

Customised Price-Quality Path Annual Compliance Statement

Powerco Electricity Distribution Services



Assessment Period: 01 April 2022 – 31 March 2023

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1. Summary

Powerco is required to annually report on compliance with its price-quality path

Powerco Limited's electricity distribution business ("Powerco") is subject to regulation under the Commerce Act 1986. The Commerce Commission ("Commission") has set a customised price-quality path (CPP) which applies to Powerco from 1 April 2018 to 31 March 2023. This 2023 assessment is the fifth and final assessment period under the CPP.

The CPP requirements are set out in the Powerco Limited Electricity Distribution Customised Price-Quality Path Determination 2018¹ ("Determination"). The Determination requires Powerco to provide an annual compliance statement ("Statement") to the Commission. In November 2020², the disclosure date for the 2021, 2022, and 2023 assessments was amended to be within five months following the end of the disclosure year. This aligns with the requirements for other information disclosures, allowing a more efficient audit and production process. It differs from the original Determination which specifies a 50-day timeframe.

This Statement confirms that Powerco:

- complies with the requirement to calculate the wash-up amount for the assessment period (section 2)
- partially complies with the quality standards for the assessment period (section 3)
- has not entered into any agreement with another EDB or Transpower for an amalgamation, merger, major transaction or non-reopener transaction in the assessment period (section 4)

Powerco is available to assist the Commission with its review of this Statement and will provide any additional information as requested.

Powerco published this Statement on 31 August 2023. A copy is available at Powerco's principal office (Powerco, 35 Junction Street, New Plymouth). The Statement is published on Powerco's website (<u>www.powerco.co.nz</u>) and additional copies can be provided on request.

¹ https://comcom.govt.nz/__data/assets/pdf_file/0026/216863/Powerco-Limited-electricity-distribution-customised-price-quality-path-determination-2018-consolidated-20-May-2020-20-May-2020.pdf

² https://comcom.govt.nz/__data/assets/pdf_file/0024/227616/2020-NZCC-23-Powerco-Limited-electricity-distribution-customised-pricequality-path-annual-compliance-statement-due-date-amendment-determination-2020-4-November-2020.pdf



2. Assessment against the price path

Each year Powerco calculates an annual 'wash-up' of the difference between revenue received and allowable revenue adjusted for actual CPI, pass-through costs and recoverable costs. The purpose of the wash-up mechanism is to restore Powerco to the position it would have been in had the forecasted quantities, pass through and recoverable costs, and level of CPI been made with perfect foresight, taking account of the time value of money.

The wash-up amount for this year-ending 2023 assessment period will be included in the calculation of allowable revenue and price-setting for the year ending 2025. The two-year differential reflects the timing between the end of this assessment period (March), finalising actual revenues (around September) and setting prices for the following year (occurs around December).

For presentation purposes, the tables set out in this section are aggregates of the price and quantity information. While dollar balances are rounded to the nearest thousand dollars, the underlying compliance calculations apply the whole number and are reflected in the totals The rounding of each component may result in tables which look like they don't add up - this is just the rounding effect.

2.1 Calculation of the revenue wash-up amount

The Determination requires the wash-up amount to be calculated as demonstrated by table 1. The three components of this calculation are described in more detail throughout section 3 of this Statement.

Table 1: Wash-up amount calculation

Calculation components	\$000
Actual allowable revenue	425,794
Less: Actual revenue	393,637
Less: Revenue forgone	-
Wash-up amount 2023	32,158

Calculation specified in Schedule 1.5 of the Determination

The positive wash-up amount indicates an under recovery of revenue. This will be recoverable in FY25 by adding it to allowable revenue, adjusting for the time-value of money.



2.2 Calculation of allowable revenue

The first step is to calculate what should have been allowed for 2023: actual allowable revenue. The Determination defines actual allowable revenue as in table 2. The calculation of each component is explained in subsequent sections.

Table 2: Actual allowable revenue calculation

Calculation components	\$000
[a] Actual net allowable revenue	271,885
[b] Plus: Actual pass-through costs	4,329
[c] Plus: Actual recoverable costs	106,455
[d] Plus: Revenue wash-up draw down amount	43,124
Actual allowable revenue	425,794

Specified in Schedule 1.5 of the Determination

[a] Actual net allowable revenue

Actual net allowable revenue is the maximum revenue, excluding pass-through costs and recoverable costs and any wash-up draw down amount, that Powerco can earn in the assessment period.

[b][c] Actual pass-through and recoverable costs

Tables 3 and 4 contains actual pass-through and recoverable costs for 2023, with a comparison to forecast for reference. Actual pass-through costs were \$400k lower than forecast driven by differences in regulatory levies. These can be difficult to forecast given the mismatched financial years along them being based on whole-of-sector inputs and actions e.g., generation and demand.

Table 3: Actual and forecast pass-through costs

Pass-through costs	Actual \$000	Forecast \$000	Variance \$000
EA levies	989	1,172	(183)
Commerce Commission levies	951	1,112	(161)
UDL levies	218	218	-
Council rates	2,171	2,227	(56)
Total	4,329	4,729	(400)



Table 4: Actual and forecast recoverable costs

Recoverable costs	Actual \$000	Forecast \$000	Variance \$000
Opex IRIS incentive adjustment	(836)	(836)	0
Capex IRIS incentive adjustment	(683)	(683)	0
Transpower connection charges	16,451	16,467	(16)
Transpower interconnection charges	77,441	77,441	0
Transpower new investment charges	7,238	7,238	0
Avoided Costs of Transmission (ACOT)	5,129	5,129	0
Quality incentive adjustment	1,103	1,103	0
Capex wash-up adjustment	612	612	0
Total	106,455	106,471	(16)

For the 2023 assessment period actual recoverable costs were \$16k lower than forecast, driven by the difference between the actual and forecast Transpower connection charges.

[d] Revenue wash-up draw down amount

The revenue wash-up draw-down amount represents any under or over recovery of revenue from two years prior (2021). It is calculated in accordance with schedules 1.5 and 1.6 of the Determination. The 'revenue wash-up draw down amount' for this fifth assessment period (2023) is \$43.124m, derived as in table 5.

Table 5: 2023 revenue wash-up draw-down amount

Calculation components	\$000
Wash-up amount 2021	37,822 ³
Plus: adjustment for 67th percentile estimate of post-tax WACC	5,302
Revenue wash-up draw down amount 2023	43,124

2.3 Calculation of actual revenue

Actual revenue is calculated in table 6 as:

- actual revenue from prices is the sum of each price multiplied by each corresponding actual quantity and,
- other regulated income is income associated with the supply of electricity distribution services, other than through prices, investment related income, capital contributions, or vested assets. Notably, other regulatory income includes gains and losses on asset disposals.

³ See table 1 of the 2021 Annual compliance statement https://www.powerco.co.nz/who-we-are/disclosures-and-submissions/electricity-disclosures



Table 6: Actual revenue calculation

Calculation components	\$000
Actual revenue from prices	390,887
Plus: Other regulated income	2,750
Actual revenue	393,637

Specified in clause 4.2 of the Determination

Attachment A contains all schedules of prices and actual quantities used to calculate actual revenue from prices. These schedules total \$390.730m, \$157,000 higher than actual revenue from prices disclosed above. The difference relates to prior period revisions that are receipted in the current year. The actual revenue of \$390.887m reconciles to the general ledger.

Table 7 summarises the sources of other regulated income.

Table 7: Other regulated income

Calculation components	\$000
Gains/losses on asset disposals	1,089
Other regulated income	1,661
Total other regulated income	2,750

The value of gains and losses on disposals is consistent with the value reported in the 2023 Information Disclosure. Schedule 15 in that disclosure includes a discussion about the underlying methodology used to calculate this figure.



2.4 Calculation of revenue foregone

Revenue forgone for 2023 is zero due to the revenue reduction percentage for 2023 being 0.47%, which is below the 20% threshold (table 8).

Table 8: Revenue reduction percentage calculation

Calculation components	\$000
Actual revenue from prices	390,887
Forecast revenue from prices	392,725
Revenue reduction percentage	0.47%
Revenue forgone	Nil

The percentage is specified in clause 4.2 of the Determination as 1 - (actual revenue from prices / forecast revenue from prices)

The revenue forgone component of the wash-up calculation places a cap on the amount of revenue that may be recovered through the wash-up mechanism years. This can occur if there is a reduction in revenue from prices exceeding 20% of allowable revenue. This would most likely occur due to a significant reduction in demand.



3. Assessment against the quality path

This section outlines how Powerco has complied with the quality standards set in Powerco's CPP quality path. Separate annual planned and unplanned quality standards apply. Cumulative (5-year) requirements also apply in 2023, the last year of the CPP regulatory period.

For presentation purposes, the tables set out in this section are aggregates of the SAIDI and SAIFI information. While results are rounded to three decimal places, the underlying calculations apply the whole number.

3.1 Planned interruptions

Planned SAIDI and SAIFI comprises all planned Class B interruptions on Powerco's network for the assessment period. Clauses 9.1 and 9.5 of the Determination specify that compliance with the planned interruptions quality standard can be met by passing an annually or multi-year test. Clause 9.6 of the determination specifies that compliance for the fifth assessment period includes an additional test of the cumulative total across the five assessment periods.

- **Annual:** the assessed planned SAIDI and SAIFI values for the current assessment period do not exceed the reliability limits for the current assessment period; or
- **Multi-year:** the assessed planned SAIDI and SAIFI values for each of the two preceding assessment periods do not exceed the reliability limits for those preceding assessment periods.
- **5-year:** the sum of assessed planned SAIDI and SAIFI values accumulated through the first to fifth assessment periods must not exceed the accumulated reliability limits.

The requirement to comply with the multi-year assessment only applies if Powerco exceeds the limit for the annual 2023 assessment. Powerco complies with the annual assessment but also provides the multi-year assessment data for reference.

Compliance with the annual assessment

Table 9: 2023 Planned interruptions annual reliability assessment

CPP requirement	Results	Assessment
Assessed planned SAIDI \leq Limit	94.396 < 99.292	Complies
Assessed planned SAIFI \leq Limit	0.399 < 0.414	Complies

Compliance with the multi-year assessment

Table 10: Planned interruptions multi-year reliability assessment

CPP requirement	Assessed planned SAIDI		Assessed planned SAIFI	
2023	94.396	\checkmark	0.399	\checkmark
2022	95.740	\checkmark	0.398	 Image: A set of the set of the
2021	88.648	 Image: A second s	0.374	\checkmark



Compliance with the 5-year assessment

Table 11: Planned interruptions 5-year reliability assessment

CPP requirement	Results	Assessment
Accumulated assessed planned SAIDI \leq Limit	432.772 < 454.746	Complies
Accumulated assessed planned SAIFI ≤ Limit	1.926 < 1.935	Complies

Schedule 3.1 of the Determination specifies the planned reliability limits. These metrics are included in Attachment B of this document.

3.2 Unplanned interruptions

Powerco does not comply with the unplanned interruptions quality assessment on the basis of the multi-year assessment. Clauses 9.7 and 9.10 of the Determination specify that compliance with the unplanned interruptions quality standard can be met by passing an annually or multi-year test:

- **Annual assessment**: the assessed unplanned SAIDI and SAIFI values for the current assessment period does not exceed the reliability limits for the current assessment period; or
- **Multi-year assessment:** the assessed unplanned SAIDI and SAIFI values for each of the two preceding assessment periods does not exceed the reliability limits for those preceding assessment periods.

Unplanned SAIDI non-compliant (breaches the multi-year assessment). Unplanned SAIDI exceeds the annual limit (Table 12). Compliance is not achieved because the multi-year test is not passed (Table 13). Annual unplanned SAIDI limits were exceeded for both FY22 and FY23, which is 2 out of 3 years.

Unplanned SAIFI is compliant in 2023. Unplanned SAIFI exceeds the annual limit (Table 12). However, compliance is achieved by passing the multi-year SAIFI assessment (Table 13). Annual unplanned SAIFI was compliant for both FY22 and FY21 (the two years preceding FY23).

Compliance with the annual assessment

Table 12: 2023 Unplanned interruptions annual reliability assessment

CPP requirement	Results	Assessment
Assessed unplanned SAIDI \leq Limit	230.216 > 175.941	Exceed
Assessed unplanned SAIFI ≤ Limit	2.227 > 2.193	Exceed



Compliance with the multi-year assessment

Table 13: Unplanned interruptions multi-year reliability assessment

CPP requirement	Assessed unplann	ed SAIDI	Assessed unplanned SAIFI			
2023	230.216	×	2.227	×		
2022	201.078	×	2.025	\checkmark		
2021	168.962	~	1.836	\checkmark		

Schedules 3.2 and 4 of the Determination specify the unplanned reliability limits, unplanned boundary values, caps, collars and targets for the assessment period. These metrics are included in Attachment B of this Statement.

3.3 Unplanned SAIDI and SAIFI calculations

Unplanned SAIDI

To calculate unplanned SAIDI, the assessment dataset is populated by listing all unplanned (Class C) interruptions on Powerco's network for the assessment period. Unplanned SAIDI is normalised for major event day ("MED").

A MED occurs when the daily SAIDI value for unplanned interruptions exceeds Powerco's SAIDI boundary value. The SAIDI boundary value for Powerco is specified in Schedule 3.2 of the Determination. For the current regulatory period the SAIDI boundary value is 11.710 minutes.

Table 14: Calculating Powerco's unplanned SAIDI assessment values

Calculation components	Result
Assessment dataset for SAIDI Total unplanned SAIDI for the assessment period	395.732
Normalise assessment dataset (3 MEDs) For any day in the assessment dataset where the daily unplanned SAIDI value is greater than the SAIDI unplanned boundary value, replace the daily unplanned SAIDI value with the SAIDI unplanned boundary value.	165.516
SAIDI unplanned	230.216

Major event days in the assessment period

There were three SAIDI major event days in the assessment period:

Interruption date	Pre-normalised unplanned SAIDI	Normalised SAIDI (boundary value)	SAIDI adjustment for normalisation
12 February 2023	71.740	11.710	60.030
13 February 2023	80.632	11.710	68.922



Interruption date	Pre-normalised	Normalised SAIDI	SAIDI adjustment for
	unplanned SAIDI	(boundary value)	normalisation
14 February 2023	48.274	11.710	36.564

Further information on major event days is included in Attachment C - Commentary on major event days

Unplanned SAIFI

To calculate unplanned SAIFI, the assessment dataset is populated by listing all unplanned (Class C) interruptions on Powerco's network for the assessment period. Unplanned SAIFI is normalised for MEDs.

A MED occurs when the daily SAIFI value for unplanned interruptions exceeds Powerco's SAIFI Boundary Value of 0.064.

Table 15: Calculating Powerco's unplanned SAIFI assessment values

Calculation components	Result
Assessment dataset for SAIFI Total unplanned SAIFI for the assessment period	2.466
Normalise assessment dataset (4 MED) For any day in the assessment dataset where the daily unplanned SAIFI value is greater than the SAIFI unplanned boundary value, replace the daily unplanned SAIFI value with the SAIFI unplanned boundary value.	0.239
SAIFI unplanned	2.227

Major event days in the assessment period

There were four SAIFI major event days in the assessment period.

Interruption date	Pre-normalised unplanned SAIFI	Normalised SAIFI (boundary value)	SAIFI adjustment for normalisation
7 June 2022	0.098	0.064	0.034
12 February 2023	0.153	0.064	0.089
13 February 2023	0.120	0.064	0.056
14 February 2023	0.123	0.064	0.059



3.4 Reliability policies and procedures

Recording interruptions

Powerco has well developed processes to capture outage / interruption information and ensure the accuracy of these records. Key aspects of this calculation include:

- The underlying reliability records are created and maintained by Powerco's Network Operations Team which initiate and manage all fault reports.
- The start of an interruption is recorded when there is a SCADA alarm for assets that have a real time link to Powerco's SCADA system. For other assets, which is the majority on our network, the interruption is recorded when Powerco is first notified of the fault by retailers or field staff.
- All fault reports contain switching sequences and where available SCADA printouts of transformers and areas affected, along with any other relevant information to support accurate evaluation.
- Details on the fault report are entered into the Powerco Outage Management System ("OMS") database. Information recorded includes the date, time and cause of the fault, voltage of the faulted circuit and the transformers affected.
- Powerco notes the introduction of new systems to assist with the management of outages and interruptions during the 2015 assessment period. This OMS provides enhanced oversight and recording of outages, enhancing the robustness of recording processes.
- The faults recorded may be due to third party causes (transmission problems, generation problems, or the actions of other electricity industry participants or third parties) this information is also recorded in the OMS database but excluded for compliance reporting.
- When power is restored for less than one minute following an initial interruption the successive interruption is not counted as a new SAIFI event. The duration of the successive interruption is added to the duration of the initial interruption. This is consistent with prior year treatment.
- When power is restored for one minute or longer following an initial interruption the successive interruption is counted as a new SAIFI event. The duration of the successive interruption is assigned to the new SAIDI event. This is consistent with prior year treatment.

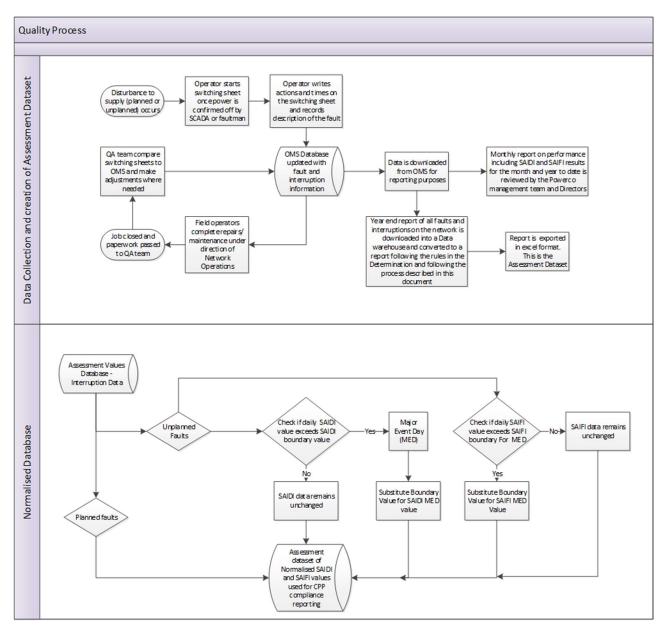
Calculating SAIDI and SAIFI

In utilising the input data noted above, Powerco applies processes to ensure compliance with Schedules 3.1 and 3.2 of the Determination, as shown diagrammatically in Figure 1. The following key calculation steps are applied:

- To calculate SAIDI and SAIFI customer connection numbers ("ICPs") are calculated from the Geographic Information System ("GIS") for the transformers affected. ICPs are updated to the GIS daily from the Electricity Registry.
- The customer connection number used in the annual calculation of SAIDI and SAIFI is the average of customer numbers at the end of each month of the assessment year. The sum of all customer minutes interrupted is divided by the average customer connection numbers to derive the annual SAIDI minutes. The sum of the number of customer interruptions is divided by the average customer connection numbers to derive the annual SAIFI value.
- Results are calculated using the outage / interruption records in OMS noting a range of global corrections and refinements are required as set out below.
- As specified by the Determination, data is limited to include only Powerco interruptions that cause a cessation of electricity for a period of at least one minute, affect at least one consumer and occur on an electricity line capable of conveying electricity at a voltage of at least 3.3 kV.
- The unplanned data is normalised to account for the impact of MEDs.



Figure 1: Powerco's process to create the normalized dataset





4. Major transactions

Powerco has not entered into any agreement with another EDB or Transpower for an amalgamation, merger, major transaction or non-reopener transaction in the assessment period.



5. Directors' certificate

Director's Certificate for the Customised Price-quality Path Annual Compliance Statement For the period 1 April 2022 – 31 March 2023

I, _____Paul Callow ______, being a director of Powerco certify that, having made all reasonable enquiry, to the best of my knowledge and belief, the attached annual compliance statement of Powerco, and related information, prepared for the purposes of the *Powerco Electricity Distribution Customised Price-Quality Path Determination 2018* has been prepared in accordance with all the relevant requirements.

Director

22 / 08 / 2023

Date

6. Auditor's report

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INDEPENDENT ASSURANCE REPORT TO THE DIRECTORS OF POWERCO LIMITED AND THE COMMERCE COMMISSION

Report on Powerco Limited's Electricity Customised Price-Quality Path Annual Compliance Statement 2023

We have conducted a reasonable assurance engagement on Powerco Limited's ('the Company') compliance with the Powerco Limited Electricity Distribution Customised Price-Quality Path Determination 2018 (consolidated 20 May 2020) ('the Determination') in relation to the preparation of Sections 1, 2, 3, 4 and 5 of the Company's Annual Compliance Statement ('the Annual Compliance Statement') on pages 3 to 16 for the period 1 April 2022 to 31 March 2023.

Opinion

In our opinion:

- the Company has complied, in all material respects, with the Determination in relation to the Company's
 preparation of the Annual Compliance Statement; and
- as far as appears from an examination of the records, the information used in the preparation of the Annual Compliance Statement has been properly extracted, in all material respects, from the Company's accounting and other records, sourced from its financial and non-financial systems.

Basis for Opinion

We conducted our engagement in accordance with the Standard on Assurance Engagements 3100 (Revised): *Compliance Engagements* ('SAE 3100 (Revised)') and the International Standard on Assurance Engagements (New Zealand) 3000 (Revised): *Assurance Engagements Other than Audits or Reviews of Historical Financial Information* ('ISAE (NZ) 3000 (Revised)'), both issued by the New Zealand Auditing and Assurance Standards Board.

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

Board of Directors' Responsibility

The Board of Directors is responsible on behalf of the Company for the preparation of the Annual Compliance Statement in accordance with the Determination. This responsibility includes the design, implementation and maintenance of internal control relevant to the preparation of the Annual Compliance Statement in accordance with the Determination.

Our Independence and Quality Control

We have complied with the independence and other ethical requirements of the 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, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

Other than in our capacity as auditor and the provision of other assurance services including the audit of financial statements, the audit of regulatory disclosure statements, and greenhouse gas assurance, we have no relationship with or interests in the Company. These services have not impaired our independence as auditor of the Company as required by the Determination.

The firm applies Professional and Ethical Standard 3: Quality Management for Firms that Perform Audits or Reviews of Financial Statements, or Other Assurance or Related Services Engagements, which requires the firm to design, implement and operate a system of quality management including policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.





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Our Responsibility

Our responsibility is to express an opinion on whether the Company has complied, in all material respects, with the Determination in relation to the preparation of the Annual Compliance Statement. SAE 3100 (Revised) and ISAE (NZ) 3000 (Revised) requires that we plan and perform our procedures to obtain reasonable assurance that the Company has complied, in all material respects, with the Determination in preparing its Annual Compliance Statement.

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

In making those risk assessments, we consider internal control relevant to the Company's preparation of the Annual Compliance Statement in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control. A reasonable assurance engagement also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates, as well as evaluating the overall presentation of the Annual Compliance Statement.

Our procedures included:

- examining, on a test basis, evidence relevant to the amounts and disclosures contained on pages 3 to 16 of the Annual Compliance Statement in relation to the Customised Price Path Compliance Information and Quality Compliance Information set out in Clauses 8 and 9 of the Determination respectively;
- assessing significant estimates and judgements, if any, made by the Company in the preparation of the Annual Compliance Statement;
- assessing whether the basis of preparation of the Annual Compliance Statement has been adequately disclosed; and
- ensuring that the information used in preparing the Annual Compliance Statement has been properly extracted from the Company's accounting and other records, sourced from its financial and non-financial systems.

These procedures have been undertaken to form an opinion as to whether the Company has complied, in all material respects, with the Determination in preparing the Annual Compliance Statement for the period 1 April 2022 to 31 March 2023.

Inherent Limitations

Because of the inherent limitations of an assurance engagement, together with the inherent limitations of any system of internal control, it is possible that fraud, error or non-compliance may occur and not be detected. As the procedures performed for this engagement are not performed continuously throughout 1 April 2022 to 31 March 2023 and the procedures performed in respect of the Company's compliance with the Determination are undertaken on a test basis, our assurance engagement cannot be relied on to detect all instances where the Company may not have complied with the Determination. We did not examine every transaction, adjustment or event underlying the Compliance Statement nor do we guarantee complete accuracy of the Annual Compliance Statement. We also did not evaluate the security and controls over the electronic publication of the Compliance Statement. The opinion expressed in this report has been formed on the above basis.

Use of Report

This report is provided solely for your use and solely for the purpose of Clause 11.5(e) of the Determination. However, we understand that a copy of this report has been requested by the Commerce Commission solely for the purpose of above. We agree that a copy of our report may be provided to the Commerce Commission. This report



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is not to be used for any other purpose, recited or referred to in any document, copied or made available (in whole or in part) to any other person without our prior written consent. We accept or assume no duty, responsibility or liability to any party, other than you, in connection with the report or this engagement including without limitation, liability for negligence in relation to the opinion expressed in our report.

Deloitte Limited

Deloitte Limited Auckland, New Zealand 22 August 2023



7. Appendices

The following list of appendices provides further information supporting this compliance statement.

Attachment reference	Information provided
A – Price and actual quantities for the assessment period	Details prices and corresponding actual quantities for each tariff group across Powerco's Eastern and Western networks. The product of prices and actual quantities is Powerco's actual revenue from prices for the assessment period in section 2 of this document.
B – Reliability limits, boundary values, target, cap and collar	Lists the SAIDI and SAIFI limits, boundary values used to determine major event days, target, cap and collar values as specified in the Determination.
C – Commentary on major event days	Provides further detail on reliability and major event days.
D – Exceeding the unplanned interruptions	Provides reasons for non-compliance and actions taken to mitigate.
E – Compliance statement references	Notes the compliance requirements from the Determination and where they are evidenced in this Statement.



Attachment A – Prices and actual quantities for the assessment period

Western Network					Distribution Prices FY23 (Prices 1 April 2022 to 31 March 202							Individually		
	Western	network			Fixed		Variable							ced
				Net	work Asset Ch	arge	v	olume Charg	le	D	emand Charg	e		
<u>Tariff Group</u>	GXP Group	GXP		ICP \$/Month	ICP cents/day	CT/VT Charge (\$/day)	Uncontrolled c/kWh	On Peak c/kWh	Off Peak c/kWh	Dist-\$/kW /Month	Trans-\$/kW /Month	\$/kVAr /Month	Indirect Fixed (\$/ICP)	Non-ICP Fixed (\$/day)
Residential+Small	Commercial													
E1C	A	Brunswick	BRK		15.00			7.1100	5.4800					
E1UC	A	Brunswick	BRK		30.00			7.1100	5.4800					
E1C	A	Bunnythorpe	BPE		15.00			7.1100	5.4800					
E1UC	A	Bunnythorpe	BPE		30.00			7.1100	5.4800					
E1C	A	Carrington	CST		15.00			7.1100	5.4800					
E1UC	A	Carrington	CST		30.00			7.1100	5.4800					
E1C E1UC	A	Huirangi	HUI HUI		15.00			7.1100 7.1100	5.4800 5.4800					
E10C	A	Huirangi	LTN		15.00			7.1100	5.4800					
E1UC	A	Linton	LTN		30.00			7.1100	5.4800					
E10C	A	Linton Moturoa / New Plyn			15.00		••••••	7.1100	5.4800	•••••				
E1UC	A	Moturoa / New Plyn			30.00			7.1100	5.4800					
E1C	A	Stratford	SFD		15.00			7.1100	5.4800					
E1UC	A	Stratford	SFD		30.00			7.1100	5.4800					1
E1C	A	Wanganui	WGN		15.00			7.1100	5.4800					[
E1UC	A	Wanganui	WGN		30.00			7.1100	5.4800					
E1C	В	Greytown	GYT		15.00			9.1800	7.4200					
E1UC	B	Greytown	GYT		30.00			9.1800	7.4200					
E1C	B	Hawera	HWA		15.00			9.1800	7.4200					
E1UC	В	Hawera	HWA		30.00		-	9.1800	7.4200					
E1C	В	Mangamaire	MGM		15.00			9.1800	7.4200					
E1UC	B	Mangamaire	MGM		30.00			9.1800	7.4200					
E1C	В	Marton	MTN		15.00		1	9.1800	7.4200					
E1UC	В	Marton	MTN		30.00		1	9.1800	7.4200					
E1C	В	Masterton	MST		15.00		I	9.1800	7.4200					
E1UC	В	Masterton	MST		30.00		I	9.1800	7.4200					
E1C	В	Mataroa	MTR		15.00			9.1800	7.4200					
E1UC	В	Mataroa	MTR		30.00			9.1800	7.4200					
E1C	B	Ohakune	OKN		15.00			9.1800	7.4200					
E1UC	В	Ohakune	OKN		30.00			9.1800	7.4200					
E1C	B	Opunake	OPK		15.00			9.1800	7.4200					
E1UC E1C	B B	Opunake	OPK WVY		30.00			9.1800 9.1800	7.4200					
E1UC	B	Waverley Waverley	WVY		30.00			9.1800	7.4200					
2100	U	waveney	0001		50.00			5.1000	1.4200					i
Medium/Large Co	mmercial													
E100	A	Carrington	CST		880.0000	4.5400	0.5000			0.3317		7.0000		
E100	A	Huirangi	HUI		880.0000	4.5400	0.5000			0.3317		7.0000		
E100	A	New Plymouth	NPL		880.0000	4.5400	0.5000			0.3317		7.0000		
E100 E100	A B	Stratford Hawera	SFD HWA		880.0000 880.0000	4.5400 4.5400	0.5000			0.3317		7.0000		
E100	C	Hawera Waverley	HWA WVY		880.0000	4.5400	0.5000			0.5716		7.0000		
E100	D	Opunake	OPK		880.0000	4.5400	0.5000			0.4074		7.0000		
E100	E	Brunswick	BRK		880.0000	4.5400	0.5000			0.4351		7.0000		
E100	E	Wanganui	WGN		880.0000	4.5400	0.5000			0.3409		7.0000		
E100	 F	Marton	MTN		880.0000	4.5400	0.5000			0.4135		7.0000		
E100	G	Mataroa	MTR		880.0000	4.5400	0.5000			0.6419		7.0000		[
E100	G	Ohakune	OKN		880.0000	4.5400	0.5000			0.6419		7.0000		[
E100	Н	Masterton	MST		880.0000	4.5400	0.5000			0.4748		7.0000		
E100	Н	Greytown	GYT		880.0000	4.5400	0.5000			0.4748		7.0000		1
E100	1	Bunnythorpe	BPE		880.0000	4.5400	0.5000			0.2996		7.0000		
E100		Linton	LTN		880.0000	4.5400	0.5000			0.2996		7.0000		
E100	J	Mangamaire	MGM		880.0000	4.5400	0.5000			0.4433		7.0000		1
W50		Asset Based										7.0000	45,403.1363	
SPECIAL		Asset Based										7.0000	148,601.9133	



			I		Transmission Prices FY23 (Prices 1 April 2022 to 31 March 2023)									
	Western	Network			Fixed				Vari	able			Indivi Pri	dually ced
				Net	twork Asset Ch	arge	V	olume Charg	e	0	emand Charg	e		
Tariff Group GXP Gro		GXP		ICP \$/Month	ICP h cents/day	CT/VT Charge (\$/day)	Uncontrolled c/kWh	On Peak c/kWh	Off Peak c/kWh	Dist-\$/kW /Month	Trans-\$/kW /Month	\$/kVAr /Month	Indirect Fixed (\$/ICP)	Non-ICP Fixed (\$/day)
Residential+Sma	II Commercial													
E1C	A	Brunswick	BRK					5.8100	1.0600					
E1UC	A	Brunswick	BRK					5.8100	1.0600					
E1C	A	Bunnythorpe	BPE					5.8100	1.0600					
E1UC	A	Bunnythorpe	BPE					5.8100	1.0600					
E1C	A	Carrington	CST					5.8100	1.0600					
E1UC	A	Carrington	CST					5.8100	1.0600					
E1C	A	Huirangi	HUI					5.8100	1.0600					
E1UC	A	Huirangi	HUI					5.8100	1.0600					
E1C	A	Linton	LTN					5.8100	1.0600					
E1UC	A	Linton	LTN					5.8100	1.0600					
E1C	A	Moturoa / New Plymou						5.8100	1.0600					
E1UC	A	Moturoa / New Plymou					1	5.8100	1.0600					
E1C	A	Stratford	SFD					5.8100	1.0600					
E1UC	A	Stratford	SFD					5.8100	1.0600					
E1C	A	Wanganui	WGN					5.8100	1.0600					
E1UC	A	Wanganui	WGN					5.8100	1.0600					
		-												
E1C	В	Greytown	GYT					5.3900	1.0600					
E1UC	B	Greytown	GYT				1	5.3900	1.0600					1
E1C	B	Hawera	HWA					5.3900	1.0600					[
E1UC	B	Hawera	HWA					5.3900	1.0600					
E1C	B	Mangamaire	MGM	••••••				5.3900	1.0600			••••••		
E1UC	B	Mangamaire	MGM					5.3900	1.0600					
E1C	B	Marton	MTN	••••••				5.3900	1.0600			••••••		
E1UC	B	Marton	MTN					5.3900	1.0600					
E1C	B	Masterton	MST	••••••				5.3900	1.0600					
E1UC	B	Masterton	MST	••••••				5.3900	1.0600					
E1C	В	Mataroa	MTR	••••••			•	5.3900	1.0600			••••••		
E1UC	B	Mataroa	MTR	••••••			•	5.3900	1.0600			••••••		
E1C	В	Ohakune	OKN				•	5.3900	1.0600			••••••		
E1UC	B	Ohakune	OKN	••••••				5.3900	1.0600			••••••		
E1C	B	Opunake	OPK	••••••			•	5.3900	1.0600			••••••		
E1UC	В	Opunake	OPK					5.3900	1.0600					
E1C	B	Waverley	WVY	••••••				5.3900	1.0600			••••••		
E1UC	B	Waverley	WVY	••••••				5.3900	1.0600					
	-													
Medium/Large Co	ommercial													
E100	A	Carrington	CST								0.34580			
E100	A	Huirangi	HUI								0.34580			
E100	A	New Plymouth	NPL								0.34580			
E100	A	Stratford	SFD								0.34580			[
E100	B	Hawera	HWA				1				0.34580			[
E100	C	Waverley	WVY				1				0.34580			[
E100	D	Opunake	OPK								0.34580			
E100	E	Brunswick	BRK								0.34580			[
E100	E	Wanganui	WGN								0.34580			
E100	F	Marton	MTN								0.34580			[
E100	G	Mataroa	MTR								0.34580			
E100	G	Ohakune	OKN								0.34580			
E100	Н	Masterton	MST								0.34580			
E100	н	Greytown	GYT								0.34580			
E100		Bunnythorpe	BPE								0.34580			[
E100		Linton	LTN								0.34580			
E100	J	Mangamaire	MGM								0.34580			
		2												
W50		Asset Based											20,944.4287	
SPECIAL		Asset Based											122,642.2894	[



	Wester	n Network						0	Quantities FY	(23 (Period 1 A	April 2022 to 31	March 2023)					
Tariff Group		GXP		ICP No.'s (Average)	ICP Days	ICP Months	CT/VTs	kWh Uncontrolled	kWh Day	kWh Night	kWh On peak	kWh Off Peak	kW Demand (AMD for E100)	OPD (kW)	kVAr Demand pa	Base Power Units (Average)	Non-ICP Days
Deside estate i																	
E1C	Small Comme	Brunswick	BRK	5,773	2,107,009	-		-	19,703,012	10,268,463	13,204,425	29,971,475	125,948	-			
E1UC	A	Brunswick	BRK	6,884	2,512,516	-	·······	-	24,465,626	12,750,556	16,396,200	37,216,182	156,392	-	-	-	-
E1C	A	Bunnythorpe	BPE	14,552	5,311,337	-	-	-	62,584,378	31,700,048	40,746,325	94,284,426	316,945	-	-	-	-
E1UC	Α	Bunnythorpe	BPE	19,823	7,235,473	· · · · ·			89,674,576	45,421,693	58,383,730	135,096,269	454,138	······		· · · · ·	· · · ·
E1C E1UC	A	Carrington Carrington	CST CST	11,221 17,880	4,095,774 6,526,110	·····		······	39,896,500 68,451,288	19,326,003 33,158,041	25,879,158 44,401,432	59,222,503 101,609,329	200,501 344,005	-			
E1C	A	Huirangi	HUI	4,289	1,565,437	-		-	18,167,494	9,589,465	11,705,831	27,756,959	91,807	-		-	
E1UC	A	Huirangi	HUI	6,057	2,210,632	-	-	-	27,565,445	14,550,045	17,761,197	42,115,490	139,298	-	-	-	-
E1C	Α	Linton	LTN	7,316	2,670,512	-	-	-	29,488,444	15,345,548	18,743,178	44,833,992	158,040	-	-	-	-
E1UC	A	Linton	LTN	11,125	4,060,788	-			45,707,594	23,785,863	29,052,247	69,493,457	244,965	·		-	-
E1C E1UC	A	New Plymouth New Plymouth	NPL		•	-		-			-		-	-	•		-
E10C	A	Stratford	SFD	3,740	1,365,196				18,012,157	10,113,358	11,536,634	28,125,514	96,833	-	·····		
E1UC	A	Stratford	SFD	4,716	1,721,192	-		-	23,858,945	13,396,177	15,281,453	37,255,123	128,266	-	-		-
E1C	Α	Wanganui	WGN	4,459	1,627,525	-		3	16,074,708	7,871,419	9,973,665	23,946,127	99,716		*:	-	-
E1UC	А	Wanganui	WGN	5,494	2,005,459	-	-	-	22,437,748	10,987,254	13,921,658	33,425,002	139,187	-	-	-	-
E1C	в	Greytown	GYT	2,992	1,091,950	-		-	12,230,121	7,280,760	7,604,748	19,510,881	61,643				
E1UC	В	Greytown	GYT	4,541	1,657,482		•	-	20,496,299	12,201,729	12,744,696	32,698,028	103,306				-
E1C	В	Hawera	HWA	2,722	993,661	-	-	-	10,616,289	6,173.432	6.745.365	16,789,721	53,455	-	-	-	-
E1UC	В	Hawera	HWA	6,647	2,426,241	-		-	31,395,567	18,256,700	19,948,077	49,652,268	158,084	-	-	-	-
E1C	В	Mangamaire	MGM	1,886	688,471				7,776,743	4,154,386	5,071,618	11,931,129	38,041				-
E1UC E1C	B	Mangamaire Marton	MGM MTN	2,460	897,893 1,360,810				10,432,256	5,572,978 8,526,573	6,803,416 9,828,725	16,005,234 24,073,687	51,031 77,167	······			
EIUC	B	Marton	MTN	2.608	951,925			- -	12,131,708	6.653.447	7.669.540	18,785,155	60.215				
E1C	B	Masterton	MST	9,447	3,448,193	-		-	36,089,015	20,208,594	23,430,448	56,297,609	181.748	-	-		
E1UC	В	Masterton	MST	9,614	3,509,180	-	-	-	39,794,853	22,283,735	25,836,428	62,078,588	200,411	-	-	-	-
E1C	В	Mataroa	MTR	1,651	602,731	-	-	-	6,519,395	3,634,001	4,172,100	10,153,396	33,963	-	-	-	-
E1UC	B	Mataroa	MTR	1.129	412,171	·····		-	4,377,286	2,439,960	2,801,253	6,817,246	22,804	·····	· · · · ·	·	
E1C	B	Ohakune	OKN	600 624	218,856 227,635				2,325,676	1,371,532	1,470,437 1,467,610	3,697,208 3,690,097	11,730 11,707		-	·······	-
E1UC E1C	B	Ohakune Opunake	OKN OPK	964	351.812		·····		2,321,203	1,368,894 3,105,210	2.870.299	7,607,234	28,886	-			
E1UC	В	Opunake	ОРК	2,118	773,240	-	······		14,141,625	9,753,993	9,016,098	23,895,618	90,736	-		-	-
E1C	В	Waverley	WVY	5		-		:*	-	5			-				-
E1UC	В	Waverley	WVY	1,363	497,659	-		-	7,198,379	4,294,331	4,422,576	11,492,710	40,731	-	-	-	-
Medium/Laro	e Commercia	H							1								
E100	A	Carrington	CST	41	14,983	-	•	15,677,639	-	-	-		1,608,846	839,640	2,876	-	-
E100	Α	Huirangi	HUI	12	4,302	-	-	2,620,355	-	-	-	-	452,450	125,535	2,904	•	-
E100	A	New Plymouth	NPL		-			•	-	-	+	•				•	-
E100 E100	B	Stratford Hawera	SFD HWA	12 14	4,380 5,064			5,072,820 4,655,768				······	517,935 523,119	243,090 254,620	2,246 1,642		
E100	C	Waverley	WVY	2	730		······································	4,655,766	-	-	-		41,245	254,620	40		
E100	D	Opunake	OPK	1	365	-	-	68,364	-	-	-		43,070	3,285	351	-	-
E100	E	Brunswick	BRK	11	4,015	-		4,530,751	-	-	-	-	521,950	270,830	981	-	
E100	E	Wanganui	WGN	10	3,515	-	-	3,312,798	-	-	-	-	296,020	169,435	1,566		-
E100	F	Marton	MTN	7	2,581	·····		2,588,578		·····			322,995	175,485	480		
E100 E100	G	Mataroa Ohakune	MTR OKN	5	1,825			2,612,049					340,545	146,730	712		
E100	Н	Masterton	MST	33	11,930		······	10,456,229		-	-		1,361,071	653,077	3,628		
E100	Н	Greytown	GYT	10	3,493	-	-	2,877,426	-	-	-	-	413,873	185,220	1,587	-	-
E100	1	Bunnythorpe	BPE	70	25,617	-	-	25,400,409	-	-	-	-	2,975,028	1,515,369	6,482	-	-
E100 E100	1	Linton	LTN MGM	41	14,900			11,632,851		-	•	· · · · ·	1,583,042	760,695	4,922	-	
E100	J	Mangamaire	MGM	3	1,095			1,313,782		-	2		139,065	49,640	878		
W50		Asset Based		234				283,488,228		-			-	-	61,353		-
SPECIAL		Asset Based		44	-			376,042,086	ļ	-	-		-	-	27,864		-
							A. 199										
Base Power		Non-ICP Based				-	æ			-	-		-		-	12	4,258
	141-11-12	Teres Transl		170 070	65 000 000			700 644 550		205 544 522	170 000 007	4 430 537 555	45.004.000	E 404 412	100 510	10	4.955
	Western Reg	gion Total		178,973	65,223,665	-		752,541,556		395,544,187	478,890,567	1,139,527,655	15,061,955	5,401,412	120,510	12	4,258



	Wester	n Network			Distribution Revenue (FY23 Prices)									
Tariff Group	GXP Group	GXP		Fixed (Monthly)	Fixed (Daily)	Variable	Demand	Non-standard	Total					
Residential+	Small Commer	rial												
E1C	A	Brunswick	BRK	-	316,051	2,581,271	-	-	2,897,32					
E1UC	A	Brunswick	BRK	-	753,755	3,205,217	-	-	3,958,97					
E1C	A	Bunnythorpe	BPE	-	796,701	8,063,850	-	-	8,860,55					
E1UC	A	Bunnythorpe	BPE	-	2,170,642	11,554,359	-		13,725,00					
E1C	A	Carrington	CST	-	614,366	5,085,401	-	-	5,699,76					
E1UC	A	Carrington	CST	-	1,957,833	8,725,133	<mark>.</mark> -	-	10,682,960					
E1C	A	Huirangi	HUI	-	234,816	2,353,366	-	-	2,588,18					
E1UC	A	Huirangi	HUI		663,190	3,570,750	······	-	4,233,94					
E1C	A	Linton	LTN		400,577	3,789,543	······		4,190,119					
E1UC	A	Linton	LTN	-	1,218,236	5,873,856	-	-	7,092,093					
E1C	A	New Plymouth	NPL		-	-	-							
E1UC E1C	A	New Plymouth Stratford	NPL SFD	-	204 770	2,361,533	-		2 566 24					
E1UC	A	Stratford	SFD		204,779 516,358	3,128,092			2,566,312					
E1C	A	Wanganui	WGN	-	244,129	2,021,375			2,265,504					
E1UC	A	Wanganui	WGN	-	601,638	2,821,520	-	-	3,423,15					
		5							, , ,					
E1C	В	Greytown	GYT	-	163,793	2,145,823	-		2,309,61					
E1UC	B	Greytown	GYT	-	497,245	3,596,157	-	-	4,093,40					
E1C	В	Hawera	HWA	-	149,049	1,865,022	-	-	2,014,07					
E1UC	B	Hawera	HWA	-	727,872	5,515,432	-	- 1	6,243,304					
E1C	B	Mangamaire	MGM	-	103,271	1,350,864	-	-	1,454,13					
E1UC	B	Mangamaire	MGM	-	269,368	1,812,142	-	-	2,081,51					
E1C	B	Marton	MTN	-	204,122	2,688,545	-	-	2,892,66					
E1UC	B	Marton	MTN	-	285,578	2,097,922	-	-	2,383,500					
E1C	В	Masterton	MST	-	517,229	6,328,198	-	-	6,845,42					
E1UC	В	Masterton	MST	-	1,052,754	6,978,015	-	-	8,030,769					
E1C	B	Mataroa	MTR	-	90,410	1,136,381	-	-	1,226,790					
E1UC	B	Mataroa	MTR	-	123,651	762,995	-	-	886,646					
E1C	B	Ohakune	OKN		32,828	409,319	-	-	442,147					
E1UC	B	Ohakune	OKN	-	68,291	408,532	-	-	476,822					
E1C	B	Opunake	OPK	-	52,772	827,950	-	-	880,722					
E1UC	B	Opunake	OPK		231,972	2,600,733	-		2,832,705					
E1C E1UC	B	Waverley Waverley	WVY WVY		149,298	1,258,752	-	-	1,408,049					
2100	U	waveney			143,230	1,230,732	-		1,400,040					
Medium/Larg	ge Commercial													
E100	A	Carrington	CST	-	131,850	78,388	553,785	-	764,023					
E100	A	Huirangi	HUI	-	37,858	13,102	170,403	-	221,362					
E100	A	New Plymouth	NPL	-	-	-	-	-	-					
E100	A	Stratford	SFD	-	38,544	25,364	187,519	-	251,42					
E100	B	Hawera	HWA	-	44,563	23,279	310,509	-	378,35					
E100	C D	Waverley	WVY	-	6,424	957	17,083	-	24,46					
E100	D	Opunake	OPK		3,212	342	21,199	-	24,75					
E100	E	Brunswick	BRK		35,332	22,654	184,799		242,78					
E100	C	Wanganui	WGN		30,932	16,564	111,876		159,37					
E100		Marton	MTN		22,713	12,943	136,921	-	172,57					
E100	G	Mataroa	MTR		16,060	13,060	223,579		252,69					
E100 E100	G H	Ohakune Masterton	OKN MST		- 104,984	- 52,281	- 671,631		828 89					
E100	H H		GYT	-	30,738	52,201 14,387	207,616		828,89 252,74					
E100	 	Greytown Bunnythorpe	BPE		225,430	127,002	936,689		1,289,12					
E100	 	Linton	LTN		131,120	58,164	508,732		698,010					
E100	' J	Mangamaire	MGM	-	9,636	6,569	67,797	-	84,00					
W50		Asset Based		-	-	-	429,468	10,612,983	11,042,451					
SPECIAL		Asset Based		-	-	-	195,046	6,513,717	6,708,763					
				L				I						
					0.710									
Base Power		Non-ICP Based		-	6,748	-	-	•	6,74					



	Wester	n Network			Tra	ansmission Reve	nue (FY23 Price	es)	
Tariff Group	GXP Group	GXP		Fixed (Monthly)	Fixed (Daily)	Variable	Demand	Non-standard	Total
Decidential	Small Commer	cial							
E1C	A	Brunswick	BRK			1,084,875	-	-	1,084,875
E1UC	A	Brunswick	BRK	-	-	1,347,111	-	-	1,347,111
E1C	A	Bunnythorpe	BPE	-	-	3,366,776	-	-	3,366,776
E1UC	A	Bunnythorpe	BPE	-	-	4,824,115	-	-	4,824,115
E1C	A	Carrington	CST	-	-	2,131,338	-	-	2,131,338
E1UC	A	Carrington	CST	-	-	3,656,782	-	-	3,656,782
E1C	A	Huirangi	HUI	-	-	974,333	-	-	974,333
E1UC	A	Huirangi	HUI	-	-	1,478,350	-	-	1,478,350
E1C	A	Linton	LTN	-	-	1,564,219	-	-	1,564,219
E1UC	A	Linton	LTN	-	-	2,424,566	-	-	2,424,566
E1C	A	New Plymouth	NPL	-	-	-	-	-	-
E1UC	A	New Plymouth	NPL	-		<mark>.</mark>	-	-	-
E1C	A	Stratford	SFD			968,409	-	-	968,409
E1UC	A	Stratford	SFD	-		1,282,757	-	-	1,282,757
E1C	A	Wanganui	WGN		-	833,299	-	-	833,299
E1UC	A	Wanganui	WGN	-	-	1,163,153	-	-	1,163,153
E1C	В	Greytown	GYT	-	-	616,711	-	-	616,711
E1UC	В	Greytown	GYT	-	-	1,033,538	-	-	1,033,538
E1C	В	Hawera	HWA	-	-	541,546	-	-	541,546
E1UC	В	Hawera	HWA	-	-	1,601,515	-	-	1,601,515
E1C	В	Mangamaire	MGM	-	-	399,830	-	-	399,830
E1UC	В	Mangamaire	MGM	-	-	536,360	-	-	536,360
E1C	B	Marton	MTN	-	-	784,949	<u>_</u>	-	784,949
E1UC	B	Marton	MTN	-	-	612,511	-	-	612,511
E1C	В	Masterton	MST	-	-	1,859,656	-	-	1,859,656
E1UC	B	Masterton	MST	-	-	2,050,617	-	-	2,050,617
E1C	В	Mataroa	MTR	-	-	332,502	-	-	332,502
E1UC	B	Mataroa	MTR	-	-	223,250	-	-	223,250
E1C	B	Ohakune	OKN	-	-	118,447	-	-	118,447
E1UC	B	Ohakune	OKN		<mark>-</mark>	118,219			118,219
E1C	B	Opunake	OPK	-	-	235,346	-	-	235,346
E1UC E1C	B B	Opunake	OPK WVY	-	-	739,261	-	-	739,261
E1UC	B	Waverley Waverley	WVY	-	-	360,200	-		360,200
	ge Commercial				-	-	000.017	-	200 247
E100	A	Carrington	CST	-	-	-	290,347	-	290,347
E100 E100	A	Huirangi New Plymouth	HUI		-	-	43,410	-	43,410
	A	Stratford	NPL SFD			······		-	94.064
E100 E100	B	Hawera	HWA				88,048		84,061 88,048
E100	C	Waverley	WVY	-		-	3,029		3,029
E100	D	Opunake	OPK	-		-	1,136	-	1,136
E100	E	Brunswick	BRK	-	-	-	93,653	-	93,653
E100	E	Wanganui	WGN	-	-	-	58,591	-	58,591
E100	F	Marton	MTN	-	-	-	60,683	-	60,683
E100	G	Mataroa	MTR	-	-	-	50,739	-	50,739
E100	G	Ohakune	OKN	-	-	-	-	-	-
E100	Н	Masterton	MST	-	-	-	225,834	-	225,834
E100	H	Greytown	GYT	-	-	-	64,049	-	64,049
E100		Bunnythorpe	BPE	-	-	-	524,015	-	524,015
E100		Linton	LTN	-	-	-	263,048	-	263,048
E100	J	Mangamaire	MGM	-			17,165	-	17,165
W50		Asset Based		-		-	-	4,895,760	4,895,760
SPECIAL		Asset Based		-	-	-	-	5,375,820	5,375,820
Base Power		Non-ICP Based		-		-		-	
	Western Reg				-	39,264,541	1,867,808	10,271,581	51,403,930



					Distr	ibution P	rices FY2	23 (Prices	s 1 April 2	022 to 31	March 2	023)			
	Eastern Network				Variable								Individually Priced		
				sset Charge				١	/olume Charg	e				Demand Charge	
Tariff Group	Network Group	Tarriff Description	ICP \$/Month	ICP cents/day	Uncontrolled c/kWh	Controlled c/kWh	All Inclusive c/kWh	Night Only c/kWh	On Peak Uncontrolled c/kWh	Off Peak Uncontrolled c/kWh	On Peak All Inclusive c/kWh	Off Peak All Inclusive c/kWh	Night Rate c/kWh	\$/kVAr /Month	(\$/ICP)
Residential+S	mall Commercial				24UC	CTRL	AICO	NITE	PEAK	OFPK	PKIN	OPIN	UNML		
V05S	Valley	Low Usage - TOU		30.0000	7.3300	6.7800	7.3300	5.1600	7.3300	6.7800	7.3300	6.7800	8.5300		
V06S	Valley	Standard Residential & Commercial - TOU		85.0000	4.8300	4.2800	4.8300	2.6600	4.8300	4.2800	4.8300	4.2800	8.5300		
V08	Valley	Temporary Accommodation		99.0000	4.1900	3.3400	4.1900	2.0200	4.8300	3.3400	4.8300	3.3400	8.5300		
T05S	Tauranga	Low Usage - TOU		30.0000	6.3100	5.7600	6.3100	4.7400	6.3100	5.7600	6.3100	5.7600	7.6500		
T06S	Tauranga	Standard Residential & Commercial - TOU	1	85.0000	3.8100	3.2600	3.8100	2.2400	3.8100	3.2600	3.8100	3.2600	7.6500		
	vallev	Unmetered/Streetlighting			8.5300								8.5300		
V01				44.0700	0.5500								0.5300		
V02	Valley	Unmetered/Streetlighting		11.6700											
T01	Tauranga	Unmetered/Streetlighting			7.6500								7.6500		
T02	Tauranga	Unmetered/Streetlighting		12.7600											
Medium Com															
V22 V28	Valley	> 3 phase 60 amps to 3 phase 250 amps		990.0000					4.0900	3.6200				7.0000)
	Valley	> 200 kVA up to 299 kVA		2,500.0000	3.6000									7.0000	2
T22	Tauranga	> 3 phase 60 amps to 3 phase 250 amps		1,000.0000	4.3200	2.2500		2.3400	4.3200	3.7000				7.0000	
T28	Tauranga	> 200 kVA up to 299 kVA		2,425.0000	3.6100									7.0000)
	rcial / Industrial														
V40	Valley	Individual ICP prices												7.0000	
V60	Valley	Individual ICP prices												7.0000	
V71	Kinleith													7.0000	3,776,708.3537
	T	Individual ICP prices		<u> </u>		••••••					1			7.000	28,675,1392
T50	Tauranga	Individual ICP prices												7.0000	20.0/0.1092



			Prices 1	April 2022	to 31 Ma	rch 2023)	1								
		Eastern Network	Fixed		Variable										Individually Priced
Network Asset Charge Volume Charge Cha									Demand Charge	Indirect Fixed					
Tariff Group	Network Group	Tarriff Description	ICP \$/Month	ICP cents/day	Uncontrolled c/kWh	Controlled c/kWh	All Inclusive c/kWh	Night Only c/kWh	On Peak Uncontrolled c/kWh	Off Peak Uncontrolled c/kWh	On Peak All Inclusive c/kWh	Off Peak All Inclusive c/kWh	Night Rate c/kWh	\$/kVAr /Month	(\$/ICP)
Residential+Sr	nall Commercial				24UC	CTRL	AICO	NITE	PEAK	OFPK	PKIN	OPIN	UNML		
V05S	Valley	Low Usage - TOU			3.0500	0.5300	3.0500	0.5300	9.6600	0.5300	9.6600	0.5300	3.8600		
V06S	Valley	Standard Residential & Commercial - TOU			3.0500	0.5300	3.0500	0.5300	9.6600	0.5300	9.6600	0.5300	3.8600		
V08	Valley	Temporary Accommodation			3.0500	0.5300	3.0500	0.5300	9.6600	0.5300	9.6600		3.8600		
T05S	Tauranga	Low Usage - TOU			3.4300	0.5300	3.4300	0.5300	9.8300	0.5300	9.8300	0.5300	3.5700		
T06S	Tauranga	Standard Residential & Commercial - TOU			3.4300	0.5300	3.4300	0.5300	9.8300	0.5300	9.8300	0.5300	3.5700		
Unmetered Su				1											
V01	Valley	Unmetered/Streetlighting			3.8600								3.8600		
V02	Valley	Unmetered/Streetlighting		5.5700											
T01	Tauranga	Unmetered/Streetlighting		[3.5700								3.5700		
T02	Tauranga	Unmetered/Streetlighting		5.4800											
Medium Comm	ercial														
V22	Valley	> 3 phase 60 amps to 3 phase 250 amps		150.0000	2.4600				7.7900	0.4300					
V28	Valley	> 200 kVA up to 299 kVA		275.0000	1.8000										
T22	Tauranga	> 3 phase 60 amps to 3 phase 250 amps		75.0000	2.1900	1.2500		0.5300	6.2800	0.3400					
T28	Tauranga	> 200 kVA up to 299 kVA		150.0000	1.5800										
Large Comme	cial / Industrial														
V40	Valley	Individual ICP prices		Ļ											14,500.7860
V60	Valley	Individual ICP prices		Ļ											185,679.3962
V71	Kinleith														3,908,164.5463
T50	Tauranga	Individual ICP prices													13,974.0724
T60	Tauranga	Individual ICP prices		1											119,096.4631



	Fas	stern Network					Quantitie	es FY23 (Per	iod 1 April 202	22 to 31 March	2023)				,
<u>Tariff Group</u>		Tarriff Description	ICP No.'s (Average)	ICP Days	kWh Uncontrolled	kWh Controlled	kWh All Inclusive	kWh Nite Only	kWh Uncontrolled On peak	kWh Uncontrolled Off Peak	kWh All Inclusive On Peak	kWh All Inclusive Off Peak	kWh Night	Distributed Generation	kVAr Demand pa
Posidontial+ St	mall Commercial				24UC	CTRL	AICO	NITE	PEAK	OFPK	PKIN	OPIN	UNML	24DG	
V05S	Valley	Low Usage - TOU	37,023	13,513,540	35,082,202	33,152,412	3,793,698	304,406	29,220,962	69,715,742	1,287,169	2,935,321	872	1.823.345	
V06S	Valley	Standard Residential & Commercial - TOU	36,647	13,376,226	137,499,654	35,116,997	9,306,991	1,621,367	64,002,641	154,694,884	3,279,445	7,645,847	1,903	1,482,496	
V08	Valley	Temporary Accommodation		-	-	-	-	-		-		-	-	-	
T05S	Tauranga	Low Usage - TOU	34,917	12,744,650	25,022,502	35,874,691	8.231.378	3,712,627	27,167,386	60,938,543	5,998,145	12,466,694	1,694	2.875.771	-
T06S	Tauranga	Standard Residential & Commercial - TOU	54,976	20,066,144	138,169,219	73,616,560	15,059,995	4,191,384	71,916,464	167,510,354	10,711,909	22,708,082	113,574	3,512,062	-
Unmetered Su	pply														
V01	Valley	Unmetered/Streetlighting										İ	849,104		
V02	Valley	Unmetered/Streetlighting	11,562	4,215,842									1,982,226		-
T01	Tauranga	Unmetered/Streetlighting											1,682,860		
T02	Tauranga	Unmetered/Streetlighting	14,228	5,193,159									3,105,256		-
Medium Comn	nercial														
V22	Valley	> 3 phase 60 amps to 3 phase 250 amps	539	196,657	58,237,849	-	-	-	1,897,846	4,915,372	-	-	-	190,182	-
V28	Valley	> 200 kVA up to 299 kVA	46	16,823	11,237,750	-	-	-	-	-	-	-	-	-	1,192
T22	Tauranga	> 3 phase 60 amps to 3 phase 250 amps	699	255,086	46,421,423	120,860	-	-	3,896,310	9,411,569	-	-	-	123,946	-
T28	Tauranga	> 200 kVA up to 299 kVA	147	53,675	35,069,009	-	-	-	-	-	-	-	- 1	1,131	8,585
Large Comme	rcial / Industrial														
V40	Valley	Individual ICP prices	93		64,895,694										16,469
V60	Valley	Individual ICP prices	26		305,981,139										38,957
V71	Kinleith		1		293,524,496										-
T50	Tauranga	Individual ICP prices	228		173,582,011										37,568
T60	Tauranga	Individual ICP prices	36		214,290,403										29,528
Eastern Region	Total		191,167	69,631,802	1,539,013,350	177,881,519	36,392,062	9,829,784	198,101,609	467,186,462	21,276,668	45,755,945	7,737,489	10,008,932	132,299



	Eas	tern Network		Distribution Revenue (FY23 Prices)								
Tariff Group		Tarriff Description	Fixed (Monthly)	Fixed (Daily)	Variable	Demand	Non-standard	Total				
Residential+S	mall Commercial											
V05S	Valley	Low Usage - TOU	-	4,054,062	12,275,107	-	-	16,329,169				
V06S	Valley	Standard Residential & Commercial - TOU	-	11,369,792	18,834,967	-	-	30,204,759				
V08	Valley	Temporary Accommodation	-	-	-	-	-					
T05S	Tauranga	Low Usage - TOU	-	3,823,395	10,661,697	- 1		14,485,092				
T06S	Tauranga	Standard Residential & Commercial - TOU	-	17,056,222	17,689,770	÷1	-	34,745,993				
Unmetered Su	pply											
V01	Valley	Unmetered/Streetlighting	-	-	72,429	-1	-	72,429				
V02	Valley	Unmetered/Streetlighting		491,989	-	-	-	491,989				
T01	Tauranga	Unmetered/Streetlighting	-	- 1	128,739	- 1	-	128,739				
T02	Tauranga	Unmetered/Streetlighting	-	662,647	-	-	-	662,647				
Medium Comm	nercial											
V22	Valley	> 3 phase 60 amps to 3 phase 250 amps	-	1,946,904	2,637,486	-	-	4,584,391				
V28	Valley	> 200 kVA up to 299 kVA		420,575	404,559	8,346	-	833,480				
T22	Tauranga	> 3 phase 60 amps to 3 phase 250 amps		2,550,860	2,524,673	-1	-	5,075,533				
T28	Tauranga	> 200 kVA up to 299 kVA	-	1,301,619	1,265,991	60,098	-	2,627,708				
Large Comme	rcial / Industrial											
V40	Valley	Individual ICP prices	-	-	-	115,283	2,732,510	2,847,792				
V60	Valley	Individual ICP prices	-	-	-	272,699	4,642,547	4,915,245				
V71	Kinleith		-	- 1	-	-1	3,776,708	3,776,708				
T50	Tauranga	Individual ICP prices		-		262,974	6,530,763	6,793,737				
T60	Tauranga	Individual ICP prices		-	-	206,695	5,847,328	6,054,024				
Eastern Regio	n Total			43.678.065	66,495,418	926.095	23,529,856	134,629,435				



Eas	tern Network		
Network Group	Tarriff Description		Fixed (Monthl
mall Commercial		1	
Valley	Low Usage - TOU	-1	
	Standard Residential & Commercial - TOU		
	Temporary Accommodation		
	······································		
5		-	
		_	
	······································		
Valley	Unmetered/Streetlighting		
Tauranga	Unmetered/Streetlighting		
·····			
Valley	> 3 phase 60 amps to 3 phase 250 amps	_	
vancy			
Tauranga	> 3 phase 60 amps to 3 phase 250 amps		
Tauranga	> 200 kVA up to 299 kVA	_	
rcial / Industrial			
	Individual ICP prices	\neg	
Kinleith			
Touronao	Individual ICP prices		
rauranga	individual ICP prices	-	
	Network Group mall Commercial Valley Valley Tauranga Tauranga Valley Valley Valley Valley Valley Tauranga Tauranga Tauranga recial Valley Tauranga Tauranga recial / Industrial Valley Valley Valley Valley Valley	mail Commercial Valley Low Usage - TOU Valley Standard Residential & Commercial - TOU Valley Temporary Accommodation Tauranga Low Usage - TOU Tauranga Low Usage - TOU Tauranga Standard Residential & Commercial - TOU Tauranga Standard Residential & Commercial - TOU pply Valley Valley Unmetered/Streetlighting Valley Unmetered/Streetlighting Tauranga Unmetered/Streetlighting Tauranga Unmetered/Streetlighting Tauranga Unmetered/Streetlighting Tauranga Unmetered/Streetlighting Tauranga Unmetered/Streetlighting Nalley > 3 phase 60 amps to 3 phase 250 amps Valley > 200 kVA up to 299 kVA Tauranga > 3 phase 60 amps to 3 phase 250 amps Tauranga > 200 kVA up to 299 kVA rcial / Industrial Valley Valley Individual ICP prices Valley Individual ICP prices Kinleith Tauranga	Network Group Tarriff Description mall Commercial

	Prices)	nue (FY23	ission Reve	Transm	
Total	Non-standard	Demand	Variable	Fixed (Daily)	Fixed (Monthly)
4,695,20	-	-	4,695,206	-	-
12,032,24	-	-	12,032,245	-	
4,999,70	-	-	4,999,701		-
14,802,72	-	-	14,802,726	-	-
32,77		- 1	32,775	-	-
234,82	-	-	-	234,822	-
	-	-	-	-	-
60,07	-	- 1	60,078	-	-
284,58	-	-1	-	284,585	-
1,896,61	-	- 1	1,601,629	294,986	-
248,54	-	-	202,280	46,263	-
1,486,14			1,294,828	191,315	
634,60			554,090	80,513	-
1,342,53	1,342,531	-		-	
4,874,08	4,874,084		-	-	-
3,908,10	3,908,165	-	-	-	-
3,182,59	3,182,595	-	-		-
4,247,77	4,247,774	-	-	-	-
58,963,18	17,555,149		40,275,557	1,132,483	



Attachment B – Reliability limits and boundary values, caps, collars and targets

The reliability limits and boundary values for planned and unplanned SAIDI and SAIFI listed below are from Schedule 3.1 and 3.2 of the Determination. The target, collar and cap for unplanned SAIDI and SAIFI listed below are from Schedule 4 of the Determination.

Table B1: 2023 assessment period - Planned reliability limits

	Limit
Planned SAIDI	99.292
Planned SAIFI	0.414

Table B2: 2019-2023 assessment periods - planned reliability limits

	Limit
Accumulated planned SAIDI	454.746
Accumulated planned SAIFI	1.935

Table B3: 2023 assessment period - Unplanned reliability limits, boundary values, target, collar and cap

	Limit	Unplanned boundary value	Target	Collar	Сар
Unplanned SAIDI	175.941	11.710	155.826	135.710	175.941
Unplanned SAIFI	2.193	0.064	2.030	1.867	2.193

There have been no recalculations of the SAIDI and SAIFI limits, unplanned boundary values, targets, caps or collars in this assessment period.



Attachment C – Commentary on major event days

7 June 2022

Failure of defective overhead equipment caused a multiple-trip event in the Palmerston North region affecting over 20,000 customers over two stages. This resulted in a SAIFI Major Event Day (MED) on the 7th of June.

Interruption date	Pre-normalised	Normalised SAIFI	SAIFI adjustment for
	unplanned SAIFI	(boundary value)	normalisation
7 June 2022	0.098	0.064	0.034

12-14 February 2023 – Cyclone Gabrielle

Cyclone Gabrielle caused significant disruption across the entire Powerco network. This resulted in a Major Event Day (MED) on 12th,13th and 14th February. The MED affected both SAIDI and SAIFI boundaries.

Interruption date	Pre-normalised unplanned SAIDI	Job count	Customers affected (unique count)
12 February 2023	71.740	41	32,951
13 February 2023	80.632	171	35,159
14 February 2023	48.274	216	33,371

Interruption date	Pre-normalised unplanned SAIFI	Normalised SAIFI (boundary value)	SAIFI adjustment for normalisation
12 February 2023	0.153	0.064	0.089
13 February 2023	0.120	0.064	0.056
14 February 2023	0.123	0.064	0.059



Attachment D – Exceeding the unplanned interruptions limit

Reasons for non-compliance with the unplanned interruptions reliability assessment

This section provides details and discusses the contributing factors to the exceedance of the unplanned SAIDI limit for 2023.

Powerco exceeded the annual unplanned SAIDI limit for the 2023 Assessment Period by 54 minutes (30.8%) and the unplanned SAIFI limit by 0.034 (1.5%). In 2023, we experienced 3 MED days due to Cyclone Gabrielle, 24 level one storm days and four level two severe weather events.

Vegetation (out of zone), foreign interference (vehicle damage) and defective equipment are the leading causes of unplanned outages across the network. The leading cause varies by location. For instance, our Industrial, Commercial, and Urban feeder network is most affected by third-party damage and defective equipment. In contrast, our Rural and Remote feeders experience a high incidence of vegetation-related faults, which can result in long restoration times due to the challenging terrain in these areas. We continually adapt our strategies to mitigate these causes, including improving information quality to enhance decision-making.

In addition to these causes and storm events, several factors have contributed to the increase in SAIDI:

- Recent safety initiatives, including a risk-based approach to re-energising high voltage lines down events and remote de-energising for safety following reported lines down hazards.
- Accessibility issues, including road closures amid flooding and landslips.

Figure D1 below presents a breakdown of the causes of unplanned SAIDI in FY23.

Figure D1: HV unplanned interruption causes by % of total SAIDI, FY23

	FY 2023							Grand					
	April	May	Jone	July	August	Septemp.	October	November 1	December	January.	February	Marsh	Total
VEGETATION - OUTSIDE ZONE	0.13%	-1.35%	2:61%	1.85%	0.63%	2:28%	0.37%	0.64%	0.38%	2.508*	5 59%	0.18%	17.39%
DEFECTIVE EQUIPMENT - OH EQUIPMENT FAILURE	1.06%	0.96%		1,44%	0.69%	0.94%	2.35%	0.86%	0,45%	3.94%	2.41%	0.84%	16.69%
24 OTHERS	0.24%	0.35%	1.35%	0.76%	0.37%	0.19%	0.44%	2.04%	0.53%	0.24%	3.09%	0.65%	10.02%
FOREIGN INTERFERENCE - THIRD PARTY DAMAGE - VEHICLE DAMAGE	0.86%	0.51%	0.38%	1.46%	0 50%	0.52%	0.95%	0.93%	0.45%	2.64%	0.21%	0.27%	9.69%
DEFECTIVE EQUIPMENT - HIGH WIND	0.01%	0.99%	0.92%	1.01%	0.18%	0.23%	0.01%	0.84%	0.02%	0.20%	3.85%	0.01%	8.31%
UNKNOWN - CURSORY PATROLLED - CAUSE UNKNOWN	0.66%	0.39%	0.28%	0.58%	0.75%	0.27%	0.25%	118%	0.43%	0.80%	1.57%	0.41%	7.58%
DEFECTIVE EQUIPMENT - BROKEN HARDWARE	0.15%	0.55%	0.36%	1.21%	0.62%	0 38%	0.14%	0,47%	0.25%	0.75%	1.28%	0.13%	6.29%
VEGETATION - INSIDE ZONE	0.13%	0.22%	0.12%	0.48%	0.06%	0.07%	0.16%	2.67%	0.00%	0,64%	0.11%	0.34%	4.97%
VEGETATION - WIND-BLOWN DEBRIS - TREES	0.08%	0.35%	0.60%	0.44%	0.09%	0.06%	0.06%	0.87%	0.07%	0.31%	1.39%	0.02%	4.34%
LIGHTNING - LIGHTNING STRIKE		0.03%	2.19%	0.06%	0.00%	0.22%	0.08%	0.28%	0.15%	0,27%	0.14%	0.09%	3.52%
UNKNOWN - OPERATIONAL PATROLLED - CAUSE UNKNOWN	0.04%	0.62%	0.55%	0.44%	0.24%	0.47%	0 20%	0.02%	0.01%	0.23%	0.34%	0.29%	3.45%
FOREIGN INTERFERENCE - ANIMAL - BIRD STRIKE	0.38%	0.55%	0.07%	0.16%	0.09%	0.08%	0.21%	0.02%	0.71%	0.20%	0.16%	0,24%	2.89%
DEFECTIVE EQUIPMENT - UG EQUIPMENT FAILURE	0.39%	0.18%	0.16%	0.25%	0.27%	0.37%	0.11%	0.28%	0.26%	0.19%	0.21%	0.14%	2.83%
FOREIGN INTERFERENCE - ANIMAL - SUSPECT BIRD STRIKE	0.09%	0.18%	0.10%	0.08%	0.04%	0.02%	0.08%	0.28%	0.23%	0.10%	0.78%	0.06%	2.04%
Grand Total	4.24%	7.22%	12.44%	10.22%	4.50%	5.10%	5.41%	10.58%	3.95%	10.72%	21.94%	3.69%	100.00%

Please note that the category labelled '24 Others' encompasses less common cause codes, collectively amounting to less than 11% of the total SAIDI. These cause codes include Adverse Environment, Adverse Weather, Defective Equipment, Foreign Interference, Human Element, and Unknown.

We have engaged an independent expert consultant to conduct a review of our SAIDI and SAIFI performance over the FY22 and FY23 assessment periods. This analysis is aimed at gaining a deeper understanding of the specific areas of our performance that require focused attention. Through this examination, our objective is to



ensure that our strategy for managing system performance is not only achievable but also maintains its effectiveness over time.

Actions taken to mitigate non-compliance with the annual reliability assessment

Our internal SAIDI governance groups monitor and manage initiatives aimed at improving both planned and unplanned SAIDI and SAIFI performance. Following our exceedance of the unplanned SAIDI quality standard in FY22, an investigation was initiated to delve into the possible root causes behind Powerco's poor unplanned SAIDI performance. The findings from this investigation revealed the following insights:

- Longer restoration times can, in part, be attributed to a greater focus on safety; however, without effective tracking, quantifying the actual impact is challenging. The safety measures include:
- i) Practices preventing climbing of certain pole types unbound or unsupported.
- ii) Risk-based approach to re-energizing high voltage lines down events and remote de-energizing for safety.
- iii) Contractor fatigue management.
- Shortage of experienced technical staff.
- Detailed fault information and defect prioritisation is required to allow better investment decisions.
- The need for a dedicated function in managing the turnaround of in-year reliability improvements.

Some of these findings have already been acted upon, and efforts for improvement are ongoing.

We have established a Reliability Engineering function with a clear mandate to identify and implement mitigation plans to address unplanned interruptions. As part of this initiative, we initially evaluated 36 feeders, aiming to gain insights into the "unknown" causes contributing to unplanned interruptions. The outcomes of this evaluation are as follows:

- 20 feeders have shown an improved trend in the number of faults.
- 13 feeders require further assessment.
- 2 feeders are currently work-in-progress, awaiting scheduled outages or remedial work.
- 1 feeder is newly established and currently ranked 35th with no historical data.

Through this process, we have acknowledged the necessity for enhancements in our vegetation management approach, especially concerning the growing number of out-of-zone faults and the influence of forestry on our network. Additionally, we have identified the importance of an improved approach to managing out-of-cycle defects. To further improve the reliability of our network, we have extended this feeder evaluation program into FY24 to analyze repeat worst-performing feeders, enabling us to identify opportunities for swift remedial improvements. Working alongside our service provider, we are actively engaging in discussions to strengthen fault response KPIs for poorly performing areas.

As part of our commitment to enhancing network performance in the long term, we have transformed our Unplanned SAIDI Governance group into the Network Reliability Governance Group (NRG). This change strengthens our efforts to meet reliability standards and regulatory requirements by prioritising and coordinating activities throughout the business related to unplanned network performance.

We are continuously evaluating technology and initiatives to reduce unplanned SAIDI and improve customer experience. Balancing competing drivers of value, reliability and customer experiences is a key focus for Powerco and our NRG group.



Improvement Focus areas leading into FY24

Advancing vegetation management:

- Exploring the use of up-to-date satellite imagery to better understand growth rates and high-risk trees.
- Identifying out-of-zone vegetation that could impact the network during adverse weather.
- Assessing the feasibility of a dedicated forestry manager to enhance collaboration with forestry owners, particularly with the emergence of carbon forestry.

Alternative solutions to address leading causes:

- Conducting detailed performance investigations to identify where network solutions will provide longerterm improvement to opex-intensive areas.
- Prioritising the replacement and relocation of high-risk assets. For example: car vs pole incidents.
- Identify areas around rivers, lakes and ponds where overhead design changes can improve inter-phase clearances to reduce bird strikes.
- Improving access track identification and maintenance to critical parts of the network to enable easier accessibility for faults response.

Adoption of drone technology under various scenarios:

- Using drones for fault response to expedite locating the fault in remote terrain.
- Utilising drones for reactive patrols on poor performing feeders. This has yielded great results to date.
- Performing detailed inspections using drones to provide an overall health profile of the feeder for investment decision making.

Technology investigations:

- A distribution faults anticipation (DFA) trial is currently underway on 10 network feeders that can assist with pinpointing possible fault causes and locations based on waveform analysis of network events.
- Exploring AI and machine learning functions to analyze and categorize the return defect data.
- Investigating the use of satellite imagery to provide insights into unstable ground conditions, identify poor health trees, and simulate storms to inform resilience planning.

Ongoing improvement initiatives from FY22

Enhancing Decision-Making with High-Quality Information. To bolster our decision-making:

- We are using our "Faults Fast Track" initiative to enhance the quality of inspection patrols.⁴
- We are improving data collection of failure mechanisms, to enable timely actions by asset owners.
- Ensuring easy access to fault, defect, and vegetation information across all business functions is a priority to facilitate better decision-making.

Working with our contractors:

- We are identifying and building additional resources to undertake key work across the network.
- We are increasing the number of fault people on-call.

⁴ We established a Fault Fast Track group to concentrate on identifying the root causes of our faults and collaborate closely with our Service Providers to implement effective solutions.



Attachment E – Compliance statement references

The following tables reference the Determination requirements and provide guidance on the section of this Statement that meets the specified requirements.

Table D1: Wash-up amount calculation

Determination clause	Determination requirement	Compliance statement section
8.6	Powerco must calculate the wash-up amount for each assessment period using the methodology specified in Schedule 1.5 of the Determination	2

Table D2: Quality path summary

Determination clause	Determination requirement	Compliance statement section		
9.1(a)	Comply with the annual planned interruptions reliability assessment where assessed values for SAIDI and SAIFI for the assessment period must not exceed the reliability limits for SAIDI and SAIFI	3.1		
9.1(b)	Comply with the annual planned interruptions reliability assessment for each of the two immediately preceding assessment periods			
9.7(a)	Comply with the annual unplanned interruptions reliability assessment where assessed values for SAIDI and SAIFI for the assessment period must not exceed the reliability limits for SAIDI and SAIFI	3.2		
9.7(b)	Comply with the annual unplanned interruptions reliability assessment for each of the two immediately preceding assessment periods			



Table D3: Annual compliance statement

Determination clause	Determination requirement	Compliance statement section				
An annual Compliance Statement must be provided to the Commission consisting of:						
11.5(a)(i)	A statement regarding compliance with the requirement to calculate the wash-up amount for the assessment period	1				
11.5(a)(ii)	A statement regarding compliance with the quality standards for the assessment period	1				
11.5(b)	The day on which the statement was published	1				
11.5(c)	A statement whether Powerco has entered into any agreement with another EDB or Transpower for an amalgamation, merger, major transaction or non-reopener transaction in the assessment period	1				
11.5(d)	A certificate in the form set out in Schedule 7 signed by at least one Director of Powerco	5				
11.5(e)	An assurance report meeting the requirements in Schedule 8, in respect of all information contained in the 'annual compliance statement'	6				
11.6(a)	Details of the wash-up amount calculation, together with supporting information for all components of the calculation	2 and Attachment A				
11.6(b)	Any reasons for non-compliance with the annual planned interruptions reliability assessment	N/a				
11.6(c)	Any reasons for non-compliance with the annual planned interruptions reliability assessment for the 5-year cap	N/a				
11.6(d-1)	Any reasons for non-compliance with the annual unplanned interruptions reliability assessment	Attachment D				
11.6(d-2)	Actions taken to mitigate any non-compliance and to prevent similar noncompliance in future assessment periods	Attachment D				
11.6(e)	For the annual planned interruptions reliability assessment, the SAIDI assessed value, SAIFI assessed value, SAIDI limit and SAIFI limit for the assessment period, and any supporting calculations (including those in Schedule 3.1) and where applicable, the annual planned interruptions reliability assessments for the two previous assessment periods	3.1 and Attachment B				



Determination clause	Determination requirement	Compliance statement section		
11.6(f)	For the annual unplanned interruptions reliability assessment, the SAIDI assessed value, SAIFI assessed value, SAIDI limit, SAIFI limit, SAIDI unplanned boundary value, SAIFI unplanned boundary value, SAIDI cap, SAIFI cap, SAIDI collar, SAIFI collar, SAIDI target and SAIFI target for the assessment period, and any supporting calculations (including those in Schedule 3.2) and where applicable, the annual unplanned interruptions reliability assessments for the two previous assessment periods	3.2 and Attachment B		
11.6(g)	A description of the policies and procedures which Powerco has used for capturing and recording Class B interruptions and Class C interruptions, and for calculating SAIDI assessed values and SAIFI assessed values for the assessment period	3.4		
11.6(h)	The cause of each major event day within the assessment period	Attachment C		

