ 1.5132	137	-$ 76
Daily fixed discount	DT150H	$/day	-$ 2.3748	14	-$ 12
Daily fixed discount	DT150L	$/day	-$ 3.0927	33	-$ 37
Daily fixed discount	TT15HC	$/day	-$ 0.4293	179	-$ 28

Actual revenue from prices RY2023					
Description	Price Category	Unit	Price	Actual quantity*	Actual revenue ($000)*
Daily fixed discount	TT15HU	$/day	-$ 0.4293	83	-$ 13
Daily fixed discount	TT15LC	$/day	-$ 0.6100	107	-$ 24
Daily fixed discount	TT15LU	$/day	-$ 0.6100	193	-$ 43
Daily fixed discount	TT30HC	$/day	-$ 0.8698	4	-$ 1
Daily fixed discount	TT30HU	$/day	-$ 0.8698	9	-$ 3
Daily fixed discount	TT30LU	$/day	-$ 1.1409	1	-$ 0
Daily fixed discount	TT70H	$/day	-$ 1.9204	3	-$ 2
Daily fixed discount	TT70L	$/day	-$ 2.5643	1	-$ 1
Daily fixed discount	TT150H	$/day	-$ 3.9538	1	-$ 1
Daily fixed discount	TT150L	$/day	-$ 5.3093	1	-$ 2
Daily fixed discount	RNLFCHC	$/day	-$ 0.0574	30	-$ 1
Daily fixed discount	RNLFCHU	$/day	-$ 0.0574	2	-$ 0
Daily fixed discount	RNLFCLC	$/day	-$ 0.0574	9	-$ 0
Daily fixed discount	RNLFCLU	$/day	-$ 0.0574	3	-$ 0
Daily fixed discount	RNSTDHC	$/day	-$ 0.1657	30	-$ 2
Daily fixed discount	RNSTDHU	$/day	-$ 0.1657	0	-$ 0
Daily fixed discount	RNSTDLC	$/day	-$ 0.3093	9	-$ 1
Daily fixed discount	RNSTDLU	$/day	-$ 0.3093	3	-$ 0
Daily fixed discount	GN15HC	$/day	-$ 0.2837	6	-$ 1
Daily fixed discount	GN15HU	$/day	-$ 0.2837	25	-$ 3
Daily fixed discount	GN15LC	$/day	-$ 0.4020	2	-$ 0
Daily fixed discount	GN15LU	$/day	-$ 0.4020	29	-$ 4
Daily fixed discount	GN30HC	$/day	-$ 0.5675	1	-$ 0
Daily fixed discount	GN30HU	$/day	-$ 0.5675	7	-$ 1
Daily fixed discount	GN30LU	$/day	-$ 0.7448	1	-$ 0
Daily fixed discount	GN70H	$/day	-$ 1.2768	4	-$ 2
Daily fixed discount	DN30HU	$/day	-$ 0.5191	1	-$ 0
Daily fixed discount	DN70H	$/day	-$ 1.1377	1	-$ 0
Daily fixed discount	DN150L	$/day	-$ 3.0927	1	-$ 1
Daily fixed discount	TN15HC	$/day	-$ 0.4293	1	-$ 0
Daily fixed discount	TN15HU	$/day	-$ 0.4293	3	-$ 0
Daily fixed discount	TN15LC	$/day	-$ 0.6100	2	-$ 0
Daily fixed discount	TN15LU	$/day	-$ 0.6100	3	-$ 1
Peak kWh price	RTLFCHC	$/kWh	$ 0.1816	6,276,318	$ 1,140
Peak kWh price	RTLFCLC	$/kWh	$ 0.2158	1,511,966	$ 326
Peak kWh price	RTLFCHU	$/kWh	$ 0.2373	1,599,131	$ 380
Peak kWh price	RTLFCLU	$/kWh	$ 0.2715	439,353	$ 119
Peak kWh price	RTSTDHC	$/kWh	$ 0.1558	9,599,384	$ 1,497
Peak kWh price	RTSTDLC	$/kWh	$ 0.1558	3,784,664	$ 590
Peak kWh price	RTSTDHU	$/kWh	$ 0.2115	2,192,977	$ 464
Peak kWh price	RTSTDLU	$/kWh	$ 0.2115	949,736	$ 201
Peak kWh price	GT15HC	$/kWh	$ 0.1558	617,675	$ 96
Peak kWh price	GT15LC	$/kWh	$ 0.1558	342,676	$ 53
Peak kWh price	GT15HU	$/kWh	$ 0.2226	2,585,766	$ 576
Peak kWh price	GT15LU	$/kWh	$ 0.2226	1,904,151	$ 424
Peak kWh price	GT30HC	$/kWh	$ 0.1670	421,314	$ 70
Peak kWh price	GT30LC	$/kWh	$ 0.1670	130,735	$ 22
Peak kWh price	GT30HU	$/kWh	$ 0.1881	1,659,082	$ 312
Peak kWh price	GT30LU	$/kWh	$ 0.1881	360,590	$ 68
Peak kWh price	GT70H	$/kWh	$ 0.1547	1,987,046	$ 307
Peak kWh price	GT70L	$/kWh	$ 0.1547	241,828	$ 37
Peak kWh price	GT150H	$/kWh	$ 0.1369	1,998,722	$ 274
Peak kWh price	GT150L	$/kWh	$ 0.1369	170,305	$ 23
Peak kWh price	DT15HC	$/kWh	$ 0.1558	47,620	$ 7
Peak kWh price	DT15HU	$/kWh	$ 0.2226	41,190	$ 9
Peak kWh price	DT15LC	$/kWh	$ 0.1558	35,351	$ 6
Peak kWh price	DT15LU	$/kWh	$ 0.2226	39,999	$ 9
Peak kWh price	DT30HC	$/kWh	$ 0.1503	362,990	$ 55
Peak kWh price	DT30HU	$/kWh	$ 0.1670	294,167	$ 49
Peak kWh price	DT30LC	$/kWh	$ 0.1503	85,584	$ 13
Peak kWh price	DT30LU	$/kWh	$ 0.1670	267,344	$ 45
Peak kWh price	DT70H	$/kWh	$ 0.1391	2,952,048	$ 410
Peak kWh price	DT70L	$/kWh	$ 0.1391	4,057,751	$ 564
Peak kWh price	DT150H	$/kWh	$ 0.1224	699,849	$ 86

Actual revenue from prices RY2023					
Description	Price Category	Unit	Price	Actual quantity*	Actual revenue ($000)*
Peak kWh price	DT150L	$/kWh	$ 0.1224	1,753,304	$ 215
Peak kWh price	TT15HC	$/kWh	$ 0.1558	1,429,468	$ 223
Peak kWh price	TT15HU	$/kWh	$ 0.2226	821,879	$ 183
Peak kWh price	TT15LC	$/kWh	$ 0.1558	109,950	$ 17
Peak kWh price	TT15LU	$/kWh	$ 0.2226	121,918	$ 27
Peak kWh price	TT30HC	$/kWh	$ 0.1642	213,377	$ 35
Peak kWh price	TT30HU	$/kWh	$ 0.1836	214,936	$ 39
Peak kWh price	TT30LC	$/kWh	$ 0.1642	25,183	$ 4
Peak kWh price	TT30LU	$/kWh	$ 0.1836	98,694	$ 18
Peak kWh price	TT70H	$/kWh	$ 0.1503	583,971	$ 88
Peak kWh price	TT70L	$/kWh	$ 0.1503	240,746	$ 36
Peak kWh price	TT150H	$/kWh	$ 0.1336	375,824	$ 50
Peak kWh price	TT150L	$/kWh	$ 0.1336	54,865	$ 7
Peak kWh discount	RTLFCHC	$/kWh	-$ 0.0247	3,275,752	-$ 81
Peak kWh discount	RTLFCLC	$/kWh	-$ 0.0312	1,060,381	-$ 33
Peak kWh discount	RTLFCHU	$/kWh	-$ 0.0353	530,618	-$ 19
Peak kWh discount	RTLFCLU	$/kWh	-$ 0.0419	256,434	-$ 11
Peak kWh discount	RTSTDHC	$/kWh	-$ 0.0198	5,395,528	-$ 107
Peak kWh discount	RTSTDLC	$/kWh	-$ 0.0198	2,830,742	-$ 56
Peak kWh discount	RTSTDHU	$/kWh	-$ 0.0304	764,597	-$ 23
Peak kWh discount	RTSTDLU	$/kWh	-$ 0.0304	604,684	-$ 18
Peak kWh discount	GT15HC	$/kWh	-$ 0.0198	336,083	-$ 7
Peak kWh discount	GT15LC	$/kWh	-$ 0.0198	245,756	-$ 5
Peak kWh discount	GT15HU	$/kWh	-$ 0.0325	1,489,767	-$ 48
Peak kWh discount	GT15LU	$/kWh	-$ 0.0325	1,487,093	-$ 48
Peak kWh discount	GT30HC	$/kWh	-$ 0.0219	262,380	-$ 6
Peak kWh discount	GT30LC	$/kWh	-$ 0.0219	99,685	-$ 2
Peak kWh discount	GT30HU	$/kWh	-$ 0.0259	915,452	-$ 24
Peak kWh discount	GT30LU	$/kWh	-$ 0.0259	274,494	-$ 7
Peak kWh discount	GT70H	$/kWh	-$ 0.0195	973,515	-$ 19
Peak kWh discount	GT70L	$/kWh	-$ 0.0195	210,764	-$ 4
Peak kWh discount	GT150H	$/kWh	-$ 0.0161	900,921	-$ 15
Peak kWh discount	GT150L	$/kWh	-$ 0.0161	62,963	-$ 1
Peak kWh discount	DT15HC	$/kWh	-$ 0.0198	25,558	-$ 1
Peak kWh discount	DT15HU	$/kWh	-$ 0.0325	41,760	-$ 1
Peak kWh discount	DT15LC	$/kWh	-$ 0.0198	35,708	-$ 1
Peak kWh discount	DT15LU	$/kWh	-$ 0.0325	27,446	-$ 1
Peak kWh discount	DT30HC	$/kWh	-$ 0.0187	362,066	-$ 7
Peak kWh discount	DT30HU	$/kWh	-$ 0.0219	289,265	-$ 6
Peak kWh discount	DT30LC	$/kWh	-$ 0.0187	83,527	-$ 2
Peak kWh discount	DT30LU	$/kWh	-$ 0.0219	240,530	-$ 5
Peak kWh discount	DT70H	$/kWh	-$ 0.0166	2,750,483	-$ 46
Peak kWh discount	DT70L	$/kWh	-$ 0.0166	3,602,722	-$ 60
Peak kWh discount	DT150H	$/kWh	-$ 0.0134	503,602	-$ 7
Peak kWh discount	DT150L	$/kWh	-$ 0.0134	1,636,313	-$ 22
Peak kWh discount	TT15HC	$/kWh	-$ 0.0198	102,402	-$ 2
Peak kWh discount	TT15HU	$/kWh	-$ 0.0325	63,124	-$ 2
Peak kWh discount	TT15LC	$/kWh	-$ 0.0198	72,832	-$ 1
Peak kWh discount	TT15LU	$/kWh	-$ 0.0325	109,287	-$ 4
Peak kWh discount	TT30HC	$/kWh	-$ 0.0214	28,853	-$ 1
Peak kWh discount	TT30HU	$/kWh	-$ 0.0251	38,657	-$ 1
Peak kWh discount	TT30LU	$/kWh	-$ 0.0251	7,984	-$ 0
Peak kWh discount	TT70H	$/kWh	-$ 0.0187	28,490	-$ 1
Peak kWh discount	TT70L	$/kWh	-$ 0.0187	25,234	-$ 0
Peak kWh discount	TT150H	$/kWh	-$ 0.0155	33,438	-$ 1
Peak kWh discount	TT150L	$/kWh	-$ 0.0155	18,003	-$ 0
Shoulder kWh price	RTLFCHC	$/kWh	$ 0.1179	11,774,669	$ 1,388
Shoulder kWh price	RTLFCLC	$/kWh	$ 0.1521	2,760,187	$ 420
Shoulder kWh price	RTLFCHU	$/kWh	$ 0.1179	2,948,471	$ 348
Shoulder kWh price	RTLFCLU	$/kWh	$ 0.1521	807,043	$ 123
Shoulder kWh price	RTSTDHC	$/kWh	$ 0.0921	18,190,750	$ 1,675
Shoulder kWh price	RTSTDLC	$/kWh	$ 0.0921	6,858,991	$ 632
Shoulder kWh price	RTSTDHU	$/kWh	$ 0.0921	4,089,445	$ 377
Shoulder kWh price	RTSTDLU	$/kWh	$ 0.0921	1,763,044	$ 162

Actual revenue from prices RY2023					
Description	Price Category	Unit	Price	Actual quantity*	Actual revenue ($000)*
Shoulder kWh price	GT15HC	$/kWh	$ 0.1014	1,347,421	$ 137
Shoulder kWh price	GT15LC	$/kWh	$ 0.1014	660,641	$ 67
Shoulder kWh price	GT15HU	$/kWh	$ 0.1014	6,168,759	$ 626
Shoulder kWh price	GT15LU	$/kWh	$ 0.1014	4,004,908	$ 406
Shoulder kWh price	GT30HC	$/kWh	$ 0.0882	940,560	$ 83
Shoulder kWh price	GT30LC	$/kWh	$ 0.0882	256,182	$ 23
Shoulder kWh price	GT30HU	$/kWh	$ 0.0882	4,022,138	$ 355
Shoulder kWh price	GT30LU	$/kWh	$ 0.0882	771,543	$ 68
Shoulder kWh price	GT70H	$/kWh	$ 0.0827	4,630,416	$ 383
Shoulder kWh price	GT70L	$/kWh	$ 0.0827	484,977	$ 40
Shoulder kWh price	GT150H	$/kWh	$ 0.0744	4,473,057	$ 333
Shoulder kWh price	GT150L	$/kWh	$ 0.0744	369,319	$ 27
Shoulder kWh price	DT15HC	$/kWh	$ 0.0965	75,637	$ 7
Shoulder kWh price	DT15HU	$/kWh	$ 0.0965	75,292	$ 7
Shoulder kWh price	DT15LC	$/kWh	$ 0.0965	67,668	$ 7
Shoulder kWh price	DT15LU	$/kWh	$ 0.0965	73,732	$ 7
Shoulder kWh price	DT30HC	$/kWh	$ 0.0855	565,703	$ 48
Shoulder kWh price	DT30HU	$/kWh	$ 0.0855	439,710	$ 38
Shoulder kWh price	DT30LC	$/kWh	$ 0.0855	123,541	$ 11
Shoulder kWh price	DT30LU	$/kWh	$ 0.0855	466,869	$ 40
Shoulder kWh price	DT70H	$/kWh	$ 0.0772	4,996,470	$ 386
Shoulder kWh price	DT70L	$/kWh	$ 0.0772	7,270,089	$ 561
Shoulder kWh price	DT150H	$/kWh	$ 0.0717	1,268,160	$ 91
Shoulder kWh price	DT150L	$/kWh	$ 0.0717	3,233,423	$ 232
Shoulder kWh price	TT15HC	$/kWh	$ 0.0965	2,667,096	$ 258
Shoulder kWh price	TT15HU	$/kWh	$ 0.0965	1,515,989	$ 146
Shoulder kWh price	TT15LC	$/kWh	$ 0.0965	205,565	$ 20
Shoulder kWh price	TT15LU	$/kWh	$ 0.0965	226,124	$ 22
Shoulder kWh price	TT30HC	$/kWh	$ 0.0855	387,942	$ 33
Shoulder kWh price	TT30HU	$/kWh	$ 0.0855	384,270	$ 33
Shoulder kWh price	TT30LC	$/kWh	$ 0.0855	46,663	$ 4
Shoulder kWh price	TT30LU	$/kWh	$ 0.0855	177,697	$ 15
Shoulder kWh price	TT70H	$/kWh	$ 0.0772	1,083,560	$ 84
Shoulder kWh price	TT70L	$/kWh	$ 0.0772	433,142	$ 33
Shoulder kWh price	TT150H	$/kWh	$ 0.0717	657,121	$ 47
Shoulder kWh price	TT150L	$/kWh	$ 0.0717	89,572	$ 6
Shoulder kWh discount	RTLFCHC	$/kWh	-$ 0.0206	5,995,203	-$ 124
Shoulder kWh discount	RTLFCLC	$/kWh	-$ 0.0272	1,887,956	-$ 51
Shoulder kWh discount	RTLFCHU	$/kWh	-$ 0.0206	954,199	-$ 20
Shoulder kWh discount	RTLFCLU	$/kWh	-$ 0.0272	466,144	-$ 13
Shoulder kWh discount	RTSTDHC	$/kWh	-$ 0.0157	9,908,239	-$ 156
Shoulder kWh discount	RTSTDLC	$/kWh	-$ 0.0157	5,061,325	-$ 79
Shoulder kWh discount	RTSTDHU	$/kWh	-$ 0.0157	1,360,033	-$ 21
Shoulder kWh discount	RTSTDLU	$/kWh	-$ 0.0157	1,094,256	-$ 17
Shoulder kWh discount	GT15HC	$/kWh	-$ 0.0175	743,922	-$ 13
Shoulder kWh discount	GT15LC	$/kWh	-$ 0.0175	477,071	-$ 8
Shoulder kWh discount	GT15HU	$/kWh	-$ 0.0175	3,386,613	-$ 59
Shoulder kWh discount	GT15LU	$/kWh	-$ 0.0175	3,120,284	-$ 55
Shoulder kWh discount	GT30HC	$/kWh	-$ 0.0150	564,549	-$ 8
Shoulder kWh discount	GT30LC	$/kWh	-$ 0.0150	202,140	-$ 3
Shoulder kWh discount	GT30HU	$/kWh	-$ 0.0150	2,144,155	-$ 32
Shoulder kWh discount	GT30LU	$/kWh	-$ 0.0150	581,182	-$ 9
Shoulder kWh discount	GT70H	$/kWh	-$ 0.0139	2,260,040	-$ 31
Shoulder kWh discount	GT70L	$/kWh	-$ 0.0139	420,933	-$ 6
Shoulder kWh discount	GT150H	$/kWh	-$ 0.0123	2,055,499	-$ 25
Shoulder kWh discount	GT150L	$/kWh	-$ 0.0123	115,534	-$ 1
Shoulder kWh discount	DT15HC	$/kWh	-$ 0.0165	52,588	-$ 1
Shoulder kWh discount	DT15HU	$/kWh	-$ 0.0165	74,337	-$ 1
Shoulder kWh discount	DT15LC	$/kWh	-$ 0.0165	66,747	-$ 1
Shoulder kWh discount	DT15LU	$/kWh	-$ 0.0165	48,524	-$ 1
Shoulder kWh discount	DT30HC	$/kWh	-$ 0.0144	567,863	-$ 8
Shoulder kWh discount	DT30HU	$/kWh	-$ 0.0144	443,825	-$ 6
Shoulder kWh discount	DT30LC	$/kWh	-$ 0.0144	125,503	-$ 2
Shoulder kWh discount	DT30LU	$/kWh	-$ 0.0144	396,247	-$ 6

Actual revenue from prices RY2023					
Description	Price Category	Unit	Price	Actual quantity*	Actual revenue ($000)*
Shoulder kWh discount	DT70H	$/kWh	-$ 0.0129	4,636,976	-$ 60
Shoulder kWh discount	DT70L	$/kWh	-$ 0.0129	6,409,265	-$ 83
Shoulder kWh discount	DT150H	$/kWh	-$ 0.0118	923,828	-$ 11
Shoulder kWh discount	DT150L	$/kWh	-$ 0.0118	3,037,676	-$ 36
Shoulder kWh discount	TT15HC	$/kWh	-$ 0.0165	196,784	-$ 3
Shoulder kWh discount	TT15HU	$/kWh	-$ 0.0165	112,516	-$ 2
Shoulder kWh discount	TT15LC	$/kWh	-$ 0.0165	136,535	-$ 2
Shoulder kWh discount	TT15LU	$/kWh	-$ 0.0165	201,015	-$ 3
Shoulder kWh discount	TT30HC	$/kWh	-$ 0.0144	55,937	-$ 1
Shoulder kWh discount	TT30HU	$/kWh	-$ 0.0144	63,502	-$ 1
Shoulder kWh discount	TT30LU	$/kWh	-$ 0.0144	14,828	-$ 0
Shoulder kWh discount	TT70H	$/kWh	-$ 0.0129	51,590	-$ 1
Shoulder kWh discount	TT70L	$/kWh	-$ 0.0129	45,885	-$ 1
Shoulder kWh discount	TT150H	$/kWh	-$ 0.0118	54,249	-$ 1
Shoulder kWh discount	TT150L	$/kWh	-$ 0.0118	36,206	-$ 0
Off Peak kWh price	RTLFCHC	$/kWh	$ 0.0836	5,806,345	$ 485
Off Peak kWh price	RTLFCLC	$/kWh	$ 0.1178	1,387,775	$ 163
Off Peak kWh price	RTLFCHU	$/kWh	$ 0.0836	1,555,485	$ 130
Off Peak kWh price	RTLFCLU	$/kWh	$ 0.1178	438,950	$ 52
Off Peak kWh price	RTSTDHC	$/kWh	$ 0.0578	9,237,691	$ 534
Off Peak kWh price	RTSTDLC	$/kWh	$ 0.0578	3,551,096	$ 205
Off Peak kWh price	RTSTDHU	$/kWh	$ 0.0578	2,125,478	$ 123
Off Peak kWh price	RTSTDLU	$/kWh	$ 0.0578	914,656	$ 53
Off Peak kWh price	GT15HC	$/kWh	$ 0.0590	646,715	$ 38
Off Peak kWh price	GT15LC	$/kWh	$ 0.0590	340,025	$ 20
Off Peak kWh price	GT15HU	$/kWh	$ 0.0590	2,955,875	$ 174
Off Peak kWh price	GT15LU	$/kWh	$ 0.0590	2,137,752	$ 126
Off Peak kWh price	GT30HC	$/kWh	$ 0.0562	446,606	$ 25
Off Peak kWh price	GT30LC	$/kWh	$ 0.0562	116,431	$ 7
Off Peak kWh price	GT30HU	$/kWh	$ 0.0562	1,648,815	$ 93
Off Peak kWh price	GT30LU	$/kWh	$ 0.0562	421,058	$ 24
Off Peak kWh price	GT70H	$/kWh	$ 0.0562	1,996,435	$ 112
Off Peak kWh price	GT70L	$/kWh	$ 0.0562	263,519	$ 15
Off Peak kWh price	GT150H	$/kWh	$ 0.0562	2,337,578	$ 131
Off Peak kWh price	GT150L	$/kWh	$ 0.0562	224,007	$ 13
Off Peak kWh price	DT15HC	$/kWh	$ 0.0590	33,178	$ 2
Off Peak kWh price	DT15HU	$/kWh	$ 0.0590	46,679	$ 3
Off Peak kWh price	DT15LC	$/kWh	$ 0.0590	36,528	$ 2
Off Peak kWh price	DT15LU	$/kWh	$ 0.0590	39,510	$ 2
Off Peak kWh price	DT30HC	$/kWh	$ 0.0562	296,727	$ 17
Off Peak kWh price	DT30HU	$/kWh	$ 0.0562	250,079	$ 14
Off Peak kWh price	DT30LC	$/kWh	$ 0.0562	76,115	$ 4
Off Peak kWh price	DT30LU	$/kWh	$ 0.0562	232,713	$ 13
Off Peak kWh price	DT70H	$/kWh	$ 0.0562	2,460,796	$ 138
Off Peak kWh price	DT70L	$/kWh	$ 0.0562	3,293,992	$ 185
Off Peak kWh price	DT150H	$/kWh	$ 0.0562	561,259	$ 32
Off Peak kWh price	DT150L	$/kWh	$ 0.0562	1,470,115	$ 83
Off Peak kWh price	TT15HC	$/kWh	$ 0.0590	1,432,212	$ 85
Off Peak kWh price	TT15HU	$/kWh	$ 0.0590	889,348	$ 53
Off Peak kWh price	TT15LC	$/kWh	$ 0.0590	111,427	$ 7
Off Peak kWh price	TT15LU	$/kWh	$ 0.0590	121,778	$ 7
Off Peak kWh price	TT30HC	$/kWh	$ 0.0562	245,171	$ 14
Off Peak kWh price	TT30HU	$/kWh	$ 0.0562	236,821	$ 13
Off Peak kWh price	TT30LC	$/kWh	$ 0.0562	29,846	$ 2
Off Peak kWh price	TT30LU	$/kWh	$ 0.0562	124,775	$ 7
Off Peak kWh price	TT70H	$/kWh	$ 0.0562	590,377	$ 33
Off Peak kWh price	TT70L	$/kWh	$ 0.0562	290,033	$ 16
Off Peak kWh price	TT150H	$/kWh	$ 0.0562	365,678	$ 21
Off Peak kWh price	TT150L	$/kWh	$ 0.0562	58,088	$ 3
Off Peak kWh discount	RTLFCHC	$/kWh	-$ 0.0141	2,979,990	-$ 42
Off Peak kWh discount	RTLFCLC	$/kWh	-$ 0.0206	944,019	-$ 19
Off Peak kWh discount	RTLFCHU	$/kWh	-$ 0.0141	520,455	-$ 7
Off Peak kWh discount	RTLFCLU	$/kWh	-$ 0.0206	257,934	-$ 5
Off Peak kWh discount	RTSTDHC	$/kWh	-$ 0.0091	5,029,066	-$ 46

Actual revenue from prices RY2023					
Description	Price Category	Unit	Price	Actual quantity*	Actual revenue ($000)*
Off Peak kWh discount	RTSTDLC	$/kWh	-$ 0.0091	2,606,427	-$ 24
Off Peak kWh discount	RTSTDHU	$/kWh	-$ 0.0091	703,628	-$ 6
Off Peak kWh discount	RTSTDLU	$/kWh	-$ 0.0091	566,399	-$ 5
Off Peak kWh discount	GT15HC	$/kWh	-$ 0.0094	345,647	-$ 3
Off Peak kWh discount	GT15LC	$/kWh	-$ 0.0094	245,171	-$ 2
Off Peak kWh discount	GT15HU	$/kWh	-$ 0.0094	1,604,092	-$ 15
Off Peak kWh discount	GT15LU	$/kWh	-$ 0.0094	1,695,749	-$ 16
Off Peak kWh discount	GT30HC	$/kWh	-$ 0.0088	256,595	-$ 2
Off Peak kWh discount	GT30LC	$/kWh	-$ 0.0088	87,855	-$ 1
Off Peak kWh discount	GT30HU	$/kWh	-$ 0.0088	862,191	-$ 8
Off Peak kWh discount	GT30LU	$/kWh	-$ 0.0088	305,192	-$ 3
Off Peak kWh discount	GT70H	$/kWh	-$ 0.0088	820,343	-$ 7
Off Peak kWh discount	GT70L	$/kWh	-$ 0.0088	239,691	-$ 2
Off Peak kWh discount	GT150H	$/kWh	-$ 0.0088	1,092,339	-$ 10
Off Peak kWh discount	GT150L	$/kWh	-$ 0.0088	53,965	-$ 0
Off Peak kWh discount	DT15HC	$/kWh	-$ 0.0094	24,729	-$ 0
Off Peak kWh discount	DT15HU	$/kWh	-$ 0.0094	48,511	-$ 0
Off Peak kWh discount	DT15LC	$/kWh	-$ 0.0094	38,406	-$ 0
Off Peak kWh discount	DT15LU	$/kWh	-$ 0.0094	29,705	-$ 0
Off Peak kWh discount	DT30HC	$/kWh	-$ 0.0088	306,335	-$ 3
Off Peak kWh discount	DT30HU	$/kWh	-$ 0.0088	258,535	-$ 2
Off Peak kWh discount	DT30LC	$/kWh	-$ 0.0088	78,852	-$ 1
Off Peak kWh discount	DT30LU	$/kWh	-$ 0.0088	211,490	-$ 2
Off Peak kWh discount	DT70H	$/kWh	-$ 0.0088	2,378,966	-$ 21
Off Peak kWh discount	DT70L	$/kWh	-$ 0.0088	2,963,845	-$ 26
Off Peak kWh discount	DT150H	$/kWh	-$ 0.0088	480,325	-$ 4
Off Peak kWh discount	DT150L	$/kWh	-$ 0.0088	1,472,710	-$ 13
Off Peak kWh discount	TT15HC	$/kWh	-$ 0.0094	110,664	-$ 1
Off Peak kWh discount	TT15HU	$/kWh	-$ 0.0094	71,144	-$ 1
Off Peak kWh discount	TT15LC	$/kWh	-$ 0.0094	73,113	-$ 1
Off Peak kWh discount	TT15LU	$/kWh	-$ 0.0094	104,177	-$ 1
Off Peak kWh discount	TT30HC	$/kWh	-$ 0.0088	32,891	-$ 0
Off Peak kWh discount	TT30HU	$/kWh	-$ 0.0088	41,886	-$ 0
Off Peak kWh discount	TT30LU	$/kWh	-$ 0.0088	22,813	-$ 0
Off Peak kWh discount	TT70H	$/kWh	-$ 0.0088	24,273	-$ 0
Off Peak kWh discount	TT70L	$/kWh	-$ 0.0088	28,855	-$ 0
Off Peak kWh discount	TT150H	$/kWh	-$ 0.0088	33,846	-$ 0
Off Peak kWh discount	TT150L	$/kWh	-$ 0.0088	26,365	-$ 0
Anytime kWh price	RNLFCHC	$/kWh	$ 0.1379	995,661	$ 137
Anytime kWh price	RNLFCHU	$/kWh	$ 0.1583	120,360	$ 19
Anytime kWh price	RNLFCLC	$/kWh	$ 0.1721	169,342	$ 29
Anytime kWh price	RNLFCLU	$/kWh	$ 0.1925	49,054	$ 9
Anytime kWh price	RNSTDHC	$/kWh	$ 0.1121	1,192,239	$ 134
Anytime kWh price	RNSTDHU	$/kWh	$ 0.1325	100,997	$ 13
Anytime kWh price	RNSTDLC	$/kWh	$ 0.1121	241,973	$ 27
Anytime kWh price	RNSTDLU	$/kWh	$ 0.1325	26,932	$ 4
Anytime kWh price	GN15HC	$/kWh	$ 0.1159	142,162	$ 16
Anytime kWh price	GN15HU	$/kWh	$ 0.1404	719,249	$ 101
Anytime kWh price	GN15LC	$/kWh	$ 0.1159	35,041	$ 4
Anytime kWh price	GN15LU	$/kWh	$ 0.1404	319,760	$ 45
Anytime kWh price	GN30HC	$/kWh	$ 0.1142	88,613	$ 10
Anytime kWh price	GN30HU	$/kWh	$ 0.1219	769,406	$ 94
Anytime kWh price	GN30LC	$/kWh	$ 0.1142	25,569	$ 3
Anytime kWh price	GN30LU	$/kWh	$ 0.1219	18,679	$ 2
Anytime kWh price	GN70H	$/kWh	$ 0.1077	1,103,393	$ 119
Anytime kWh price	GN150L	$/kWh	$ 0.0981	63,242	$ 6
Anytime kWh price	DN30HU	$/kWh	$ 0.1132	45,320	$ 5
Anytime kWh price	DN70H	$/kWh	$ 0.0999	7,731	$ 1
Anytime kWh price	DN150L	$/kWh	$ 0.0918	203,833	$ 19
Anytime kWh price	TN15HC	$/kWh	$ 0.1141	123,836	$ 14
Anytime kWh price	TN15HU	$/kWh	$ 0.1386	247,689	$ 34
Anytime kWh price	TN15LC	$/kWh	$ 0.1141	9,042	$ 1
Anytime kWh price	TN15LU	$/kWh	$ 0.1386	4,845	$ 1
Anytime kWh price	TN30HC	$/kWh	$ 0.1122	33,023	$ 4

Actual revenue from prices RY2023					
Description	**Price Category**	**Unit**	**Price**	**Actual quantity***	**Actual revenue ($000)***
Anytime kWh price	TN30HU	$/kWh	$ 0.1193	33,498	$ 4
Anytime kWh price	TN70H	$/kWh	$ 0.1040	217,593	$ 23
Anytime kWh price	TN70L	$/kWh	$ 0.1040	24,073	$ 2
Anytime kWh discount	RNLFCHC	$/kWh	-$ 0.0224	163,875	-$ 4
Anytime kWh discount	RNLFCHU	$/kWh	-$ 0.0263	7,891	-$ 0
Anytime kWh discount	RNLFCLC	$/kWh	-$ 0.0289	47,234	-$ 1
Anytime kWh discount	RNLFCLU	$/kWh	-$ 0.0328	16,476	-$ 1
Anytime kWh discount	RNSTDHC	$/kWh	-$ 0.0175	296,899	-$ 5
Anytime kWh discount	RNSTDHU	$/kWh	-$ 0.0214	1	-$ 0
Anytime kWh discount	RNSTDLC	$/kWh	-$ 0.0175	97,370	-$ 2
Anytime kWh discount	RNSTDLU	$/kWh	-$ 0.0214	27,379	-$ 1
Anytime kWh discount	GN15HC	$/kWh	-$ 0.0182	20,148	-$ 0
Anytime kWh discount	GN15HU	$/kWh	-$ 0.0229	210,465	-$ 5
Anytime kWh discount	GN15LC	$/kWh	-$ 0.0182	10,791	-$ 0
Anytime kWh discount	GN15LU	$/kWh	-$ 0.0229	235,086	-$ 5
Anytime kWh discount	GN30HC	$/kWh	-$ 0.0179	17,801	-$ 0
Anytime kWh discount	GN30HU	$/kWh	-$ 0.0193	252,381	-$ 5
Anytime kWh discount	GN30LU	$/kWh	-$ 0.0193	14,297	-$ 0
Anytime kWh discount	GN70H	$/kWh	-$ 0.0166	175,562	-$ 3
Anytime kWh discount	DN30HU	$/kWh	-$ 0.0177	45,320	-$ 1
Anytime kWh discount	DN70H	$/kWh	-$ 0.0151	7,410	-$ 0
Anytime kWh discount	DN150L	$/kWh	-$ 0.0136	205,257	-$ 3
Anytime kWh discount	TN15HC	$/kWh	-$ 0.0178	124	-$ 0
Anytime kWh discount	TN15HU	$/kWh	-$ 0.0225	118,650	-$ 3
Anytime kWh discount	TN15LC	$/kWh	-$ 0.0178	5,394	-$ 0
Anytime kWh discount	TN15LU	$/kWh	-$ 0.0225	1,288	-$ 0
Capacity/Dedicated Asset connection	Connection HTI	$/kVA	$ 17.13	27,878	$ 478
Capacity/Dedicated Asset connection	Connection NPK	$/kVA	$ 43.49	3,644	$ 158
Capacity/Dedicated Asset connection	Connection OKN	$/kVA	$ 26.44	2,398	$ 63
Capacity/Dedicated Asset connection	Connection ONG	$/kVA	$ 29.58	1,443	$ 43
Capacity/Dedicated Asset connection	Connection TKU	$/kVA	$ 17.97	1,085	$ 20
Capacity/Dedicated Asset interconnection	Interconnection	$/kVA	$ 96.89	18,574	$ 1,800
Capacity/Dedicated Asset injection overhead	Injection overhead	$/annum	$ 40,717.00	1	$ 41
Capacity/Dedicated Asset distribution	Network 11 kV HTI	$/kVA	$ 115.73	14,863	$ 1,720
Capacity/Dedicated Asset distribution	Network 11 kV NPK	$/kVA	$ 168.38	1,392	$ 234
Capacity/Dedicated Asset distribution	Network 11 kV ONG	$/kVA	$ 131.21	1,645	$ 216
Capacity/Dedicated Asset distribution	Network 11 kV TKU	$/kVA	$ 126.75	2,275	$ 288
Capacity/Dedicated Asset distribution	Network 11 kV WKM	$/kVA	$ 227.63	2,096	$ 477
Capacity/Dedicated Asset discount	Network 11 kV HTI	$/kVA	-$ 22.13	14,863	-$ 329
Capacity/Dedicated Asset discount	Network 11 kV WKM	$/kVA	-$ 43.54	2,096	-$ 91
Capacity/Dedicated Asset distribution	Network 33 kV	$/kVA	$ 70.21	1,350	$ 95
Capacity/Dedicated Asset discount	Network 33 kV	$/kVA	-$ 13.43	1,350	-$ 18
Capacity/Dedicated Asset distribution	Stepped	$/kVA	$ 86.81	700	$ 61
Capacity/Dedicated Asset discount	Stepped	$/kVA	-$ 16.60	700	-$ 12
Capacity/Dedicated Asset distribution	T15	$/annum	$ 718.40	2	$ 1
Capacity/Dedicated Asset distribution	T30	$/annum	$ 951.40	3	$ 3
Capacity/Dedicated Asset distribution	T50	$/annum	$ 1,054.38	4	$ 4
Capacity/Dedicated Asset distribution	T100	$/annum	$ 1,437.83	4	$ 6
Capacity/Dedicated Asset distribution	T200	$/annum	$ 2,477.83	10	$ 25
Capacity/Dedicated Asset distribution	T300	$/annum	$ 2,990.53	7	$ 22
Capacity/Dedicated Asset distribution	T500	$/annum	$ 3,501.56	21	$ 74
Capacity/Dedicated Asset distribution	T750	$/annum	$ 4,203.43	9	$ 38
Capacity/Dedicated Asset distribution	T1000	$/annum	$ 4,739.09	2	$ 9
Capacity/Dedicated Asset distribution	T1500	$/annum	$ 5,636.55	4	$ 23
Capacity/Dedicated Asset discount	T100	$/annum	-$ 275.00	1	-$ 0
Capacity/Dedicated Asset discount	T200	$/annum	-$ 473.92	5	-$ 2
Capacity/Dedicated Asset discount	T300	$/annum	-$ 571.98	5	-$ 3
Capacity/Dedicated Asset discount	T500	$/annum	-$ 669.72	15	-$ 10
Capacity/Dedicated Asset discount	T750	$/annum	-$ 803.96	7	-$ 6
Capacity/Dedicated Asset discount	T1000	$/annum	-$ 906.41	2	-$ 2
Capacity/Dedicated Asset discount	T1500	$/annum	-$ 1,078.06	4	-$ 4
Capacity/Dedicated Asset distribution	Billing	$/annum	$ 1,939.79	42	$ 82
Capacity/Dedicated Asset discount	Billing	$/annum	-$ 371.01	28	-$ 10
Capacity/Dedicated Asset distribution	Dedicated Asset	$/annum	$ 76,437.32	1	$ 76

Actual revenue from prices RY2023					
Description	**Price Category**	**Unit**	**Price**	**Actual quantity***	**Actual revenue ($000)***
Capacity/Dedicated Asset distribution	Dedicated Asset	$/annum	$ 12,155.65	1	$ 12
Capacity/Dedicated Asset distribution	Dedicated Asset	$/annum	$ 196,987.82	1	$ 197
Capacity/Dedicated Asset distribution	Dedicated Asset	$/annum	$ 221,122.07	1	$ 221
Capacity/Dedicated Asset distribution	Dedicated Asset	$/annum	$ 14,442.42	1	$ 14
Capacity/Dedicated Asset distribution	Dedicated Asset	$/annum	$ 417,891.77	1	$ 418
Capacity/Dedicated Asset distribution	Dedicated Asset	$/annum	$1,801,961.42	1	$ 1,802
Capacity/Dedicated Asset distribution	Dedicated Asset	$/annum	$ 41,563.16	1	$ 42
Capacity/Dedicated Asset distribution	Dedicated Asset	$/annum	$ 8,303.63	1	$ 8
Capacity/Dedicated Asset distribution	Dedicated Asset	$/annum	$ 103,697.18	1	$ 104
Capacity/Dedicated Asset distribution	Dedicated Asset	$/annum	$ 153,892.04	1	$ 154
Capacity/Dedicated Asset distribution	Dedicated Asset	$/annum	$ 124,676.05	1	$ 125
Capacity/Dedicated Asset distribution	Dedicated Asset	$/annum	$ 30,166.12	1	$ 30
Capacity/Dedicated Asset distribution	Dedicated Asset	$/annum	$ 100,553.83	1	$ 101
Capacity/Dedicated Asset distribution	Dedicated Asset	$/annum	$ 40,221.46	1	$ 40
Capacity/Dedicated Asset distribution	Dedicated Asset	$/annum	$ 140,775.41	1	$ 141
Capacity/Dedicated Asset distribution	Dedicated Asset	$/annum	$ 287.25	1	$ 0
Capacity/Dedicated Asset distribution	Dedicated Asset	$/annum	$ 45,901.30	1	$ 46
Capacity/Dedicated Asset distribution	Dedicated Asset	$/annum	$ 4,085.77	1	$ 4
Capacity/Dedicated Asset distribution	Dedicated Asset	$/annum	$ 34,470.51	1	$ 34
Capacity/Dedicated Asset distribution	Dedicated Asset	$/annum	$ 42,254.10	1	$ 42
Capacity/Dedicated Asset distribution	Dedicated Asset	$/annum	$ 458,853.36	1	$ 459
Capacity/Dedicated Asset distribution	Dedicated Asset	$/annum	$ 119,716.35	1	$ 120
Capacity/Dedicated Asset distribution	Dedicated Asset	$/annum	$ 858.04	1	$ 1
Capacity/Dedicated Asset discount	Dedicated Asset	$/annum	-$ 2,324.93	1	-$ 2
Capacity/Dedicated Asset discount	Dedicated Asset	$/annum	-$ 37,676.51	1	-$ 38
Capacity/Dedicated Asset discount	Dedicated Asset	$/annum	-$ 2,762.30	1	-$ 3
Capacity/Dedicated Asset discount	Dedicated Asset	$/annum	-$ 210,000.00	1	-$ 210
Capacity/Dedicated Asset discount	Dedicated Asset	$/annum	-$ 26,925.14	1	-$ 27
Capacity/Dedicated Asset discount	Dedicated Asset	$/annum	-$ 54.94	1	-$ 0
Capacity/Dedicated Asset discount	Dedicated Asset	$/annum	-$ 8,779.23	1	-$ 9
Capacity/Dedicated Asset discount	Dedicated Asset	$/annum	-$ 6,592.93	1	-$ 7
Capacity/Dedicated Asset discount	Dedicated Asset	$/annum	-$ 8,081.66	1	-$ 8
Capacity/Dedicated Asset discount	Dedicated Asset	$/annum	-$ 91,874.60	1	-$ 92
Capacity/Dedicated Asset discount	Dedicated Asset	$/annum	-$ 164.10	1	-$ 0
Unmetered Load price	UML1	$/annum	$ 50.97	1	$ 0
Unmetered Load price	UML2	$/annum	$ 131.84	56	$ 7
Unmetered Load price	UML3	$/annum	$ 279.15	10	$ 3
Unmetered Load price	UML4	$/annum	$ 389.65	10	$ 4
Unmetered Load price	UML5	$/annum	$ 565.19	13	$ 7
Unmetered Load price	UML6	$/annum	$ 790.17	2	$ 2
Unmetered Load price	UML7	$/annum	$ 978.99	8	$ 8
Unmetered Load price	UML8	$/annum	$ 1,291.86	1	$ 1
Unmetered Load price	UML9	$/annum	$ 1,640.12	2	$ 3
Unmetered Load price	UML10	$/annum	$ 6,921.53	1	$ 6
Unmetered Load price	UML11	$/annum	$ 25,970.88	1	$ 24
Unmetered Load price	UML12	$/annum	$ 42,904.34	1	$ 39
Unmetered Load price	UML13	$/annum	$ 54,385.97	1	$ 50
Unmetered Load price	UML14	$/annum	$ 117,750.33	1	$ 108
Unmetered Load price	UML15	$/annum	$ 169,398.13	1	$ 155
Unmetered Load price	CAPDED	$/month	$ 33,762.34	1	$ 34
Unmetered Load discount	UML2	$/annum	-$ 25.22	6	-$ 0
Unmetered Load discount	UML3	$/annum	-$ 53.39	2	-$ 0
Unmetered Load discount	UML4	$/annum	-$ 74.53	3	-$ 0
Unmetered Load discount	UML5	$/annum	-$ 108.10	1	-$ 0
Unmetered Load discount	UML8	$/annum	-$ 247.09	1	-$ 0
Unmetered Load discount	UML10	$/annum	-$ 1,323.83	1	-$ 1
Unmetered Load discount	UML11	$/annum	-$ 4,967.27	1	-$ 4
Unmetered Load discount	UML12	$/annum	-$ 8,206.02	1	-$ 7
Unmetered Load discount	UML14	$/annum	-$ 22,521.30	1	-$ 20
Unmetered Load discount	CAPDED	$/month	-$ 2,829.11	1	-$ 3
Solar Application Fees	Solar	$/application	$100.00	38	$ 4
Solar Application Fees	Solar	$/application	$500.00	3	$ 2
$\Sigma P_{2022/23}*Q_{2022/23}$					**$ 42,295**

*For the Daily fixed price < 150 kVA, the calculation is the number of billed days divided by 365 days, effectively giving the number of ICPs for each Pricing code/description. Actual revenue is then calculated by multiplying the Unit price by the Actual quantity and multiplying the Actual revenue by 365 days.

The PxQ columns will not necessarily total the revenue. This is because of wash-ups from prior periods and the prices being different from prior periods.

Table 20 details the forecast revenue from prices for the third assessment period from TLC's price-setting compliance statement RY2023.

Table 20

Forecast revenue from prices RY2023		
Term	Description	Value ($000)
$\Sigma P_{2022/23} * Q_{2022/23}$	Forecast prices between 1 April 2022 and 31 March 2023 multiplied by forecast quantities for the period ending 31 March 2023	42,780

Appendix C – Policies and procedures for measuring planned and unplanned interruptions

The following documents the procedures used to capture interruptions experienced on The Lines Company's network and interconnected private networks.

The Lines Company uses an Excel spreadsheet to record all interruptions that occur on the network. The control room log or switching instruction is considered as to how it affects a section of the network, with that section's interruption being recorded as a row in the spreadsheet.

The Network Control Team manages interruptions and incidents on the network, identifying causes and interruption types. Information gathered is used to update The Lines Company's Daily Control Room Log spreadsheet. The Lines Company's Operations Manager is notified should a major interruption or fault requiring further investigation occur.

The Lines Company's Daily Control Room Log data is obtained from the following:

- The primary source for unplanned interruptions on automated equipment are reports from the network Abbey SCADA system.

- The primary source of unplanned interruptions on non-automated equipment is customer calls received by the Lines Company's Faults Team. Each call is entered directly into BASIX and automatically allocated a unique number by the BASIX System. The Faults Team dispatches the interruption details to a Faultman to address. All information received from the Faultman is then updated in BASIX against the same unique number, and the Basix restored time checked (if applicable) from field staff.

- Planned Interruption applications are subject to approval from the Network Control Team. Each application is assigned a unique reference, identifying both the request and whom it was submitted by.

All information captured into The Lines Company's Daily Control Room Log is checked and validated by the Network Control Team. A spreadsheet is then used to create a Daily Interruption Summary which estimates the effect of the interruptions before recording in the interruption spreadsheet. Supporting documentation in the form of daily control room logs, switching schedules for planned interruptions, applications to work on the TLC Network and associated documents and permits issued, along with the Daily Interruption Summary, are scanned as a PDF and electronically filed for each day. The SCADA Log is also available from the SCADA system if required.

The Network Control Team is then responsible for recording the relevant Daily Control Room Log details for each interruption into the spreadsheet. The specific data captured and its source is shown below for each section of the network affected by an interruption:

- Description of interruption (from switching or control log);
- Date and Time of interruption (from switching, control log or Basix fault history for dark assets);
- Date and Time of Restoration (from switching or control log);
- Operated Asset (from switching or control log) including feeder;
- Faulted asset ID (from the control room log based on field staff report);
- BASIX Fault Reference (if applicable – from Basix);
- Interruption Class (from control room log);
- Primary Cause (from log based on field staff information);
- Cause Description (from log based on field staff information);
- Number of customers affected in the section of the network (from Basix);
- Any other notes or comments significant to the interruption.

- For planned interruptions – date advertised as well as advertised start and finish times are received from the interruption notification tool which emails Control the information required after notification to retailers has occurred.

The control room log with associated switching is saved into a PDF file in Sharepoint.

Once entered into the spreadsheet, the interruption is then calculated to return the following details:

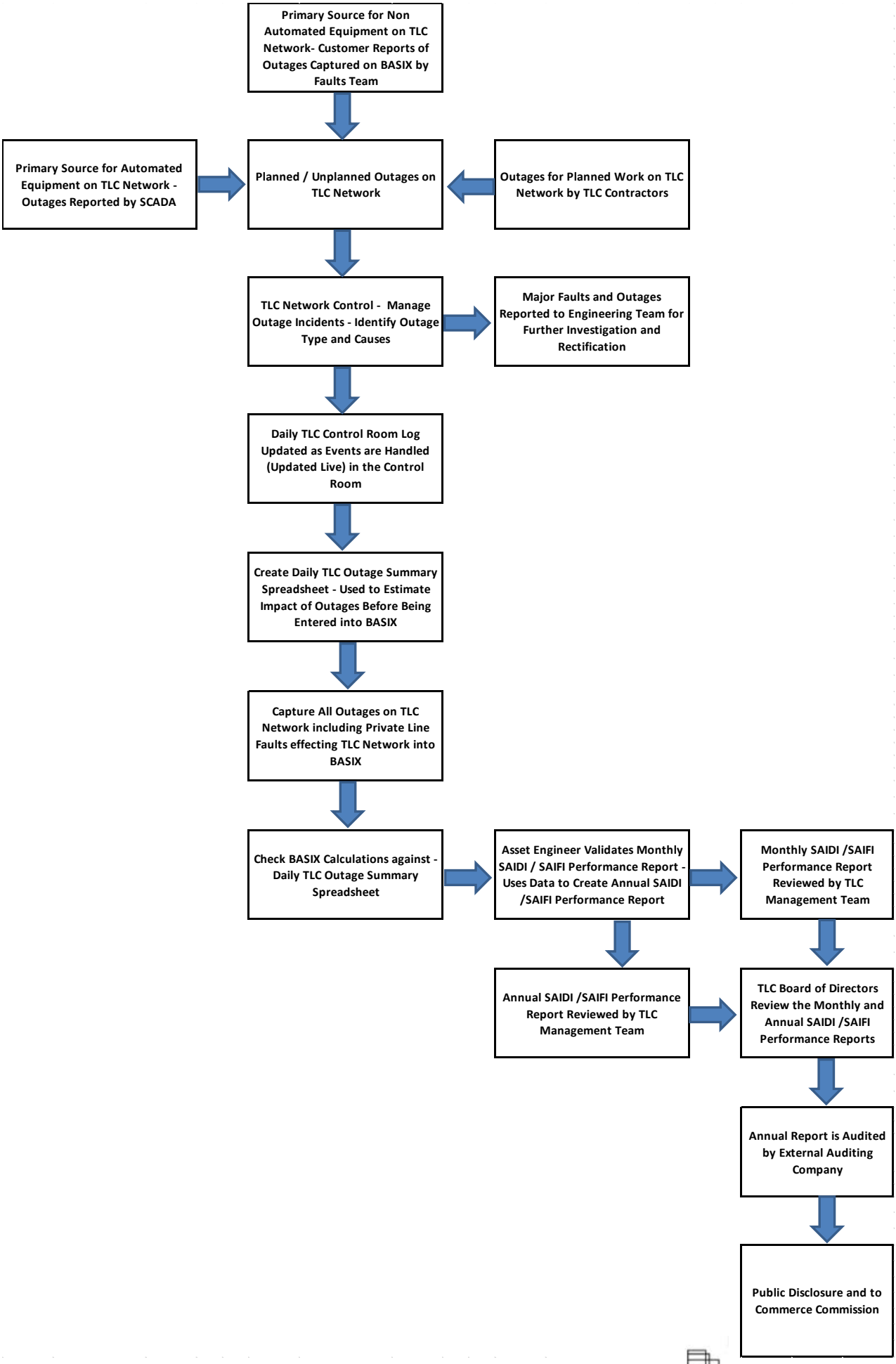
- Line interruption minutes;
- Line customer minutes;
- Line and event interruption SAIDI;
- Line and event interruption SAIFI;
- Halved and whole SAIDI for notified interruptions;
- Line interruption CAIDI.

Reports are automatically generated from the spreadsheet which includes tables and trends showing interruption statistics by class, by feeder, by primary cause, and actual vs budget figures.

A selection of the reports are reviewed monthly by the network leadership team, and then by the senior leadership team and the board.

Notified planned interruptions are treated like planned interruptions but there are procedures in place to ensure all the requirements in the Determination are met and the relevant information is retained to support that.

The interruption data is audited by an external auditing company before being publicly disclosed to comply with Commerce Commission DPP requirements.


Primary Source for Non Automated Equipment on TLC Network- Customer Reports of Outages Captured on BASIX by Faults Team
Primary Source for Automated Equipment on TLC Network - Outages Reported by SCADA
Planned / Unplanned Outages on TLC Network
Outages for Planned Work on TLC Network by TLC Contractors
TLC Network Control - Manage Outage Incidents - Identify Outage Type and Causes
Major Faults and Outages Reported to Engineering Team for Further Investigation and Rectification
Daily TLC Control Room Log Updated as Events are Handled (Updated Live) in the Control Room
Create Daily TLC Outage Summary Spreadsheet - Used to Estimate Impact of Outages Before Being Entered into BASIX
Capture All Outages on TLC Network including Private Line Faults effecting TLC Network into BASIX
Check BASIX Calculations against - Daily TLC Outage Summary Spreadsheet
Asset Engineer Validates Monthly SAIDI / SAIFI Performance Report - Uses Data to Create Annual SAIDI /SAIFI Performance Report
Monthly SAIDI /SAIFI Performance Report Reviewed by TLC Management Team
Annual SAIDI /SAIFI Performance Report Reviewed by TLC Management Team
TLC Board of Directors Review the Monthly and Annual SAIDI /SAIFI Performance Reports
Annual Report is Audited by External Auditing Company
Public Disclosure and to Commerce Commission

Appendix D – SAIDI and SAIFI major events

The tables in this Appendix detail the normalisation of the unplanned SAIDI and SAIFI major events that took place during the assessment period, consistent with Schedule 3.2 of the 2020 DPP Determination.

The Lines Company experienced seven major events during RY2023 – six SAIDI and one SAIFI:

Table 21

major event	type	description	start	end	pre-normalised	normalised	cause
1	SAIDI	Mokau feeder 11 kV	19/05/2022 17:30	21/05/2022 16:59	35.54	2.36	Adverse weather
2	SAIDI	TLC Network	12/06/2022 16:30	13/06/2022 22:59	12.38	3.37	Extreme Weather
3	SAIDI	Lake Taupo feeder 33 kV	5/10/2022 12:30	7/10/2022 11:59	15.83	0.60	Defective equipment
4	SAIDI	Gadsby Road/Wairere feeder 33 kV	11/11/2022 11:00	13/11/2022 10:29	17.41	1.20	Defective equipment
5	SAIDI	Cyclone Gabrielle	12/02/2023 17:00	17/02/2023 07:59	338.00	11.93	Adverse weather/vegetation
6	SAIFI	Cyclone Gabrielle	12/02/2023 23:00	15/02/2023 02:29	0.6362	0.0917	Adverse weather/vegetation
7	SAIDI	Lake Taupo feeder 33 kV	28/03/2023 10:00	30/03/2023 09:29	17.79	0.41	Vegetation

Details about these major events are provided below.

1. Mokau feeder SAIDI major event

Table 22

Location	11 kV Mokau feeder	**Main equipment**	Distribution lines
Cause type	Adverse weather	**Cause detail**	Extreme wind

Major contributing interruption:

- 19/05/2022 17:30 to 21/05/2022 16:59
- 35.54 normalised to 2.36 SAIDI minutes

Response to the major event

At 17:24 on 20/05/2023 strong winds brought down a section of overhead conductor on the Mokau 11 kV feeder. Information from the circuit breaker that tripped to lockout indicated that a line clash caused the conductor to fall. The fault occurred near the start of the Mokau feeder, which is a remote rural feeder with no back-feed options. The conductor (a 210m span) had fallen across State Highway 3 and traffic management was required (from Hamilton) to repair. There had already been 34 unplanned outages the day of the major event and therefore staff fatigue was an issue. Given it was also getting dark, a decision to request a generator was made early in the fault response. The generator required needed to come from Auckland and, after a few technical issues, the generator restored supply to most affected customers the following morning. All customers had their supply reinstated by 12:25 on 21/05/2022.

Mitigating factors that may have prevented or minimised the major event

- Rapid deployment of the generator.

Proposed steps to mitigate the risk of future similar major events

- Analyse LIDAR data for line clash potential and mitigate high-risk (high clash potential on high criticality segments) spans.
- Investigate options for a permanent generator or back-feed on the Mokau feeder.

Table 23

Normalisation of unplanned SAIDI major events RY2023						
SAIDI unplanned boundary value						11.17
1/48th of the SAIDI unplanned boundary value	19/05/2022 17:30 to 21/05/2022 16:59					
	Half hour commencing	Raw SAIDI value for Class C interruption	Normalised SAIDI value for Class C interruption	Half hour commencing	Raw SAIDI value for Class C interruption	Normalised SAIDI value for Class C interruption
0.23	19/05/2022 17:30	-	-	20/05/2022 17:30	-	-
0.23	19/05/2022 18:00	-	-	20/05/2022 18:00	0.13	0.13
0.23	19/05/2022 18:30	-	-	20/05/2022 18:30	-	-
0.23	19/05/2022 19:00	-	-	20/05/2022 19:00	-	-
0.23	19/05/2022 19:30	-	-	20/05/2022 19:30	-	-
0.23	19/05/2022 20:00	-	-	20/05/2022 20:00	-	-
0.23	19/05/2022 20:30	-	-	20/05/2022 20:30	-	-
0.23	19/05/2022 21:00	-	-	20/05/2022 21:00	-	-
0.23	19/05/2022 21:30	-	-	20/05/2022 21:30	-	-
0.23	19/05/2022 22:00	-	-	20/05/2022 22:00	-	-
0.23	19/05/2022 22:30	-	-	20/05/2022 22:30	-	-
0.23	19/05/2022 23:00	-	-	20/05/2022 23:00	-	-
0.23	19/05/2022 23:30	-	-	20/05/2022 23:30	-	-
0.23	20/05/2022 0:00	-	-	21/05/2022 0:00	-	-
0.23	20/05/2022 0:30	-	-	21/05/2022 0:30	-	-
0.23	20/05/2022 1:00	-	-	21/05/2022 1:00	-	-
0.23	20/05/2022 1:30	-	-	21/05/2022 1:30	-	-
0.23	20/05/2022 2:00	-	-	21/05/2022 2:00	-	-
0.23	20/05/2022 2:30	-	-	21/05/2022 2:30	-	-
0.23	20/05/2022 3:00	-	-	21/05/2022 3:00	-	-
0.23	20/05/2022 3:30	-	-	21/05/2022 3:30	-	-
0.23	20/05/2022 4:00	-	-	21/05/2022 4:00	-	-
0.23	20/05/2022 4:30	-	-	21/05/2022 4:30	-	-
0.23	20/05/2022 5:00	-	-	21/05/2022 5:00	-	-
0.23	20/05/2022 5:30	-	-	21/05/2022 5:30	-	-
0.23	20/05/2022 6:00	-	-	21/05/2022 6:00	-	-
0.23	20/05/2022 6:30	-	-	21/05/2022 6:30	-	-
0.23	20/05/2022 7:00	-	-	21/05/2022 7:00	-	-
0.23	20/05/2022 7:30	-	-	21/05/2022 7:30	-	-
0.23	20/05/2022 8:00	0.02	0.02	21/05/2022 8:00	-	-
0.23	20/05/2022 8:30	0.11	0.11	21/05/2022 8:30	-	-
0.23	20/05/2022 9:00	2.99	0.23	21/05/2022 9:00	-	-
0.23	20/05/2022 9:30	0.12	0.12	21/05/2022 9:30	-	-
0.23	20/05/2022 10:00	0.03	0.03	21/05/2022 10:00	-	-
0.23	20/05/2022 10:30	0.09	0.09	21/05/2022 10:30	0.15	0.15
0.23	20/05/2022 11:00	0.41	0.23	21/05/2022 11:00	0.09	0.09
0.23	20/05/2022 11:30	0.02	0.02	21/05/2022 11:30	-	-
0.23	20/05/2022 12:00	0.02	0.02	21/05/2022 12:00	-	-
0.23	20/05/2022 12:30	2.88	0.23	21/05/2022 12:30	-	-
0.23	20/05/2022 13:00	3.06	0.23	21/05/2022 13:00	-	-
0.23	20/05/2022 13:30	0.00	0.00	21/05/2022 13:30	-	-
0.23	20/05/2022 14:00	0.00	0.00	21/05/2022 14:00	-	-
0.23	20/05/2022 14:30	-	-	21/05/2022 14:30	0.01	0.01
0.23	20/05/2022 15:00	-	-	21/05/2022 15:00	-	-
0.23	20/05/2022 15:30	-	-	21/05/2022 15:30	-	-
0.23	20/05/2022 16:00	-	-	21/05/2022 16:00	0.55	0.23
0.23	20/05/2022 16:30	0.01	0.01	21/05/2022 16:30	0.17	0.17
0.23	20/05/2022 17:00	24.68	0.23			
Totals					35.54	2.36

2. TLC Network SAIDI major event

Table 24

Location	TLC Network	**Main equipment**	11 kV Distribution Lines
Cause type	Extreme Weather	**Cause detail**	Wind/Lightning

Major contributing interruption:

- 12/06/2022 16:30 to 13/06/2022 22:59
- 12.38 normalised to 3.37 SAIDI minutes

Response to the Major Event

At 02:46 on 12/06/2022, the first fault for this major event occurred. Pomerangai and Taumatamaire weather stations were reporting high winds after 13:00, accompanied by various spur line outages. At 19:46 the Te Mapara feeder tripped and was sectionalised and restored by 20:39 (212 customers, 0.34 SAIDI). At 20:58 a recloser on the Benneydale feeder tripped from tree contact with lines (42 customers 0.481 SAIDI). At 03:14 on 13/06/2022, a tree fell through the northern feeder beyond switch 6151. A recent upgrade in RY2021 of switch 6151 meant that 327, as opposed to 498, customers were affected by this outage (SAIDI 2.55 minutes). This was the most significant outage during the weather event.

A total of 46 class C (unplanned interruptions) outages were recorded over 2 days – outages over 0.50 SAIDI minutes for this major event are detailed below:

date/time off	feeder	customers	SAIDI	classification
12/06/2022 08:25	Mokau	16	1.00	Lightning
13/06/2022 03:14	Northern	327	2.55	Vegetation (Residential out of zone)
13/06/2022 09:22	Ongarue	30	0.62	Extreme Weather (Wind)
13/06/2022 06:53	Te Mapara	55	0.65	Defective Equipment (Faulty Switch)
13/06/2022 08:32	Mokau	48	0.64	Extreme Weather (Wind)
13/06/2022 06:48	Tirohanga	254	0.64	Extreme Weather (Wind)
13/06/2022 15:08	Northern	327	1.79	Vegetation (Residential out of zone)
13/06/2022 16:25	Aria	25	1.20	Lightning
13/06/2022 19:02	Benneydale	14	0.52	Extreme Weather (Wind)

Mitigating factors that may have prevented or minimised the major event

- This event was primarily a weather event however opportunities to improve our response to such events are continuing to be explored.
- A CIMS-type event management system would help the management of resources during extreme weather events to ensure the network activities are prioritised correctly.

Proposed steps to mitigate the risk of future similar major events

- CIMS event management is in the process of being implemented and tested at the time of writing this report.
- Discussion with forestry owners/managers to clear trees that are out of the Growth Limit Zone (GLZ), however, EDBs do not have any legal rights to enforce this.

Table 25

Normalisation of unplanned SAIDI major events RY2023						
SAIDI unplanned boundary value						11.17
1/48th of the SAIDI unplanned boundary value	12/06/2022 16:30 to 13/06/2022 22:59					
	Half hour commencing	Raw SAIDI value for Class C interruption	Normalised SAIDI value for Class C interruption	Half hour commencing	Raw SAIDI value for Class C interruption	Normalised SAIDI value for Class C interruption
0.23	12/06/2022 16:30	-	-	13/06/2022 8:00	0.05	0.05
0.23	12/06/2022 17:00	-	-	13/06/2022 8:30	1.04	0.23
0.23	12/06/2022 17:30	-	-	13/06/2022 9:00	1.00	0.23
0.23	12/06/2022 18:00	-	-	13/06/2022 9:30	-	-
0.23	12/06/2022 18:30	-	-	13/06/2022 10:00	0.50	0.23
0.23	12/06/2022 19:00	-	-	13/06/2022 10:30	0.01	0.01
0.23	12/06/2022 19:30	0.34	0.23	13/06/2022 11:00	-	-
0.23	12/06/2022 20:00	-	-	13/06/2022 11:30	-	-
0.23	12/06/2022 20:30	0.48	0.23	13/06/2022 12:00	-	-
0.23	12/06/2022 21:00	-	-	13/06/2022 12:30	0.03	0.03
0.23	12/06/2022 21:30	0.03	0.03	13/06/2022 13:00	-	-
0.23	12/06/2022 22:00	-	-	13/06/2022 13:30	-	-
0.23	12/06/2022 22:30	-	-	13/06/2022 14:00	-	-
0.23	12/06/2022 23:00	0.41	0.23	13/06/2022 14:30	0.33	0.23
0.23	12/06/2022 23:30	-	-	13/06/2022 15:00	1.79	0.23
0.23	13/06/2022 0:00	-	-	13/06/2022 15:30	0.07	0.07
0.23	13/06/2022 0:30	-	-	13/06/2022 16:00	1.26	0.23
0.23	13/06/2022 1:00	-	-	13/06/2022 16:30	-	-
0.23	13/06/2022 1:30	-	-	13/06/2022 17:00	-	-
0.23	13/06/2022 2:00	-	-	13/06/2022 17:30	-	-
0.23	13/06/2022 2:30	-	-	13/06/2022 18:00	0.00	0.00
0.23	13/06/2022 3:00	2.55	0.23	13/06/2022 18:30	-	-
0.23	13/06/2022 3:30	-	-	13/06/2022 19:00	0.17	0.17
0.23	13/06/2022 4:00	-	-	13/06/2022 19:30	-	-
0.23	13/06/2022 4:30	-	-	13/06/2022 20:00	0.52	0.23
0.23	13/06/2022 5:00	-	-	13/06/2022 20:30	-	-
0.23	13/06/2022 5:30	0.05	0.05	13/06/2022 21:00	-	-
0.23	13/06/2022 6:00	-	-	13/06/2022 21:30	-	-
0.23	13/06/2022 6:30	1.59	0.23	13/06/2022 22:00	0.00	0.00
0.23	13/06/2022 7:00	0.02	0.02	13/06/2022 22:30	-	-
0.23	13/06/2022 7:30	0.15	0.15			
Totals					12.38	3.37

3. Lake Taupo feeder SAIDI major event

Table 26

Location	33 kV Lake Taupo feeder	**Main equipment**	Sub-transmission lines
Cause type	Defective equipment	**Cause detail**	Crossarm - Loose bolts

Major contributing interruption:

- 5/10/2022 12:30 to 7/10/2022 11:59
- 15.83 normalised to 0.60 SAIDI minutes

Response to the Major Event

At 12:29 on 6/10/2022, CB6578 at the start of the Lake Taupo 33 kV feeder tripped to lockout. Customers supplied from Awamate and Waiotaka zone substations were back fed, but an attempt to close the tripped breaker resulted in an additional loss of the Tokaanu/Kuratau 33 kV feeder due to Transpower's CB1102 detecting the fault before CB6578. A faultman and helicopter were dispatched to find the issue. The faultman found a damaged insulator, however, the cause of the fault was identified from the helicopter as a tilted cross-arm that had lost its kingbolt. The fault was isolated, and the repair was carried out. Because the Lake Taupo 33 circuit shares some pole sites with the Rangipo-Hautu 11 kV feeder and the Hirangi SWER, these lines also needed to be isolated to enable the repair. The SWER isolation was initially overlooked which required re-permitting. Both the damaged insulator and cross-arm were repaired and the supply to all customers was reinstated at 19:15.

Mitigating factors that may have prevented or minimised the major event

- Immediate dispatch of the fault person when the initial trip occurred.
- Fixing the damaged insulator later as planned work.
- Double nutting the cross-arm Kingbolt.

Proposed steps to mitigate the risk of future similar major events

- Update DS16 with double nutting procedure.
- Consider retrofitting double nuts on high-risk lines.
- Improve situational awareness of where our field resources are and consider a geospatial system to track vehicle location.
- Reiterate the requirement to dispatch a fault person upon a trip to lockout, rather than waiting 15 minutes for the result of the manual closing attempt.
- Consider investigating alternative supply options for the Kiko Road substation.

Table 27

Normalisation of unplanned SAIDI major events RY2023						
SAIDI unplanned boundary value						11.17
1/48th of the SAIDI unplanned boundary value	5/10/2022 12:30 to 7/10/2022 11:59					
	Half hour commencing	Raw SAIDI value for Class C interruption	Normalised SAIDI value for Class C interruption	Half hour commencing	Raw SAIDI value for Class C interruption	Normalised SAIDI value for Class C interruption
0.23	5/10/2022 12:30	-	-	6/10/2022 12:30	-	-
0.23	5/10/2022 13:00	-	-	6/10/2022 13:00	-	-
0.23	5/10/2022 13:30	-	-	6/10/2022 13:30	-	-
0.23	5/10/2022 14:00	-	-	6/10/2022 14:00	-	-
0.23	5/10/2022 14:30	-	-	6/10/2022 14:30	-	-
0.23	5/10/2022 15:00	0.18	0.18	6/10/2022 15:00	-	-
0.23	5/10/2022 15:30	-	-	6/10/2022 15:30	-	-
0.23	5/10/2022 16:00	-	-	6/10/2022 16:00	-	-
0.23	5/10/2022 16:30	-	-	6/10/2022 16:30	-	-
0.23	5/10/2022 17:00	-	-	6/10/2022 17:00	-	-
0.23	5/10/2022 17:30	-	-	6/10/2022 17:30	-	-
0.23	5/10/2022 18:00	-	-	6/10/2022 18:00	-	-
0.23	5/10/2022 18:30	-	-	6/10/2022 18:30	-	-
0.23	5/10/2022 19:00	-	-	6/10/2022 19:00	-	-
0.23	5/10/2022 19:30	-	-	6/10/2022 19:30	-	-
0.23	5/10/2022 20:00	-	-	6/10/2022 20:00	-	-
0.23	5/10/2022 20:30	-	-	6/10/2022 20:30	-	-
0.23	5/10/2022 21:00	-	-	6/10/2022 21:00	-	-
0.23	5/10/2022 21:30	-	-	6/10/2022 21:30	-	-
0.23	5/10/2022 22:00	-	-	6/10/2022 22:00	-	-
0.23	5/10/2022 22:30	-	-	6/10/2022 22:30	-	-
0.23	5/10/2022 23:00	-	-	6/10/2022 23:00	-	-
0.23	5/10/2022 23:30	-	-	6/10/2022 23:30	-	-
0.23	6/10/2022 0:00	-	-	7/10/2022 0:00	-	-
0.23	6/10/2022 0:30	-	-	7/10/2022 0:30	-	-
0.23	6/10/2022 1:00	-	-	7/10/2022 1:00	-	-
0.23	6/10/2022 1:30	-	-	7/10/2022 1:30	-	-
0.23	6/10/2022 2:00	-	-	7/10/2022 2:00	-	-
0.23	6/10/2022 2:30	-	-	7/10/2022 2:30	-	-
0.23	6/10/2022 3:00	-	-	7/10/2022 3:00	-	-
0.23	6/10/2022 3:30	-	-	7/10/2022 3:30	-	-
0.23	6/10/2022 4:00	-	-	7/10/2022 4:00	-	-
0.23	6/10/2022 4:30	-	-	7/10/2022 4:30	-	-
0.23	6/10/2022 5:00	-	-	7/10/2022 5:00	-	-
0.23	6/10/2022 5:30	-	-	7/10/2022 5:30	-	-
0.23	6/10/2022 6:00	0.11	0.11	7/10/2022 6:00	-	-
0.23	6/10/2022 6:30	-	-	7/10/2022 6:30	-	-
0.23	6/10/2022 7:00	-	-	7/10/2022 7:00	0.01	0.01
0.23	6/10/2022 7:30	-	-	7/10/2022 7:30	-	-
0.23	6/10/2022 8:00	-	-	7/10/2022 8:00	-	-
0.23	6/10/2022 8:30	-	-	7/10/2022 8:30	-	-
0.23	6/10/2022 9:00	-	-	7/10/2022 9:00	-	-
0.23	6/10/2022 9:30	0.07	0.07	7/10/2022 9:30	-	-
0.23	6/10/2022 10:00	-	-	7/10/2022 10:00	-	-
0.23	6/10/2022 10:30	-	-	7/10/2022 10:30	-	-
0.23	6/10/2022 11:00	-	-	7/10/2022 11:00	-	-
0.23	6/10/2022 11:30	-	-	7/10/2022 11:30	-	-
0.23	6/10/2022 12:00	15.46	0.23			
Totals					15.83	0.60

4. Gadsby Road/Wairere feeder SAIDI major event

Table 28

Location	33 kV Gadsby Rd/Wairere feeder	**Main equipment**	Sub-transmission lines
Cause type	Defective equipment	**Cause detail**	Crossarm - Rotten

Major contributing interruption:

- 11/11/2022 11:00 to 13/11/2022 10:29
- 17.41 normalised to 1.20 SAIDI minutes

Response to the Major Event

CB2202 tripped to lock out at 10:51 on 12/11/2022 resulting in the loss of supply to Oparure, Gadsby Rd, Wairere and Mahaenui Substations. A couple of communication issues hampered the initial response, but a helicopter was in the air at 11:34. At 12:05 the fault was found to be caused by an insulator that had come free from a split crossarm at Pole 3070282. The fault was isolated, and repairs were carried out. All customers had their power supply reinstated by 15:25.

The failed cross-arm had been given 4-5 year remaining life when inspected in 2016 and was initially part of a multi-year line renewal project. The first phase of the line renewal was completed but in 2018 an UAV aerial inspection of the Gadsby Rd/Wairere 33 kV feeder was carried out by an external contractor to improve the quality of the data supporting the renewal project. In the inspection report, the cross-arm at pole 3070282 was described as a "Weathered old arm with some splitting" and was given a Low urgency rating by the contractor. Higher urgency-rated assets were prioritised for replacement and there was no follow-up on the cross-arm at pole 3070282.

Mitigating factors that may have prevented or minimised the major event

- Internal review of urgency/intervention ratings for structural defects identified by contractors.
- Combining UAV and ground-based data to provide a single source of asset inspection information (in BASIX).
- Remediation tracking of all structural defects identified by aerial inspection.

Proposed steps to mitigate the risk of future similar major events

- Check that all structure defects in the Wairere Tie line UAV Aerial inspection report (Broadspectrum, 2018) have been addressed.
- Develop processes to transfer future UAV inspection data into BASIX to provide a single source of asset condition information used for line renewals.
- Improve contact details (including backup phone numbers and credentials) for all staff involved in fault responses.

Table 29

Normalisation of unplanned SAIDI major events RY2023						
SAIDI unplanned boundary value						11.17
1/48th of the SAIDI unplanned boundary value	11/11/2022 11:00 to 13/11/2022 10:29					
	Half hour commencing	Raw SAIDI value for Class C interruption	Normalised SAIDI value for Class C interruption	Half hour commencing	Raw SAIDI value for Class C interruption	Normalised SAIDI value for Class C interruption
0.23	11/11/2022 11:00	0.01	0.01	12/11/2022 11:00	-	-
0.23	11/11/2022 11:30	0.03	0.03	12/11/2022 11:30	-	-
0.23	11/11/2022 12:00	-	-	12/11/2022 12:00	-	-
0.23	11/11/2022 12:30	-	-	12/11/2022 12:30	-	-
0.23	11/11/2022 13:00	-	-	12/11/2022 13:00	-	-
0.23	11/11/2022 13:30	-	-	12/11/2022 13:30	-	-
0.23	11/11/2022 14:00	0.58	0.23	12/11/2022 14:00	-	-
0.23	11/11/2022 14:30	-	-	12/11/2022 14:30	-	-
0.23	11/11/2022 15:00	-	-	12/11/2022 15:00	-	-
0.23	11/11/2022 15:30	-	-	12/11/2022 15:30	-	-
0.23	11/11/2022 16:00	-	-	12/11/2022 16:00	-	-
0.23	11/11/2022 16:30	-	-	12/11/2022 16:30	-	-
0.23	11/11/2022 17:00	-	-	12/11/2022 17:00	-	-
0.23	11/11/2022 17:30	-	-	12/11/2022 17:30	0.58	0.23
0.23	11/11/2022 18:00	-	-	12/11/2022 18:00	0.47	0.23
0.23	11/11/2022 18:30	0.09	0.09	12/11/2022 18:30	-	-
0.23	11/11/2022 19:00	-	-	12/11/2022 19:00	-	-
0.23	11/11/2022 19:30	-	-	12/11/2022 19:30	-	-
0.23	11/11/2022 20:00	0.02	0.02	12/11/2022 20:00	-	-
0.23	11/11/2022 20:30	-	-	12/11/2022 20:30	-	-
0.23	11/11/2022 21:00	0.01	0.01	12/11/2022 21:00	-	-
0.23	11/11/2022 21:30	-	-	12/11/2022 21:30	-	-
0.23	11/11/2022 22:00	-	-	12/11/2022 22:00	-	-
0.23	11/11/2022 22:30	-	-	12/11/2022 22:30	-	-
0.23	11/11/2022 23:00	-	-	12/11/2022 23:00	-	-
0.23	11/11/2022 23:30	-	-	12/11/2022 23:30	-	-
0.23	12/11/2022 0:00	-	-	13/11/2022 0:00	-	-
0.23	12/11/2022 0:30	-	-	13/11/2022 0:30	-	-
0.23	12/11/2022 1:00	-	-	13/11/2022 1:00	-	-
0.23	12/11/2022 1:30	-	-	13/11/2022 1:30	-	-
0.23	12/11/2022 2:00	-	-	13/11/2022 2:00	-	-
0.23	12/11/2022 2:30	-	-	13/11/2022 2:30	-	-
0.23	12/11/2022 3:00	-	-	13/11/2022 3:00	-	-
0.23	12/11/2022 3:30	-	-	13/11/2022 3:30	-	-
0.23	12/11/2022 4:00	-	-	13/11/2022 4:00	-	-
0.23	12/11/2022 4:30	-	-	13/11/2022 4:30	-	-
0.23	12/11/2022 5:00	-	-	13/11/2022 5:00	-	-
0.23	12/11/2022 5:30	-	-	13/11/2022 5:30	-	-
0.23	12/11/2022 6:00	-	-	13/11/2022 6:00	-	-
0.23	12/11/2022 6:30	-	-	13/11/2022 6:30	-	-
0.23	12/11/2022 7:00	-	-	13/11/2022 7:00	-	-
0.23	12/11/2022 7:30	-	-	13/11/2022 7:30	-	-
0.23	12/11/2022 8:00	-	-	13/11/2022 8:00	0.10	0.10
0.23	12/11/2022 8:30	-	-	13/11/2022 8:30	-	-
0.23	12/11/2022 9:00	-	-	13/11/2022 9:00	-	-
0.23	12/11/2022 9:30	-	-	13/11/2022 9:30	-	-
0.23	12/11/2022 10:00	-	-	13/11/2022 10:00	-	-
0.23	12/11/2022 10:30	15.52	0.23			
Totals					17.41	1.20

5. Cyclone Gabrielle SAIDI and SAIFI major events

Table 30

Location	Cyclone Gabrielle – TLC wide	**Main equipment**	Overhead lines
Cause type	Adverse weather/vegetation	**Cause detail**	Multiple

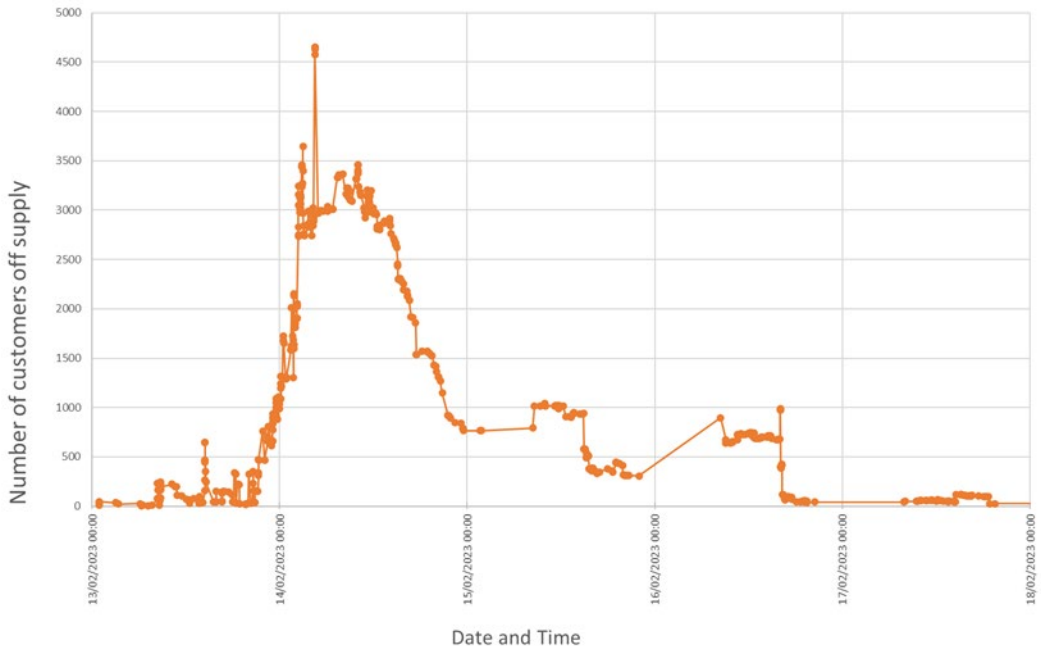
Multiple contributing interruptions:

- 12/02/2023 17:00 to 17/02/2023 07:59
- 338.00 normalised to 11.93 ***SAIDI*** minutes

- 12/02/2023 23:00 to 15/02/2023 02:29
- 0.6362 normalised to 0.0917 ***SAIFI*** minutes

Context and Response to the Major Event

On the evening of February 13, 2023, New Zealand was hit by ex-tropical cyclone Gabrielle, resulting in heavy rainfall, strong winds, and coastal flooding in the North and Eastern regions of the North Island. While less affected than other areas in New Zealand, parts of The Lines Company's network sustained significant damage resulting in 4,650 customers being without power at the peak of the event. Recovery efforts were intensive, lasting several days due to the extensive damage to the network. Despite these challenges, 50% of customers had their power restored within 11 hours and 90% within 35 hours, as shown in Figure 1. This event was unprecedented in The Lines Company's recent history, and the high volume of incidents and extensive network damage placed a significant strain on the people, processes, and systems involved. The damage to the network was primarily caused by out-of-zone fallen trees.



Plot of customers off supply vs time during the Cyclone Gabrielle event and its recovery.

Example photographs of typical network damaged that occurred during Cyclone Gabrielle.

Mitigating factors that may have prevented or minimised the major event

- While CIMS is a versatile incident response framework, it is not prescriptive in its specific procedures. As a result, the existing generic training received by TLC staff on CIMS was not specifically tailored to the systems, processes, and procedures needed to respond effectively to damaging windstorms, which are a common occurrence in a distribution network.
- Although some level of uncertainty is inevitable during the early stages of a significant event, such as Cyclone Gabrielle, the amount and duration of uncertainty could have been significantly reduced with proper preparation. The implementation of pre-prepared information gathering tools, such as integrated dispatch and Incident Response Management spreadsheets, could have enabled the CIMS intelligence function to operate more efficiently, thereby providing more accurate and timely information to the IMT.
- In addition, the use of visual aids such as maps displaying the location and status of outage areas proved to be highly effective in visualizing the incident and planning response at a macro level.
- To alleviate the bottleneck for switching and access permits, it could have been helpful to have additional controllers available. This would have made it possible to divide the network into north and south regions speeding up switching and issue of access permits.
- Communicating restoration priorities clearly to controllers and field crews would have enabled the queuing of field crew access to the controllers to be better optimised, potentially improving the rate of customer restoration.

- The failure to conduct a significant network event simulation resulted in a missed opportunity to identify issues that, if addressed, could have significantly enhanced the response to Cyclone Gabrielle.

Proposed steps to mitigate the risk of future similar major events

- The generic CIMS framework needs to be customized by defining specific roles, responsibilities, tasks, procedures, systems, and checklists for incident participants to effectively deal with common large-scale network events like windstorms and lightning storms.
- Implement a suite of process management and information gathering tools that integrate across the various incident response roles (such as dispatch, control and field operations). This could use spreadsheets and other standard software tools.
- Create and deploy visual aids to assist in managing similar network-wide events. These aids may take the form of GIS maps, or, if deemed more practical, paper or whiteboard tools located in the incident room.
- Conduct a review to determine the ideal number of network controllers to balance cost-effective BAU services and capacity to handle high volume network events, recognizing the tension between these two requirements.
- To improve the restoration process and address the bottleneck caused by limited network controllers, the Incident Response team should create a prioritized list of restoration priorities and communicate them to both control and field supervisors. This will ensure proper sequencing of the restoration effort and minimize the impact of the controller bottleneck.
- After implementing the process and system changes recommended in this report, perform a significant network event simulation to evaluate and further refine TLC's response capability.

Table 31

Normalisation of unplanned SAIDI major events RY2023						
SAIDI unplanned boundary value						11.17
1/48th of the SAIDI unplanned boundary value	12/02/2023 17:00 to 17/02/2023 07:59					
	Half hour commencing	Raw SAIDI value for Class C interruption	Normalised SAIDI value for Class C interruption	Half hour commencing	Raw SAIDI value for Class C interruption	Normalised SAIDI value for Class C interruption
0.23	12/02/2023 17:00	-	-	15/02/2023 0:30	-	-
0.23	12/02/2023 17:30	-	-	15/02/2023 1:00	-	-
0.23	12/02/2023 18:00	-	-	15/02/2023 1:30	-	-
0.23	12/02/2023 18:30	-	-	15/02/2023 2:00	-	-
0.23	12/02/2023 19:00	-	-	15/02/2023 2:30	-	-
0.23	12/02/2023 19:30	-	-	15/02/2023 3:00	-	-
0.23	12/02/2023 20:00	-	-	15/02/2023 3:30	-	-
0.23	12/02/2023 20:30	-	-	15/02/2023 4:00	-	-
0.23	12/02/2023 21:00	-	-	15/02/2023 4:30	-	-
0.23	12/02/2023 21:30	-	-	15/02/2023 5:00	-	-
0.23	12/02/2023 22:00	-	-	15/02/2023 5:30	-	-
0.23	12/02/2023 22:30	-	-	15/02/2023 6:00	-	-
0.23	12/02/2023 23:00	-	-	15/02/2023 6:30	-	-
0.23	12/02/2023 23:30	-	-	15/02/2023 7:00	-	-
0.23	13/02/2023 0:00	-	-	15/02/2023 7:30	-	-
0.23	13/02/2023 0:30	2.40	0.23	15/02/2023 8:00	0.72	0.23
0.23	13/02/2023 1:00	-	-	15/02/2023 8:30	14.92	0.23
0.23	13/02/2023 1:30	-	-	15/02/2023 9:00	0.01	0.01
0.23	13/02/2023 2:00	-	-	15/02/2023 9:30	0.01	0.01
0.23	13/02/2023 2:30	-	-	15/02/2023 10:00	-	-
0.23	13/02/2023 3:00	-	-	15/02/2023 10:30	-	-
0.23	13/02/2023 3:30	-	-	15/02/2023 11:00	0.03	0.03
0.23	13/02/2023 4:00	-	-	15/02/2023 11:30	0.19	0.19
0.23	13/02/2023 4:30	-	-	15/02/2023 12:00	-	-
0.23	13/02/2023 5:00	-	-	15/02/2023 12:30	-	-
0.23	13/02/2023 5:30	-	-	15/02/2023 13:00	2.39	0.23
0.23	13/02/2023 6:00	0.01	0.01	15/02/2023 13:30	0.13	0.13
0.23	13/02/2023 6:30	0.03	0.03	15/02/2023 14:00	-	-
0.23	13/02/2023 7:00	-	-	15/02/2023 14:30	0.36	0.23
0.23	13/02/2023 7:30	0.51	0.23	15/02/2023 15:00	1.74	0.23
0.23	13/02/2023 8:00	1.48	0.23	15/02/2023 15:30	0.68	0.23
0.23	13/02/2023 8:30	-	-	15/02/2023 16:00	-	-
0.23	13/02/2023 9:00	-	-	15/02/2023 16:30	0.09	0.09
0.23	13/02/2023 9:30	-	-	15/02/2023 17:00	-	-
0.23	13/02/2023 10:00	0.46	0.23	15/02/2023 17:30	-	-
0.23	13/02/2023 10:30	-	-	15/02/2023 18:00	-	-
0.23	13/02/2023 11:00	-	-	15/02/2023 18:30	-	-
0.23	13/02/2023 11:30	-	-	15/02/2023 19:00	0.81	0.23
0.23	13/02/2023 12:00	-	-	15/02/2023 19:30	-	-
0.23	13/02/2023 12:30	-	-	15/02/2023 20:00	0.00	0.00
0.23	13/02/2023 13:00	-	-	15/02/2023 20:30	-	-
0.23	13/02/2023 13:30	-	-	15/02/2023 21:00	-	-
0.23	13/02/2023 14:00	0.72	0.23	15/02/2023 21:30	-	-
0.23	13/02/2023 14:30	-	-	15/02/2023 22:00	-	-
0.23	13/02/2023 15:00	-	-	15/02/2023 22:30	-	-
0.23	13/02/2023 15:30	-	-	15/02/2023 23:00	-	-
0.23	13/02/2023 16:00	-	-	15/02/2023 23:30	-	-
0.23	13/02/2023 16:30	50.86	0.23	16/02/2023 0:00	-	-
0.23	13/02/2023 17:00	-	-	16/02/2023 0:30	-	-
0.23	13/02/2023 17:30	-	-	16/02/2023 1:00	-	-
0.23	13/02/2023 18:00	0.18	0.18	16/02/2023 1:30	-	-
0.23	13/02/2023 18:30	0.13	0.13	16/02/2023 2:00	-	-
0.23	13/02/2023 19:00	-	-	16/02/2023 2:30	-	-
0.23	13/02/2023 19:30	0.03	0.03	16/02/2023 3:00	-	-

Normalisation of unplanned SAIDI major events RY2023						
SAIDI unplanned boundary value						11.17
1/48th of the SAIDI unplanned boundary value	12/02/2023 17:00 to 17/02/2023 07:59					
	Half hour commencing	Raw SAIDI value for Class C interruption	Normalised SAIDI value for Class C interruption	Half hour commencing	Raw SAIDI value for Class C interruption	Normalised SAIDI value for Class C interruption
0.23	13/02/2023 20:00	0.47	0.23	16/02/2023 3:30	-	-
0.23	13/02/2023 20:30	0.07	0.07	16/02/2023 4:00	-	-
0.23	13/02/2023 21:00	14.30	0.23	16/02/2023 4:30	-	-
0.23	13/02/2023 21:30	0.20	0.20	16/02/2023 5:00	-	-
0.23	13/02/2023 22:00	-	-	16/02/2023 5:30	-	-
0.23	13/02/2023 22:30	24.02	0.23	16/02/2023 6:00	-	-
0.23	13/02/2023 23:00	6.66	0.23	16/02/2023 6:30	-	-
0.23	13/02/2023 23:30	9.70	0.23	16/02/2023 7:00	-	-
0.23	14/02/2023 0:00	15.02	0.23	16/02/2023 7:30	-	-
0.23	14/02/2023 0:30	-	-	16/02/2023 8:00	11.33	0.23
0.23	14/02/2023 1:00	0.19	0.19	16/02/2023 8:30	-	-
0.23	14/02/2023 1:30	107.22	0.23	16/02/2023 9:00	0.01	0.01
0.23	14/02/2023 2:00	19.24	0.23	16/02/2023 9:30	0.03	0.03
0.23	14/02/2023 2:30	3.43	0.23	16/02/2023 10:00	0.02	0.02
0.23	14/02/2023 3:00	-	-	16/02/2023 10:30	0.02	0.02
0.23	14/02/2023 3:30	8.63	0.23	16/02/2023 11:00	-	-
0.23	14/02/2023 4:00	-	-	16/02/2023 11:30	0.00	0.00
0.23	14/02/2023 4:30	5.85	0.23	16/02/2023 12:00	0.13	0.13
0.23	14/02/2023 5:00	0.38	0.23	16/02/2023 12:30	-	-
0.23	14/02/2023 5:30	-	-	16/02/2023 13:00	0.19	0.19
0.23	14/02/2023 6:00	-	-	16/02/2023 13:30	0.10	0.10
0.23	14/02/2023 6:30	1.14	0.23	16/02/2023 14:00	0.00	0.00
0.23	14/02/2023 7:00	10.89	0.23	16/02/2023 14:30	0.30	0.23
0.23	14/02/2023 7:30	0.79	0.23	16/02/2023 15:00	-	-
0.23	14/02/2023 8:00	0.19	0.19	16/02/2023 15:30	-	-
0.23	14/02/2023 8:30	2.23	0.23	16/02/2023 16:00	0.29	0.23
0.23	14/02/2023 9:00	-	-	16/02/2023 16:30	-	-
0.23	14/02/2023 9:30	3.34	0.23	16/02/2023 17:00	0.07	0.07
0.23	14/02/2023 10:00	2.98	0.23	16/02/2023 17:30	-	-
0.23	14/02/2023 10:30	-	-	16/02/2023 18:00	-	-
0.23	14/02/2023 11:00	-	-	16/02/2023 18:30	0.00	0.00
0.23	14/02/2023 11:30	1.19	0.23	16/02/2023 19:00	0.38	0.23
0.23	14/02/2023 12:00	2.48	0.23	16/02/2023 19:30	-	-
0.23	14/02/2023 12:30	3.48	0.23	16/02/2023 20:00	0.19	0.19
0.23	14/02/2023 13:00	0.16	0.16	16/02/2023 20:30	-	-
0.23	14/02/2023 13:30	-	-	16/02/2023 21:00	-	-
0.23	14/02/2023 14:00	-	-	16/02/2023 21:30	-	-
0.23	14/02/2023 14:30	0.08	0.08	16/02/2023 22:00	-	-
0.23	14/02/2023 15:00	0.25	0.23	16/02/2023 22:30	-	-
0.23	14/02/2023 15:30	-	-	16/02/2023 23:00	-	-
0.23	14/02/2023 16:00	-	-	16/02/2023 23:30	-	-
0.23	14/02/2023 16:30	-	-	17/02/2023 0:00	-	-
0.23	14/02/2023 17:00	-	-	17/02/2023 0:30	-	-
0.23	14/02/2023 17:30	0.09	0.09	17/02/2023 1:00	-	-
0.23	14/02/2023 18:00	1.36	0.23	17/02/2023 1:30	-	-
0.23	14/02/2023 18:30	-	-	17/02/2023 2:00	-	-
0.23	14/02/2023 19:00	-	-	17/02/2023 2:30	-	-
0.23	14/02/2023 19:30	-	-	17/02/2023 3:00	-	-
0.23	14/02/2023 20:00	-	-	17/02/2023 3:30	-	-
0.23	14/02/2023 20:30	-	-	17/02/2023 4:00	-	-
0.23	14/02/2023 21:00	-	-	17/02/2023 4:30	-	-
0.23	14/02/2023 21:30	-	-	17/02/2023 5:00	-	-
0.23	14/02/2023 22:00	-	-	17/02/2023 5:30	-	-
0.23	14/02/2023 22:30	-	-	17/02/2023 6:00	-	-
0.23	14/02/2023 23:00	-	-	17/02/2023 6:30	-	-
0.23	14/02/2023 23:30	-	-	17/02/2023 7:00	-	-
0.23	15/02/2023 0:00	-	-	17/02/2023 7:30	0.03	0.03
Totals					338.00	11.93

7. Lake Taupo feeder SAIDI major event

Table 32

Location	33 kV Lake Taupo feeder	**Main equipment**	Sub-transmission lines
Cause type	Vegetation	**Cause detail**	Veg – Plantation trees out of zone

Major contributing interruption:

- 28/03/2023 10:00 to 30/03/2023 09:29
- 17.79 normalised to 0.41 SAIDI minutes

Response to the Major Event

An out-of-zone tree that had been previously damaged by Cyclone Gabrielle brought down the Lake Taupo 33 kV feeder.

Mitigating factors that may have prevented or minimised the major event

- Clearance of at-risk vegetation post-cyclone.

Proposed steps to mitigate the risk of future similar major events

- Implement a post-major event process to prioritise the review of affected areas, identifying remaining hazards and promptly acting to remedy them.

Table 33

Normalisation of unplanned SAIDI major events RY2023						
SAIDI unplanned boundary value						11.17
1/48th of the SAIDI unplanned boundary value	28/03/2023 10:00 to 30/03/2023 09:29					
	Half hour commencing	Raw SAIDI value for Class C interruption	Normalised SAIDI value for Class C interruption	Half hour commencing	Raw SAIDI value for Class C interruption	Normalised SAIDI value for Class C interruption
0.23	28/03/2023 10:00	-	-	29/03/2023 10:00	0.06	0.06
0.23	28/03/2023 10:30	-	-	29/03/2023 10:30	-	-
0.23	28/03/2023 11:00	-	-	29/03/2023 11:00	-	-
0.23	28/03/2023 11:30	0.11	0.11	29/03/2023 11:30	-	-
0.23	28/03/2023 12:00	-	-	29/03/2023 12:00	-	-
0.23	28/03/2023 12:30	-	-	29/03/2023 12:30	-	-
0.23	28/03/2023 13:00	-	-	29/03/2023 13:00	-	-
0.23	28/03/2023 13:30	-	-	29/03/2023 13:30	-	-
0.23	28/03/2023 14:00	-	-	29/03/2023 14:00	-	-
0.23	28/03/2023 14:30	-	-	29/03/2023 14:30	-	-
0.23	28/03/2023 15:00	-	-	29/03/2023 15:00	-	-
0.23	28/03/2023 15:30	-	-	29/03/2023 15:30	-	-
0.23	28/03/2023 16:00	-	-	29/03/2023 16:00	0.01	0.01
0.23	28/03/2023 16:30	-	-	29/03/2023 16:30	-	-
0.23	28/03/2023 17:00	-	-	29/03/2023 17:00	-	-
0.23	28/03/2023 17:30	-	-	29/03/2023 17:30	-	-
0.23	28/03/2023 18:00	-	-	29/03/2023 18:00	-	-
0.23	28/03/2023 18:30	-	-	29/03/2023 18:30	-	-
0.23	28/03/2023 19:00	-	-	29/03/2023 19:00	-	-
0.23	28/03/2023 19:30	-	-	29/03/2023 19:30	-	-
0.23	28/03/2023 20:00	-	-	29/03/2023 20:00	-	-
0.23	28/03/2023 20:30	-	-	29/03/2023 20:30	-	-
0.23	28/03/2023 21:00	-	-	29/03/2023 21:00	-	-
0.23	28/03/2023 21:30	-	-	29/03/2023 21:30	-	-
0.23	28/03/2023 22:00	-	-	29/03/2023 22:00	-	-
0.23	28/03/2023 22:30	-	-	29/03/2023 22:30	-	-
0.23	28/03/2023 23:00	-	-	29/03/2023 23:00	-	-
0.23	28/03/2023 23:30	-	-	29/03/2023 23:30	-	-
0.23	29/03/2023 0:00	-	-	30/03/2023 0:00	-	-
0.23	29/03/2023 0:30	-	-	30/03/2023 0:30	-	-
0.23	29/03/2023 1:00	-	-	30/03/2023 1:00	-	-
0.23	29/03/2023 1:30	-	-	30/03/2023 1:30	-	-
0.23	29/03/2023 2:00	-	-	30/03/2023 2:00	-	-
0.23	29/03/2023 2:30	-	-	30/03/2023 2:30	-	-
0.23	29/03/2023 3:00	-	-	30/03/2023 3:00	-	-
0.23	29/03/2023 3:30	-	-	30/03/2023 3:30	-	-
0.23	29/03/2023 4:00	-	-	30/03/2023 4:00	-	-
0.23	29/03/2023 4:30	-	-	30/03/2023 4:30	-	-
0.23	29/03/2023 5:00	-	-	30/03/2023 5:00	-	-
0.23	29/03/2023 5:30	-	-	30/03/2023 5:30	-	-
0.23	29/03/2023 6:00	-	-	30/03/2023 6:00	-	-
0.23	29/03/2023 6:30	-	-	30/03/2023 6:30	-	-
0.23	29/03/2023 7:00	-	-	30/03/2023 7:00	-	-
0.23	29/03/2023 7:30	-	-	30/03/2023 7:30	-	-
0.23	29/03/2023 8:00	-	-	30/03/2023 8:00	-	-
0.23	29/03/2023 8:30	-	-	30/03/2023 8:30	-	-
0.23	29/03/2023 9:00	-	-	30/03/2023 9:00	-	-
0.23	29/03/2023 9:30	17.61	0.23			
Totals					17.79	0.41

Appendix E – Schedule 7: Form of director's certificate for The Lines Company's annual compliance statement

Clause 11.5(d)

I, Bella TAKIARI-BRAME, being a director of The Lines Company Limited certify that, having made all reasonable enquiry, to the best of my knowledge and belief, the attached annual compliance statement of The Lines Company Limited, and related information, prepared for the purposes of the Electricity Distribution Services Default Price-Quality Path Determination 2020 has been prepared in accordance with all the relevant requirements.

Bella Takiari-Brame
Director

31 August 2023

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.

Independent Assurance Report

To the Directors of The Lines Company Limited and to the Commerce Commission on the Annual Compliance Statement for the assessment period ended 31 March 2023 as required by the Electricity Distribution Services Default Price-Quality Path Determination 2020 (consolidated 20 May 2020)

The Auditor-General is the auditor of The Lines Company Limited (the Company). The Auditor-General has appointed me, Philippa Cameron, using the staff and resources of PricewaterhouseCoopers, to undertake a reasonable assurance engagement, on his behalf, on whether the Annual Compliance Statement on pages 4 to 44 for the assessment period ended on 31 March 2023 has been prepared, in all material respects, in compliance with the Electricity Distribution Services Default Price-Quality Path Determination 2020 (consolidated 20 May 2020) (the Determination).

Opinion

In our opinion, in all material respects:

- as far as appears from our examination, the information used in the preparation of the Annual Compliance Statement has been properly extracted from the Company's accounting and other records, sourced from its financial and non-financial systems; and
- the Company has complied with clauses 11.5 and 11.6 of the Determination in preparing the Annual Compliance Statement for the assessment period ended 31 March 2023.

Basis for opinion

We conducted our engagement in accordance with the Standard on Assurance Engagements (SAE) 3100 (Revised) *Compliance Engagements* ("SAE 3100 (Revised)"), issued by the New Zealand Auditing and Assurance Standards Board. An engagement conducted in accordance with SAE 3100 (Revised) requires that we also comply with the International Standard on Assurance Engagements (New Zealand) 3000 (Revised) *Assurance Engagements Other Than Audits or Reviews of Historical Financial Information*.

We have obtained sufficient recorded evidence and explanations that we required to provide a basis for our opinion.

Directors' responsibilities

The Directors of the Company are responsible for the:

- preparation of the Annual Compliance Statement under clause 11.4 and in accordance with the requirements in clauses 11.5 and 11.6 of the Determination; and
- identification of risks that may threaten compliance with the clauses identified above and controls which will mitigate those risks and monitor ongoing compliance.

Auditor's responsibilities

Our responsibilities in terms of clause 11.5(e) and schedule 8(1)(b)(vi) and 8(1)(c) of the Determination, are to express an opinion on whether:

- as far as appears from our examination, the information used in the preparation of the Annual Compliance Statement has been properly extracted from the Company's accounting and other records, sourced from its financial and non-financial systems; and
- the Annual Compliance Statement, for the assessment period ended 31 March 2023, has been prepared, in all material respects, in accordance with the requirements in clauses 11.5 and 11.6 of the Determination.

To meet these responsibilities, we planned and performed procedures in accordance with SAE 3100 (Revised), to obtain reasonable assurance about whether the Company has complied, in all material respects, with clauses 11.5 and 11.6 of the Determination.

In relation to the wash-up amount set out in clause 8.6 of the Determination, our procedures included recalculation of the wash-up amount in accordance with schedule 1.6 of the Determination and assessing it against the amounts and disclosures contained on pages 4 to 6 and 13 to 24 of the Annual Compliance Statement.

In relation to the quality standards in clause 9 of the Determination, our procedures included examination, on a test basis, of evidence relevant to the values and disclosures contained on pages 7 to 10 and 25 to 43 of the Annual Compliance Statement.

In relation to the quality incentive adjustment set out in Schedule 4 of the Determination, our procedures included recalculation of the quality incentive adjustment in accordance with Schedule 4 of the Determination and assessing it against the amounts and disclosures contained on page 11 of the Annual Compliance Statement.

An assurance engagement to report on the Company's compliance with the Determination involves performing procedures to obtain evidence about the compliance activity and controls implemented to meet the requirements. The procedures selected depend on our judgement, including the identification and assessment of the risks of material non-compliance with the requirements.

Inherent limitations

Because of the inherent limitations of an assurance engagement, together with the internal control structure, it is possible that fraud, error or non-compliance with clauses 11.5 and 11.6 of the Determination may occur and not be detected. A reasonable assurance engagement throughout the assessment period does not provide assurance on whether compliance with clauses 11.5 and 11.6 of the Determination will continue in the future.

Restricted use

This report has been prepared for use by the Directors of the Company and the Commerce Commission in accordance with clause 11.5 (e) of the Determination and is provided solely for the purpose of establishing whether the compliance requirements have been met. We disclaim any assumption of responsibility for any reliance on this report to any person other than the directors of the Company and the Commerce Commission, or for any other purpose than that for which it was prepared.

Independence and quality control

We complied with the Auditor-General's:

- independence and other ethical requirements, which incorporate the requirements of Professional and Ethical Standard 1 *International Code of Ethics for Assurance Practitioners (including International Independence Standards) (New Zealand)* (PES 1) issued by the New Zealand Auditing and Assurance Standards Board; and
- quality management requirements, which incorporate Professional and Ethical Standard 3 *Quality Management for Firms that perform Audits or Reviews of Financial Statements, or other Assurance or Related Services Engagements* (PES 3) issued by the New Zealand Auditing and Assurance Standards Board. PES 3 requires our firm to design, implement and operate a system of quality management including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

The Auditor-General, and his employees, and PricewaterhouseCoopers and its partners and employees may deal with the Company and its subsidiaries on normal terms within the ordinary course of trading activities of the Company. Other than any dealings on normal terms within the ordinary course of trading activities of the Company, this engagement, the assurance engagement on the Information Disclosures and the annual audit of the Company's financial statements and performance information, we have no relationship with, or interests in, the Company and its subsidiaries.

Philippa Cameron
PricewaterhouseCoopers
On behalf of the Auditor-General
Auckland, New Zealand
31 August 2023