



# Electricity Distribution Services

## 2024 Annual Compliance Statement

For the assessment period  
1 April 2023 - 31 March 2024

Pursuant to:

Electricity Distribution Services Default Price-Quality Path  
Determination 2020 (20 May 2020)

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## 1. INTRODUCTION

### 1.1 Background

Vector Limited (“Vector”) owns and operates the electricity distribution network in the greater Auckland region. Vector manages more than 19,000 kms of overhead lines and underground cables, delivering power to over 600,000 homes and businesses throughout the wider Auckland region from Wellsford to Papakura.

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

The assessment period 2024 is therefore the fourth assessment period of the Electricity Distribution Services Default Price-Quality Path Determination 2020 (“the Determination”)<sup>1</sup> and covers the 12 months to 31 March 2024.

### 1.2 Statement of compliance

Vector’s annual compliance statement (“the Statement”) is prepared in accordance with the requirements of clause 11.4 of the Determination.

As required by clause 11.5(a) of the Determination, the Statement provides Vector’s wash-up amount and quality incentive adjustment calculation in respect of clause 8.6 and Schedule 4 of the Determination and also confirms Vector’s compliance with the quality standards in clause 9 of the Determination for the 2024 assessment period, except for clause 9.9 regarding the extreme event standard. Vector reports it has exceeded the extreme event standard due to outages occurring on June 14, 2023. The outages likely resulted from latent damage caused by Cyclone Gabrielle in February 2023, considered a major external factor. However, Vector cannot state this with absolute certainty. Vector has, as required by the Determination published an Extreme Event Report.<sup>2</sup>

As required by clause 11.5(c) of the Determination, Vector confirms that it has not entered into any agreement with another Electricity Distribution Business (“EDB”) or Transpower for an amalgamation, merger, major transaction or transfer in the 2024 assessment period.

This Statement was approved for issue on 26 August 2024 and was published on 31 August 2024 in accordance with the Determination. In this Statement, references to Vector relate only to Vector’s electricity distribution business.

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<sup>1</sup> Available at [https://comcom.govt.nz/\\_data/assets/pdf\\_file/0025/216862/Electricity-distribution-services-default-price-quality-path-determination-2020-consolidated-20-May-2020-20-May-2020.pdf](https://comcom.govt.nz/_data/assets/pdf_file/0025/216862/Electricity-distribution-services-default-price-quality-path-determination-2020-consolidated-20-May-2020-20-May-2020.pdf)

<sup>2</sup> Available at <https://www.vector.co.nz/about-us/regulatory/disclosures-electricity/price-quality-path>

### **1.3 Disclaimer**

The pricing information contained in this Statement is accurate at the time of preparation, 2 May 2024.

The information contained in this Statement has been prepared for the express purpose of complying with the requirements of clause 11.4 of the Determination. The Statement has not been prepared for any other purpose. Vector expressly disclaims any liability to any party who may rely on this Statement for any other purpose.

For presentation purposes, some numbers in this Statement have been rounded. In most cases calculations are based on more detailed numbers. This may cause small discrepancies or rounding inconsistencies when aggregating some of the information presented in this Statement. These discrepancies do not affect the overall compliance calculations which are based on the more detailed information.

## 2. WASH-UP AMOUNT

### 2.1 Wash-up amount calculation

As required by clauses 11.4 and 8.6 of the Determination, Vector must calculate the wash-up amount for each assessment period using the methodology specified in Schedule 1.6 of the Determination. For the 2024 assessment period the wash-up amount is \$57.3m. How the wash-up amount was calculated is detailed below in Table 1 and the different components of the calculation are detailed in sections 2.2 to 2.4.

Table 1: Wash-up amount (WAU) 2024		
Formula: $WAU_{2024} = AAR_{2024} - AR_{2024} - RV_{2024}$		
Component	Description	Value (\$000)
AAR <sub>2024</sub>	Actual allowable revenue 2024 <sup>3</sup>	703,809
- AR <sub>2024</sub>	Actual revenue 2024 <sup>4</sup>	(646,536)
- RV <sub>2024</sub>	Revenue foregone 2024 <sup>5</sup>	-
<b>WUA<sub>2024</sub></b>	<b>Wash-up amount 2024</b>	<b>57,273</b>

### 2.2 Actual allowable revenue

Vector's actual allowable revenue for the fourth assessment period (detailed below in Table 2) has been determined in line with the formula from paragraph 2 (c) of Schedule 1.6 of the Determination.

Table 2: Actual allowable revenue (AAR) 2024		
Formula: $AAR_{2024} = ANAR_{2024} + APRC_{2024} + RWA_{2024}$		
Component	Description	Value (\$000)
ANAR <sub>2024</sub>	Actual net allowable revenue 2024 <sup>6</sup>	460,601
APRC <sub>2024</sub>	Actual pass-through costs and recoverable costs 2024 <sup>7</sup>	214,213
RWA <sub>2024</sub>	Revenue wash-up draw down amount <sup>8</sup>	28,995
<b>AAR<sub>2024</sub></b>	<b>Actual allowable revenue 2024</b>	<b>703,809</b>

<sup>3</sup> Details of actual allowable revenue 2024 is set out in section 2.2.

<sup>4</sup> Details of actual revenue 2024 is set out in section 2.3.

<sup>5</sup> Details of forgone revenue 2024 is set out in section 2.4.

<sup>6</sup> Details of actual net allowable revenue 2024 is set out in section 2.2.1.

<sup>7</sup> Details of actual pass-through costs and recoverable costs 2024 are included in section 2.2.2.

<sup>8</sup> The revenue wash-up draw down amount 2024 is set out in section 2.2.3.

## 2.2.1 Actual net allowable revenue

To present how the actual net allowable revenue is derived we provide the calculation of its different elements in Table 3.

Table 3: Actual net allowable revenue (ANAR) 2024		
<b>Formula:</b> $ANAR_{2024} = ANAR_{2023} \times (1 + \Delta CPI_{2024}) \times (1 - X)$		
Component	Description	Value (\$000)
ANAR <sub>2023</sub>	Actual net allowable revenue 2023 <sup>9</sup>	438,352
$\Delta CPI_{2024}$	Inflated by consumer price index 2024 ( $\Delta CPI_{2024} = 5.0755\%$ ) <sup>10</sup>	22,249
X	Annual rate of change ( $X = 0\%$ ) <sup>11</sup>	-
<b>ANAR<sub>2024</sub></b>	<b>Actual net allowable revenue 2024</b>	<b>460,601</b>

One of the key items of the calculation of the actual net allowable revenue is the derived change in CPI for the 2024 assessment period. We provide the details of this calculation in Table 4 below.

Table 4: Consumer price index (CPI) 2024			
<b>Formula:</b> $\Delta CPI_{2024} = \left( \frac{CPI_{Jun,2023} + CPI_{Sep,2023} + CPI_{Dec,2023} + CPI_{Mar,2024}}{CPI_{Jun,2022} + CPI_{Sep,2022} + CPI_{Dec,2022} + CPI_{Mar,2023}} \right) - 1$			
Component	Value	Component	Value
CPI <sub>Jun,2023</sub>	1,231	CPI <sub>Jun,2022</sub>	1,161
CPI <sub>Sep,2023</sub>	1,253	CPI <sub>Sep,2022</sub>	1,186
CPI <sub>Dec,2023</sub>	1,259	CPI <sub>Dec,2022</sub>	1,203
CPI <sub>Mar,2024</sub>	1,267	CPI <sub>Mar,2023</sub>	1,218
<b>Total</b>	<b>5,010</b>	<b>Total</b>	<b>4,768</b>
$\Delta CPI_{2024}$	(5,010 / 4,768) - 1		<b>0.050755</b>

## 2.2.2 Actual pass-through and recoverable costs

Actual allowable revenue includes actual pass-through and recoverable costs excluding any recoverable cost that is a revenue wash-up draw down amount. The pass-through and recoverable costs have been determined in accordance with the Electricity Distribution Services Input Methodologies Determination 2012, ("Input Methodologies").<sup>12</sup> Table 5 summarises the pass-

<sup>9</sup> Actual net allowable revenue for the 2023 assessment period was the amount calculated in Vector's 2023 Electricity Compliance Statement which can be found here on Vector's website <https://blob-static.vector.co.nz/blob/vector/media/vector-2023/2023-vector-s-electricity-annual-compliance-statement.pdf>

<sup>10</sup> Details of  $\Delta CPI_{2024}$  are included in Table 4.

<sup>11</sup> The annual rate of change generally applicable to all non-exempt EDBs for the DPP regulatory period is 0% as per Schedule 1.2 of the Determination.

<sup>12</sup> Current version when preparing the Statement was consolidated 20 May 2020, available at <https://comcom.govt.nz/regulated-industries/input-methodologies/electricity-distribution-ims>, Appendix part 4, clauses 3.1.2 and 3.1.3.

through and recoverable costs used to set prices for the 2024 assessment period. All other types of pass-through and recoverable costs not included below are not applicable to Vector.

Table 5: Actual pass-through costs and recoverable costs (APRC) 2024		
Cost type	Description	Value (\$000)
Pass-through costs	Local Authority rates	18,099
	Commerce Act levy	1,881
	Electricity Authority levy	1,720
	Utility Disputes levy	419
	<b>Total pass-through costs</b>	<b>22,119</b>
Recoverable costs	Incremental rolling incentive scheme incentive adjustment <sup>13</sup>	2,924
	Transpower electricity lines service charges	179,991
	Transpower new investment charges	7,680
	Distributed generation allowance	-
	Quality incentive adjustment <sup>14</sup>	(355)
	Capex wash-up adjustment <sup>15</sup>	366
	Fire and Emergency New Zealand levy <sup>16</sup>	729
	Innovation project allowance	759
	<b>Total recoverable costs</b>	<b>192,094</b>
<b>Actual pass-through costs and recoverable costs excluding revenue wash-up drawn down amount 2024</b>		<b>214,213</b>

### 2.2.3 Revenue wash-up draw down amount

The 'revenue wash-up draw down amount' is the 'opening wash-up account balance' calculated in accordance with Schedule 1.7 of the Determination.

The opening wash-up account balance was zero for the first and second assessments periods, and for the third and subsequent assessment periods it is the closing wash-up account balance of the previous assessment period, which in turn is related to the wash-up amount for the previous assessment period. Therefore, the revenue wash-up draw down amount for the 2024 assessment period is derived from the wash-up amount from the 2022 assessment period.

The wash-up amount for the 2022 assessment period has been recalculated for the additional information available at the end of the 2023 assessment period, predominantly being quantity data,

<sup>13</sup> The incremental rolling incentive (IRIS) adjustment is specified in Schedule 2.2 of the Determination.

<sup>14</sup> The quality incentive adjustment is the amount calculated in Vector's 2022 Electricity Compliance Statement which can be found here on Vector's website <https://www.vector.co.nz/about-us/regulatory/disclosures-electricity/price-quality-path>

<sup>15</sup> The capex wash-up adjustment is specified in clause 3.1.3 of the Input Methodologies.

<sup>16</sup> The Fire and Emergency New Zealand levy is any levy payable to Fire and Emergency New Zealand under the Fire and Emergency New Zealand Act 2017.

Qi,2022. This follows the similar approach to the recalculation of the pass-through balance under clause 8.6(a) of the Electricity Distribution Services Default Price-Quality Path Determination 2015.

<b>Table 6: Opening wash-up account balance 2024</b>			
<b>Formula:</b> $OWAB_{2024} = (WUA_{2022} - VUAF_{2022}) \times (1 + WACC)^2$			
<b>Component</b>	<b>Description</b>	<b>2022 Value (\$000)</b>	<b>2023 Value (\$000)</b>
WUA <sub>2022</sub>	Wash-up amount 2022 <sup>17</sup>	26,494	26,689
- VUAF <sub>2022</sub>	Voluntary undercharging amount foregone 2022 <sup>18</sup>	-	-
$(WUA_{2022} - VUAF_{2022}) \times WACC^2$	67th percentile estimate of post-tax WACC (4.23%) <sup>19</sup>	2,289	2,306
<b>OWAB<sub>2024</sub></b>	<b>Opening wash-up account balance 2024</b>	<b>28,783</b>	<b>28,995</b>

## 2.3 Actual revenue

The actual revenue for the 2024 assessment period has been calculated in accordance with the definition in the Determination and is provided in Table 7 below.

<b>Table 7: Actual revenue 2024</b>		
<b>Formula:</b> $AR_{2024} = ARFP_{2024} + ORI_{2024}$		
<b>Component</b>	<b>Description</b>	<b>Value (\$000)</b>
ARFP <sub>2024</sub>	Actual revenue from prices 2024 <sup>20</sup>	662,183
ORI <sub>2024</sub>	Other regulated income 2024 <sup>21</sup>	(15,647)
<b>AR<sub>2024</sub></b>	<b>Actual revenue 2024</b>	<b>646,536</b>

## 2.4 Revenue foregone

The revenue foregone for the 2024 assessment period is the actual net allowable revenue multiplied by the revenue reduction percentage less 20%. As specified in the Determination if the revenue reduction percentage is not greater than 20%, then the revenue foregone is zero. Table 8 below

<sup>17</sup> Wash-up account 2022 is from the 2023 Annual Compliance Statement, available at <https://www.vector.co.nz/about-us/regulatory/disclosures-electricity/price-quality-path>.

<sup>18</sup> Details of the voluntary undercharging amount foregone are from the 2022 Annual Compliance Statement, available at <https://www.vector.co.nz/about-us/regulatory/disclosures-electricity/price-quality-path>.

<sup>19</sup> 67th percentile estimate of post-tax WACC as defined in clause 4.2 of the Determination.

<sup>20</sup> Details of actual revenue from prices 2024, calculated as  $\sum P_{i,2024} Q_{i,2024}$  (prices 2024 x actual quantities 2024) is included in Appendix 1, tables 30 to 34.

<sup>21</sup> Other regulated income has the meaning given in the Input Methodologies, "forecast income associated with the supply of electricity distribution services, including gains and losses on disposed assets but excluding income through prices; investment-related income; capital contributions; or vested assets." The only other regulated income for the 2024 assessment period is the loss on asset disposals, which is from the Electricity Information Disclosure 2024, available at <https://www.vector.co.nz/about-us/regulatory/disclosures-electricity/financial-and-network-information>.



shows Vector’s revenue reduction percentage is 1.90%, which is less than 20%, therefore Vector’s revenue foregone is zero for the 2024 assessment period.

Table 8: Revenue reduction percentage			
Formula: $RRP_{2024} = 1 - ARFP_{2024}/FRFP_{2024}$			
Component	Description	Value (\$000)	Result
ARFP <sub>2024</sub>	Actual revenue from prices 2024	662,183	
FRFP <sub>2024</sub>	Forecast revenue from prices 2024 <sup>22</sup>	649,808	
RRP <sub>2024</sub>	Revenue reduction percentage 2024		-1.90%
Revenue reduction percentage > 20%?			No
Revenue forgone (RV <sub>2024</sub> )		-	

## 2.5 2023 wash-up amount recalculation

The wash-up amount for the 2023 assessment period has been recalculated for the additional information available at the end of the 2024 assessment period, predominantly being quantity data, Qi,2023. This follows a similar approach to the recalculation of the pass-through balance under clause 8.6(a) of the Electricity Distribution Services Default Price-Quality Path Determination 2015<sup>23</sup>. The calculation is detailed below in Tables 9-11.

Table 9: Wash-up amount (WAU) 2023			
Formula: $WUA_{2023} = AAR_{2023} - AR_{2023} - RV_{2023}$			
Component	Description	2023 Value (\$000)	2024 Value (\$000)
AAR <sub>2023</sub>	Actual allowable revenue 2023 <sup>24</sup>	664,408	664,408
- AR <sub>2023</sub>	Actual revenue 2023 <sup>25</sup>	(601,563)	(601,494)
- RV <sub>2023</sub>	Revenue foregone 2023 <sup>26</sup>	-	-
<b>WUA<sub>2023</sub></b>	<b>Wash-up amount 2023</b>	<b>62,845</b>	<b>62,914</b>

The wash-up amount for the 2023 assessment period is recalculated to be \$62.9m.

<sup>22</sup> Forecast revenue from prices is from the 2024 Price Setting Compliance Statement, available at <https://blob-static.vector.co.nz/blob/vector/media/vector-2023/electricity-distribution-price-setting-compliance-statement-2024.pdf>

<sup>23</sup> Available at [https://comcom.govt.nz/\\_data/assets/pdf\\_file/0023/61358/2014-NZCC-33-Electricity-Distribution-Services-Default-Price-Quality-Path-Determination-2015-28-November-2014.pdf](https://comcom.govt.nz/_data/assets/pdf_file/0023/61358/2014-NZCC-33-Electricity-Distribution-Services-Default-Price-Quality-Path-Determination-2015-28-November-2014.pdf). It provided an approach for EDBs to recalculate the pass-through balances if any additional information became available. The DPP3 determination is silent on this matter.

<sup>24</sup> Actual allowable revenue 2023 is from the 2023 Annual Compliance Statement, available at <https://www.vector.co.nz/about-us/regulatory/disclosures-electricity/price-quality-path>.

<sup>25</sup> Details of 2024 value for actual revenue 2023 is set out in Table 10. The 2023 value for actual revenue 2023 is from the 2023 Annual Compliance Statement.

<sup>26</sup> Details of forgone revenue is set out in Table 11.

**Table 10: Actual revenue 2023**

<b>Formula: AR<sub>2023</sub> = ARFP<sub>2023</sub>+ ORI<sub>2023</sub></b>			
<b>Component</b>	<b>Description</b>	<b>2023 Value (\$000)</b>	<b>2024 Value (\$000)</b>
ARFP <sub>2023</sub>	Actual revenue from prices 2023 <sup>27</sup>	615,065	614,996
ORI <sub>2023</sub>	Other regulated income 2023 <sup>28</sup>	(13,502)	(13,502)
<b>AR<sub>2023</sub></b>	<b>Actual revenue 2023</b>	<b>601,563</b>	<b>601,494</b>

**Table 11: Revenue reduction percentage 2023**

<b>Formula: RRP<sub>2023</sub> = 1 - ARFP<sub>2023</sub>/FRFP<sub>2023</sub></b>					
<b>Component</b>	<b>Description</b>	<b>2023 Value (\$000)</b>	<b>2023 Result</b>	<b>2024 Value (\$000)</b>	<b>2024 Result</b>
ARFP <sub>2023</sub>	Actual revenue from prices 2023	615,065		614,996	
FRFP <sub>2023</sub>	Forecast revenue from prices 2023 <sup>29</sup>	625,305		625,305	
RRP <sub>2023</sub>	Revenue reduction percentage 2023		1.64%		1.65%
<b>Revenue reduction percentage &gt; 20%?</b>			<b>No</b>		<b>No</b>
<b>Revenue forgone (RV<sub>2023</sub>)</b>		-		-	

<sup>27</sup> Details of actual revenue from prices 2023, calculated as  $\sum P_{i,2023} Q_{i,2023}$  (prices 2023 x actual quantities 2023) is included in Appendix 1, tables 30 to 33.

<sup>28</sup> Details of other regulated income 2022 is from the 2022 Annual Compliance Statement, available at <https://blob-static.vector.co.nz/blob/vector/media/vector-2022/vector-electricity-distribution-annual-compliance-statement-2022.pdf>.

<sup>29</sup> Forecast revenue from prices is from the 2022 Price Setting Compliance Statement, available at <https://blob-static.vector.co.nz/blob/vector/media/vector2021/electricity-distribution-price-setting-compliance-statement-2022.pdf>.

### 3. QUALITY STANDARDS

#### 3.1 Quality standards - planned interruptions

As required by clause 9.1 of the Determination, to demonstrate compliance with the quality standards, the sum of Vector’s planned SAIDI (SAIFI) assessed values for all five assessment periods of the DPP regulatory period<sup>30</sup> must not exceed the planned accumulated SAIDI (SAIFI) limit set out in the Determination at the end of the fifth assessment period of the DPP regulatory period.

##### Planned SAIDI assessment

The 2024 assessment period is the fourth assessment period of the Determination, therefore for the purpose of the Statement, Vector has compared its planned SAIDI assessed value against both the planned accumulated SAIDI five-year limit for the DPP regulatory period and the average annual planned SAIDI limit.

Vector has complied with clause 9.1 of the Determination because:

- The sum of its planned SAIDI assessed values for the assessment periods 2021, 2022, 2023 and 2024 was below the planned accumulated SAIDI limit for the DPP; and
- Its planned SAIDI assessed value for the 2024 assessment period was below the average annual planned SAIDI limit.

Both are reported in Table 12 below.

Table 12: Planned SAIDI standard							
Type	2024 SAIDI assessed value	2023 SAIDI assessed value	2022 SAIDI assessed value	2021 SAIDI assessed value <sup>31</sup>	Accumulated limit <sup>32</sup> (5-year)	Average annual limit <sup>33</sup>	Compliance (Clause 9.1)
Planned interruptions	55.77	43.87	40.48	46.54	585.38	117.08	Compliant

<sup>30</sup> For the regulatory period 1 April 2020 to 31 March 2025.

<sup>31</sup> Details of 2023, 2022 and 2021 SAIDI assessed values are from the 2023 Annual Compliance Statement, available at <https://blob-static.vector.co.nz/blob/vector/media/vector-2023/2023-vector-s-electricity-annual-compliance-statement.pdf>.

<sup>32</sup> The planned accumulated SAIDI limit for the DPP regulatory period is set out in the table 3.1.1 of Schedule 3.1 of the determination.

<sup>33</sup> The average annual planned SAIDI limit is the planned accumulated SAIDI limit divided by five.

Table 13 specifies how Vector has derived the planned SAIDI assessed value for the 2024 assessment period.

Table 13: Planned SAIDI assessed value		
Formula: $SAIDI_{planned,assessed} = SAIDI_B + \frac{SAIDI_N}{2}$		
Component	Description	Value
$SAIDI_B$	Sum of SAIDI values: (a) Class B interruptions excluding the Class B notified interruptions + (b) Class B notified interruptions occurred partially or wholly outside of their specified notified interruption window or alternate day	<b>10.74</b>
$SAIDI_N$	(a) the SAIDI values of any Class B notified interruptions where the SAIDI value is the greater of that calculated based on: (i) the duration of minutes accumulated for each ICP that the Class B notified interruption occurred for; and (ii) the period of the notified interruption window minus two hours;	85.29
	(b) the 'intended SAIDI values' of any intended interruption cancelled without notice is the greater of that calculated based on: (i) the duration of minutes accumulated for each ICP that the intended interruption occurred for, which will be zero; and (ii) the period of the notified interruption window minus two hours; and	4.76
	(c) the 'intended SAIDI values' of any intended interruption cancelled with notice, where the 'intended SAIDI value' for each of those intended interruptions cancelled with notice is zero.	-
	<b>Total</b>	90.05
$\frac{SAIDI_N}{2}$		<b>45.03</b>
$SAIDI_{planned,assessed} = SAIDI_B + \frac{SAIDI_N}{2}$		<b>55.77</b>

### Planned SAIFI assessment

The 2024 assessment period is the fourth assessment period of the Determination; therefore, for the purpose of the Statement, Vector has compared its planned SAIFI assessed value against both the planned accumulated SAIFI five-year limit and the average annual planned SAIFI limit.

Vector has complied with clause 9.1 of the Determination because:

- The sum of its planned SAIFI assessed values for the assessment periods 2021, 2022, 2023 and 2024 was below the planned accumulated SAIFI limit for the DPP; and

- Its planned SAIFI assessed value for the 2024 assessment period was below the average annual planned SAIFI limit

Both are reported in Table 14 below.

Table 14: Planned SAIFI standard							
Type	2024 SAIFI assessed value	2023 SAIFI assessed value	2022 SAIFI assessed value	2021 SAIFI assessed value <sup>34</sup>	Accumulated limit <sup>35</sup> (5-year)	Average annual limit <sup>36</sup>	Compliance (Clause 9.1)
Planned interruptions	0.311	0.256	0.269	0.342	2.878	0.576	Compliant

Vector is not required to provide the ‘planned interruptions reporting’ specified by clause 12.1 of the Determination as Vector has not exceeded the planned SAIDI and SAIFI limits and therefore has complied with clauses 9.2(a) and 9.2(b) of the Determination.

### 3.2 Quality standards - unplanned interruptions

As required by clause 9.7 of the Determination, to demonstrate compliance with the quality standards in respect of each assessment period, Vector must comply with the unplanned interruptions reliability assessment specified in clause 9.8 for that assessment period.

#### Unplanned SAIDI assessment

Vector’s annual unplanned SAIDI limit and boundary data are set by the Commission and disclosed in Schedule 3.2 of the Determination.

As detailed below in Table 15, Vector’s unplanned SAIDI assessed value has not exceeded the unplanned SAIDI limit for the 2024 assessment period.

Table 15: Unplanned SAIDI standard				
Type	2024 SAIDI assessed value	Annual SAIDI limit	SAIDI Boundary	Compliance (Clause 9.7)
Unplanned interruptions	98.37	104.83	4.83	compliant

The methodology for deriving the unplanned SAIDI assessed value for the 2024 assessment period is detailed below in Table 16 and the supporting data which informed the replacing of SAIDI values during Vector’s SAIDI major events have been included in Appendix 4a.

<sup>34</sup> Details of 2021, 2022 and 2023’s SAIFI assessed value are from the 2023 Annual Compliance Statement, available at <https://blob-static.vector.co.nz/blob/vector/media/vector-2023/2023-vector-s-electricity-annual-compliance-statement.pdf>

<sup>35</sup> The planned accumulated SAIFI limit for the DPP regulatory period is set out in the table 3.1.1 of Schedule 3.1 of the determination.

<sup>36</sup> The average planned SAIFI limit is the planned accumulated SAIFI limit divided by five.

**Table 16: Unplanned SAIDI assessment**

Component	Description	Value
<i>SAIDI<sub>unplanned,assessed</sub></i>	Sum of the SAIDI values for Class C interruptions commencing within the assessment period, where the SAIDI value for each 30-minute period that starts on the hour or half past the hour within a SAIDI major event that exceeds 1/48 <sup>th</sup> of the SAIDI unplanned boundary value for that assessment period is replaced with 1/48 <sup>th</sup> of the SAIDI unplanned boundary value for that assessment period	98.37

**Unplanned SAIFI assessment:**

Vector’s annual unplanned SAIFI limit and boundary data are set by the Commission and disclosed in Schedule 3.2 of the Determination.

As detailed below in Table 17, Vector’s unplanned SAIFI assessed value has not exceeded the unplanned SAIFI limit for the 2024 assessment period.

**Table 17: Unplanned SAIFI standard**

Type	Annual SAIFI assessed value	Annual SAIFI limit	SAIFI Boundary	Compliance (Clause 9.7)
<b>Unplanned interruptions</b>	1.129	1.337	0.037	Compliant

The methodology for deriving the unplanned SAIFI assessed value for the 2024 assessment period is detailed below in Table 18 and the supporting data which informed the replacing of SAIFI values during Vector’s SAIFI major events have been included in Appendix 4b.

**Table 18: Unplanned SAIFI assessed values**

Component	Description	Value
<i>SAIFI<sub>unplanned,assessed</sub></i>	Sum of the SAIFI values for Class C interruptions commencing within the assessment period, where the SAIFI value for each 30-minute period that starts on the hour or half past the hour within a SAIFI major event that exceeds 1/48 <sup>th</sup> of the SAIFI unplanned boundary value for that assessment period is replaced with 1/48 <sup>th</sup> of the SAIFI unplanned boundary value for that assessment period.	1.129

Vector is not required to provide the ‘unplanned interruptions reporting’ specified by clause 12.3 of the Determination as Vector has not exceeded the unplanned SAIDI and SAIFI limits and therefore has complied with clauses 9.7 and 9.8 of the Determination.

### 3.3 Quality incentive adjustment

Vector’s target, collar, and cap for SAIDI planned and unplanned and Vector’s Incentive rate for the DPP regulatory period are set out in the Determination respectively. We have present them together in Table 19.

Table 19: Vector’s SAIDI quality measures				
Measure	Incentive rate (IR)	Target	Collar	Cap
Unplanned	\$84,519	89.28	-	104.83
Planned		39.03	-	117.08

The quality incentive adjustment must be calculated by Vector within five months after the expiration of the assessment period in accordance with Schedule 4 of the Determination and is a recoverable cost in the assessment period following that in which it was calculated. This Statement includes the calculation for the quality incentive adjustment for the 2026 assessment period in Appendix 2, in accordance with clause 11.6 in the Determination.

### 3.4 Major events within the assessment period

A SAIDI/SAIFI major event is defined in clause 4.2 of the Determination as any period of 24 hours that starts on the hour or half past the hour where the sum of SAIDI/SAIFI values over that period for unplanned interruptions exceeds the applicable SAIDI/SAIFI unplanned boundary value.

Vector had two extended SAIDI major events and one extended major SAIFI events during the 2024 assessment period. We have defined each of these events as an ‘extended major event’ as major events can last longer than 24 hours if the major event criteria are met. This is in accordance with the Commission’s final decision in the Determination’s reasons paper<sup>37</sup>.

Tables 20 to 21 include details relating to the two extended major SAIDI events in accordance with clause 11.6(g) of the Determination.

<sup>37</sup> Section K69-K72 p391 - [https://comcom.govt.nz/\\_data/assets/pdf\\_file/0020/191810/Default-price-quality-paths-for-electricity-distribution-businesses-from-1-April-2020-Final-decision-Reasons-paper-27-November-2019.PDF](https://comcom.govt.nz/_data/assets/pdf_file/0020/191810/Default-price-quality-paths-for-electricity-distribution-businesses-from-1-April-2020-Final-decision-Reasons-paper-27-November-2019.PDF)

**Table 20: SAIDI Major Event 1 (ME1)**

Start time & date		End time & date		SAIDI Value before normalisation (see Appendix 4a)	SAIDI Value after normalisation (see Appendix 4a)
13 June 2023	07:30 AM	15 June 2023	06:30 AM	10.8803	0.2175
<b>Main causes</b>		Equipment, weather and unknown			
<b>Main location(s)</b>		Mainly isolated to the largely rural Warkworth area of the Rodney ward, including the suburbs Algies Bay, Big Omaha, Dome Forest, Dome Valley, Glorit, Kaipara Flats, Kawau Island, Leigh, Mahurangi East, Mahurangi Harbour, Mahurangi West, Makarau, Mangakura, Matakana, Omaha, Pohuehue, Point Wells, Puhoi, Sandspit, Snells Beach, Stillwater, Tauhoa, Tawharanui Peninsula, Te Arai, Ti Point, Tomarata, Waiwera, Warkworth, Wellsford, Whangaripo, Whangateau, Wharehine			
<b>ICP affected (rounding to the nearest thousand)</b>		15,000			
<b>Main equipment involved</b>		Overhead lines			
<b>How Vector responded</b>		Vector took immediate and serious action. Vector promptly sent several teams to the site of the fault to conduct a thorough investigation. Power was reinstated wherever possible. For more comprehensive information, please refer to the extreme event report, available at <a href="https://www.vector.co.nz/about-us/regulatory/disclosures-electricity/price-quality-path">https://www.vector.co.nz/about-us/regulatory/disclosures-electricity/price-quality-path</a> .			
<b>Prevention and future improvements</b>		<p>Following Cyclone Gabrielle in 2023, a full review of Vector's response was conducted, identifying areas for improvements and actions for business units to enhance future responses. One of these actions is the development of Large Scale Event (LSE) zones which enables us to better manage all response, restoration, and communication activities.</p> <p>As part of our strategy to prevent future outages, we review each high SAIDI event (above 0.2 minutes) using structured criteria, including actions taken by the Electricity Operations Centre (EOC), network configuration, maintenance, protection and operation, and restoration actions by the Field Service Provider (FSP).</p> <p>These events are reported fortnightly at the Strategic Reliability Management (SRM) meeting, where any learnings, findings, outcomes and follow-up actions are discussed. There was a set of remedial actions to address ongoing reliability in this geographic area post this major event that is monitored through the SRM meeting.</p> <p>For more comprehensive information, please refer to the extreme event report, available at <a href="https://www.vector.co.nz/about-us/regulatory/disclosures-electricity/price-quality-path">https://www.vector.co.nz/about-us/regulatory/disclosures-electricity/price-quality-path</a>.</p>			



**Table 21: SAIDI Major Event (ME2)**

Start time & date		End time & date		SAIDI Value before normalisation (see Appendix 4a)	SAIDI Value after normalisation (see Appendix 4a)
29 October 2023	8:30 AM	30 October 2023	12:00 PM	5.5508	2.0872
<b>Main causes</b>		Equipment - OH (25 events); Vegetation (24 events); Total – 50 events			
<b>Main location(s)</b>		Primarily northern and coastal areas which are largely rural and exposed, including Wellsford, Waiheke, Warkworth, Orewa, Big Omaha, Red Beach, Kaukapakapa and Coatesville.			
<b>ICP affected (rounding to the nearest thousand)</b>		30,000			
<b>Main equipment involved</b>		Overhead lines			
<b>How Vector responded</b>		A 'Storm Warning' was issued as per the Vector Storm Response Process as a tropical low caused by the remnants of Cyclone Lola approached the upper North Island. This enabled relevant parties to prepare for weather conditions that could lead to a storm. This was prepared for by rostering additional first response and support crews, as well as additional crews on standby.			
<b>Prevention and future improvements</b>		<p>Following Cyclone Gabrielle in 2023, a full review of Vector's response was conducted, identifying areas for improvements and actions for business units to enhance future responses. One of these actions is the development of Large Scale Event (LSE) zones which enables us to better manage all response, restoration, and communication activities.</p> <p>As part of our strategy to prevent future outages, we review each high SAIDI event (above 0.2 minutes) using structured criteria, including actions taken by the Electricity Operations Centre (EOC), network configuration, maintenance protection and operation, and restoration actions by the Field Service Provider (FSP).</p> <p>These events are reported fortnightly at the Strategic Reliability Management Meeting, where any learnings, findings, outcomes and follow-up actions are discussed.</p>			

Table 22 includes details relating to the one extended major SAIFI events in accordance with clause 11.6(h) of the Determination.

Table 22: SAIFI Major Event (ME3)					
Start time & date		End time & date		SAIFI Value before normalisation (see Appendix 4b)	SAIFI Value after normalisation (see Appendix 4b)
28 October 2023	10:00PM	30 October 2023	12:00 PM	0.0488	0.0147
<b>Main causes</b>		Equipment - OH (25 events); Vegetation (24 events); Total – 51 events			
<b>Main location(s)</b>		Primarily northern and coastal areas which are largely rural and exposed, including Wellsford, Waiheke, Warkworth, Orewa, Big Omaha, Red Beach, Kaukapakapa and Coatesville.			
<b>ICP affected (rounding to the nearest thousand)</b>		30,000			
<b>Main equipment involved</b>		Overhead lines			
<b>How Vector responded</b>		A 'Storm Warning' was issued as per the Vector Storm Response Process as a tropical low caused by the remnants of Cyclone Lola approached the upper North Island.. This enabled relevant parties to prepare for weather conditions that could lead to a storm. This was prepared for by rostering additional first response and support crews, as well as additional crews on standby.			
<b>Prevention and future improvements</b>		<p>Following Cyclone Gabrielle in 2023, a full review of Vector's response was conducted, identifying areas for improvements and actions for business units to enhance future responses. One of these actions is the development of Large Scale Event (LSE) zones which enables us to better manage all response, restoration, and communication activities.</p> <p>As part of our strategy to prevent future outages, we review each high SAIDI event (above 0.2 minutes) using structured criteria, including actions taken by the Electricity Operations Centre (EOC), network configuration, maintenance and defects, protection and operation, and restoration actions by the Field Service Provider (FSP).</p> <p>These events are reported fortnightly at the Strategic Reliability Management Meeting, where any learnings, findings, outcomes and follow-up actions are discussed.</p>			

All the supporting information in relation to the half-hourly normalised SAIDI and SAIFI during the major event which have informed Vector's unplanned SAIDI and SAIFI assessed value has been disclosed in Appendices 4a and 4b.

## Explanations for mitigating factors

Mitigating factors to prevent or minimise these events largely relate to Vector's pre-storm operations and network design and maintenance. That is, the mitigating factors to prevent these events and to minimise the impact of these events relate to Vector's strategy to prevent further outages. This was presented under the 'prevention and future improvements' section in the tables from 20 to 22.

Vector's approach to outage events to mitigate the impact and prevent them in future was also disclosed in much greater detail in Vector's 2024 AMP including detailed information on its Strategic Reliability Management Plan (SRMP)<sup>38</sup> and Vector's initiatives to respond to climate change. Additionally, Vector's processes in a storm are also described on our website.<sup>39</sup>

The SRMP builds on actions and learnings from our previous RY2016-22 reliability performance, focusing on reducing outage duration and the number of customers impacted. These initiatives aim to improve reliability by addressing the length of outages and minimising the number of affected customers. The SRMP and associated reliability management, targets a margin below the regulatory limit to allow for the variability in network operating conditions from year to year. In Vector's 2024 AMP, we describe the ongoing strategies, investment and initiatives underpinning our SRMP.

### **3.5 Extreme events within the assessment period**

For clause 9.9 of the Determination, to comply with the extreme event standard, Vector must not have an extreme event in the assessment period.

An extreme event is defined in Schedule 3.3 of the Determination as any period of 24 hours that starts on the hour or half past the hour where either:

1. **SAIDI value of 120 minutes:** The SAIDI value of all unplanned interruptions that start during that 24-hour period, in aggregate, is above 120 minutes; or
2. **Total of six million customer interruption minutes:** The total duration of customer interruption minutes resulting from all unplanned interruptions that start during that 24-hour period, in aggregate, is more than six million customer interruption minutes.

As defined in Schedule 3.3 (2) of the Determination, any unplanned interruption caused by 'major external factors' is not an extreme event. The Determination defines major external factors as natural disaster, third party interference, a fire that does not originate on the EDB's network, or wildfire. The

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<sup>38</sup> Section 11.3, Vector's AMP 2024 <https://blob-static.vector.co.nz/blob/vector/media/vector-2024/electricity-asset-management-plan-2024-combined-final-updated.pdf>.

<sup>39</sup> <https://www.vector.co.nz/personal/outages/popular-questions/what-does-vector-do-in-a-storm>

Determination defines a natural disaster as floods, severe weather events, including severe lightning, severe storms (including solar storms), severe wind and severe rain etc.

On 14 June 2023, outages resulted in customer minutes exceeding the 6-million threshold, as defined in Schedule 3.3 of the Determination. Our investigation shows that the outages likely resulted from latent damage caused by Cyclone Gabrielle in February 2023, which is considered a major external factor. However, due to the complex nature of these events, we cannot state this with absolute certainty. Therefore, we have published an ‘Extreme Event report’ on our website<sup>40</sup> and submitted it to the Commission, in accordance with clauses 12.5 and 12.6 of the Determination. This report provides a comprehensive description of the event, including the factors contributing to the outage, the measures taken to address the event and other learnings from it.

### **3.6 Policies and procedures for recording SAIDI and SAIFI**

Vector’s Electricity Operations Centre (“EOC”) is responsible for operating the electricity network. Resolution of planned and unplanned events is under direction of the duty Electricity Operations Controller. The EOC also operates the network in accordance with two internal company standards. These standards define the end-to-end process for capturing and reporting reliability performance data in accordance with the Determination.

#### **Recording interruptions**

Most medium voltage and high voltage interruptions are monitored and controlled in real-time by the EOC through Vector’s SCADA system. Where equipment is involved that is not SCADA enabled, it is operated by Vector’s service providers, with communication to the EOC by radio.

All planned and unplanned records are captured by the Electricity Operations Controller both in hard copy (electricity fault switching log) and electronically (HVSPEC database described below).

All interruptions are also logged and tracked separately in Vector’s Customer Management System by Vector’s customer services team.

Vector maintains a bespoke system for recording interruptions, HVSPEC. HVSPEC holds all the data in relation to customer numbers for each part of the HV network. The EOC controllers record details of all network interruptions, in accordance with the Determination for unplanned interruptions and for planned interruptions.

Vector has made the relevant changes to its policies and procedures in accordance with the Determination for the DPP regulatory period (from 2020–2025), including the separate assessment of planned and unplanned interruptions and the way that SAIDI is calculated for planned outages.

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<sup>40</sup> Available at <https://www.vector.co.nz/about-us/regulatory/disclosures-electricity/price-quality-path>

For each interruption, the event type, location, duration, and number of customers affected is identified. Appendix 3 illustrates both the HVSPEC planned and unplanned data capture processes and the quality assurance carried out on outage information.

### **SAIDI and SAIFI calculating**

SAIDI and SAIFI are calculated in HVSPEC for each interruption, and the data is retained in a database for reporting and analysis. At the end of each year the period's average network customer base is calculated using the Gentrack billing and revenue system (averaging customers at the start and end of the year). The following reliability metrics are extracted from the HVSPEC database for disclosure reporting:

- Interruption frequency and duration by class;
- Interruption frequency and duration by cause;
- Interruption frequency and duration by main equipment involved; and
- SAIDI/SAIFI (calculated using average customer count).

### **3.7 Transactions**

To comply with clause 11.6(i) Vector confirms that it has not entered into an agreement with another EDB or Transpower for an amalgamation, merger, major transaction, or transfer during the 2024 assessment period; and therefore, no further information was provided to the Commission as specified in clause 10.1 of the Determination.

## Schedule 7: Director's Certificate on Annual Compliance Statement

I, Doug McKay, being a director of Vector Limited, certify that, having made all reasonable enquiry, to the best of my knowledge and belief, the attached Annual Compliance Statement of Vector 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.



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*Director*

Date 26/08/2024

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 Reasonable Assurance Report to Vector Limited

## Opinion

Our reasonable assurance opinion has been formed on the basis of the matters outlined in this report.

In our opinion, Vector Limited has, in all material respects, complied with Clause 11 of the Electricity Distribution Services Default Price-Quality Path Determination 2020 for the period 1 April 2023 to 31 March 2024.

As far as appears from an examination, the information used in the preparation of the Annual Compliance Statement has been properly extracted from Vector Limited's accounting and other records, sourced from its financial and non-financial systems for the period 1 April 2023 to 31 March 2024.

## Information subject to assurance

We have performed an engagement to provide reasonable assurance in relation to Vector Limited's Electricity Distribution Services Default Price-Quality Path Compliance Statement (the 'Annual Compliance Statement') for the period 1 April 2023 to 31 March 2024.

## Criteria

Clause 11 of the Electricity Distribution Services Default Price-Quality Path Determination 2020. As a result, this report may not be suitable for another purpose.

## Standards we followed

We conducted our reasonable assurance engagement in accordance with Standard on Assurance Engagements 3100 (Revised) Assurance Engagement on Compliance (SAE 3100 (Revised)) (**SAE 3100 (Revised)**) issued by the New Zealand Auditing and Accounting Standards Board (**Standard**). We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our reasonable opinion. In accordance with the Standard, we have:

- used our professional judgement to assess the risk of material non-compliance and plan and perform the engagement to obtain reasonable assurance that the Electricity Distribution Services Default Price-Quality Path Compliance Statement (the 'Annual Compliance Statement'), is free from material non-compliance, whether due to fraud or error;



- considered relevant internal controls when designing our assurance procedures, however we do not express an opinion on the effectiveness of these controls; and
- ensured that the engagement team possesses the appropriate knowledge, skills and professional competencies.

## How to interpret reasonable assurance and material non-compliance

Reasonable assurance is a high level of assurance, but is not a guarantee that it will always detect material non-compliance, when it exists.

Non-compliance is considered material if, individually or in aggregate, they it could reasonably be expected to influence the relevant decisions of the intended users taken on the basis of the Electricity Distribution Services Default Price-Quality Path Compliance Statement (the 'Annual Compliance Statement').

## 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 compliance requirements may occur and not be detected.

A reasonable assurance engagement for the period 1 April 2023 to 31 March 2024 does not provide assurance on whether compliance with Clause 11 of the Electricity Distribution Services Default Price-Quality Path Determination 2020 will continue in the future or that the information used in the preparation of Annual Compliance Statements will continue to be properly extracted from Vector Limited's accounting and other records, sourced from its financial and non-financial systems.

## Use of this assurance Report

Our report is made solely for Vector Limited. Our assurance work has been undertaken so that we might state to Vector Limited those matters we are required to state to them in the assurance report and for no other purpose.

Our report is released to Vector Limited on the basis that it shall not be copied, referred to or disclosed, in whole or in part, without our prior written consent. No other third party is intended to receive our report.

Our report should not be regarded as suitable to be used or relied on by anyone other than Vector Limited for any purpose or in any context. Any other person who obtains access to our report or a copy thereof and chooses to rely on our report (or any part thereof) will do so at its own risk.

To the fullest extent permitted by law, none of KPMG, any entities directly or indirectly controlled by KPMG, or any of their respective members or employees accept or assume any responsibility and deny all liability to anyone other than Vector Limited for our work, for this independent assurance report, and/or for the opinions or conclusions we have reached.

Our opinion is not modified in respect of this matter.

## Vector Limited's responsibility for the Electricity Distribution Services Default Price-Quality Path Compliance Statement (the 'Annual Compliance Statement')

The directors of Vector Limited are responsible for the compliance activities undertaken to meet the compliance requirement in accordance with Clause 11 of the Electricity Distribution Services Default Price-Quality Path Determination 2020 and compliance requirement that the information used in the preparation of the Annual Compliance Statement has been properly extracted from Vector Limited's accounting and other records, sourced from its financial and non-financial systems. This responsibility includes such internal control as the directors determine is necessary to enable the identification of risks that threaten the compliance requirements identified above being met and identifying, designing and implementing controls which will mitigate those risks and monitor ongoing compliance.





## Our responsibility

Our responsibility is to express an opinion to Vector Limited on whether Vector Limited has, in all material respects, complied with the Criteria for the period 1 April 2023 to 31 March 2024 and to express an opinion whether as far as appears from an examination, the information used in the preparation of the Annual Compliance Statement has been properly extracted from Vector Limited's accounting and other records, sourced from its financial and non-financial systems for the period 1 April 2023 to 31 March 2024.

## Our independence and quality management

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

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* (**PES 3**), which requires the firm to design, implement and operate a system of quality control including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Our firm has also provided annual audit and half-yearly review of financial statements, regulatory assurance, pre-assurance on climate related disclosures, compliance in relation to R&D tax credits and other assurance services to Vector Limited. Subject to certain restrictions, partners and employees of our firm may also deal with Vector Limited on normal terms within the ordinary course of trading activities of the business of Vector Limited. These matters have not impaired our independence as assurance providers of Vector Limited for this engagement. The firm has no other relationship with, or interest in, Vector Limited.

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KPMG  
Auckland  
26 August 2024

## Appendix 1: PY23 & PY24 total line charge revenues

**Table 30: Summary of PY23 & PY24 total line charge revenues**

Consumer group	Auckland		Northern		Total	
	Pi, 2024 × Qi, 2024	Pi, 2023 × Qi, 2023	Pi, 2024 × Qi, 2024	Pi, 2023 × Qi, 2023	Pi, 2024 × Qi, 2024	Pi, 2023 × Qi, 2023
Residential	\$ 165,256,058	\$ 201,993,616	\$ 121,366,783	\$ 153,139,145	\$ 286,622,841	\$ 355,132,761
General	\$ 32,714,019	\$ 53,472,476	\$ 19,296,783	\$ 30,738,390	\$ 52,010,801	\$ 84,210,866
Low voltage	\$ 40,020,608	\$ 48,970,025	\$ 11,834,102	\$ 14,337,947	\$ 51,854,709	\$ 63,307,972
Transformer	\$ 42,536,575	\$ 55,640,461	\$ 13,381,032	\$ 17,304,001	\$ 55,917,607	\$ 72,944,462
High voltage	\$ 13,180,499	\$ 18,043,018	\$ 3,777,929	\$ 3,866,282	\$ 16,958,428	\$ 21,909,301
Zone substation	\$ 1,709,345	\$ -	\$ -	\$ -	\$ 1,709,345	\$ -
Sub-transmission	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Non-standard	\$ 8,355,704	\$ 16,323,335	\$ 778,810	\$ 1,167,433	\$ 9,134,514	\$ 17,490,768
Transmission	\$ 125,918,640		\$ 62,055,695	\$ -	\$ 187,974,335	\$ -
<b>Total</b>	<b>\$ 429,691,448</b>	<b>\$ 394,442,932</b>	<b>\$ 232,491,133</b>	<b>\$ 220,553,198</b>	<b>\$ 662,182,581</b>	<b>\$ 614,996,130</b>

**Table 31: Non-standard consumers' PY23 & PY24 total line charge revenues**

	Anonymised Code		Qi, 2023, & Qi, 2024	Pi, 2024	Pi, 2023	Pi, 2024 × Qi, 2024	Pi, 2023 × Qi, 2023
Auckland	AN24-1	AN23-1	1	-	-	\$ -	\$ -
	AN24-2	AN23-2	1	996,888	1,366,017	\$ 996,888	\$ 1,366,017
	AN24-3	AN23-3	1	1,049,414	2,356,382	\$ 1,049,414	\$ 2,356,382
	AN24-4	AN23-4	1	-	-	\$ -	\$ -
	AN24-5	AN23-5	1	703,982	1,167,993	\$ 703,982	\$ 1,167,993
	AN24-6	AN23-6	1	568,800	867,823	\$ 568,800	\$ 867,823
		AN23-7	1	-	764,094	\$ -	\$ 764,094
	AN24-7	AN23-8	1	794,112	1,162,214	\$ 794,112	\$ 1,162,214
	AN24-8	AN23-9	1	-	303,374	\$ -	\$ 303,374
	AN24-9	AN23-10	1	790,417	785,496	\$ 790,417	\$ 785,496
	AN24-10	AN23-11	1	395,538	1,326,151	\$ 395,538	\$ 1,326,151
		AN23-13	1	-	206,148	\$ -	\$ 206,148
	AN24-11	AN23-14	1	547,478	874,928	\$ 547,478	\$ 874,928
		AN23-15	1	-	1,479,761	\$ -	\$ 1,479,761
	AN24-12	AN23-16	1	794,524	819,301	\$ 794,524	\$ 819,301
	AN24-13	AN23-17	1	333,732	456,879	\$ 333,732	\$ 456,879
	AN24-14	AN23-18	1	69,330	78,307	\$ 69,330	\$ 78,307
	AN24-15	AN23-19	1	282,876	661,720	\$ 282,876	\$ 661,720
	AN24-16	AN23-20	1	57,919	69,948	\$ 57,919	\$ 69,948
	AN24-17	AN23-21	1	-	-	\$ -	\$ -
	AN24-18	AN23-22	1	-	-	\$ -	\$ -
	AN24-19	AN23-23	1	-	-	\$ -	\$ -
	AN24-20	AN23-24	1	367,740	719,071	\$ 367,740	\$ 719,071
AN24-21	AN23-25	1	311,602	382,231	\$ 311,602	\$ 382,231	
AN24-22	AN23-26	1	124,061	271,472	\$ 124,061	\$ 271,472	
AN24-23	AN23-27	1	167,290	243,426	\$ 167,290	\$ 243,426	
	AN23-28	1	-	38,124	\$ -	(\$ 38,124)	
	AN23-29	1	-	1,278	\$ -	(\$ 1,278)	
Northern	WN24-1	WN23-1	1	261,432	491,164	\$ 261,432	\$ 491,164
	WN24-2	WN23-2	1	517,378	676,269	\$ 517,378	\$ 676,269
	WN24-3	WN23-3	1	-	-	\$ -	\$ -

**Table 32: Residential and general consumers' PY23 & PY24 total line charge revenues**

Consumer group, price category & code				Auckland						Northern						
2023	2024			Pi, 2024	Pi, 2023	Qi, 2024	Qi, 2023	Pi, 2024 * Qi, 2024	Pi, 2023 * Qi, 2023	Pi, 2024	Pi, 2023	Qi, 2024	Qi, 2023	Pi, 2024 * Qi, 2024	Pi, 2023 * Qi, 2023	
Residential	ARUL WRUL	ARNLU WRNLU	...-FIXD	0.4500	0.3000	6,642,190	4,854,575	\$ 2,988,986	\$ 1,456,373	0.4500	0.3000	3,518,622	2,926,856	\$ 1,583,380	\$ 878,057	
			...-24UC	0.0551	0.0904	81,857,612	51,044,669	\$ 4,510,354	\$ 4,614,438	0.0551	0.0904	51,689,387	40,974,856	\$ 2,848,085	\$ 3,704,127	
			...-INJT	-	-	774,694	301,305	\$ -	\$ -	-	-	-	1,110,655	672,832	\$ -	\$ -
	ARCL WRCL	ARNLC WRNLC	...-FIXD	0.4500	0.3000	12,825,633	15,034,854	\$ 5,771,535	\$ 4,510,456	0.4500	0.3000	7,948,168	10,723,901	\$ 3,576,676	\$ 3,217,170	
			...-AICO	0.0542	0.0842	202,612,378	224,103,992	\$ 10,981,591	\$ 18,869,556	0.0551	0.0842	128,850,374	165,674,418	\$ 7,099,656	\$ 13,949,786	
			...-INJT	-	-	857,198	902,412	\$ -	\$ -	-	-	-	1,116,860	1,210,415	\$ -	\$ -
	ARHL WRHL	ARHLU WRHLU	...-FIXD	0.4500	0.3000	16,604,084	8,453,680	\$ 7,471,838	\$ 2,536,104	0.4500	0.3000	11,177,645	5,972,632	\$ 5,029,940	\$ 1,791,790	
			...-OFPK	0.0387	0.0603	68,078,660	65,869,891	\$ 2,634,644	\$ 3,971,954	0.0387	0.0603	54,845,772	58,512,141	\$ 2,122,531	\$ 3,528,282	
			...-OFPK	0.0387	-	28,753,855	-	\$ 1,112,774	\$ -	0.0387	-	21,966,057	-	\$ 850,086	\$ -	
			...-OFPK	0.0387	-	81,281,469	-	\$ 3,145,593	\$ -	0.0387	-	58,041,782	-	\$ 2,246,217	\$ -	
			...-PEAK	0.1322	0.1579	37,804,000	27,176,905	\$ 4,997,689	\$ 4,291,233	0.1322	0.1579	27,223,613	24,635,732	\$ 3,598,962	\$ 3,889,982	
	ARHLC WRHLC	ARHLC ARHLC	...-FIXD	0.4500	0.3000	40,090,467	43,622,477	\$ 18,040,710	\$ 13,086,743	0.4500	0.3000	25,160,822	26,822,118	\$ 11,322,370	\$ 8,046,635	
			...-OFPK	0.0378	0.0603	212,108,624	423,938,987	\$ 8,017,706	\$ 25,563,521	0.0387	0.0603	119,972,849	271,538,379	\$ 4,642,949	\$ 16,373,764	
			...-OFPK	0.0378	-	85,535,255	-	\$ 3,233,233	\$ -	0.0387	-	48,207,540	-	\$ 1,865,632	\$ -	
			...-OFPK	0.0378	-	215,448,147	-	\$ 8,143,940	\$ -	0.0387	-	140,127,480	-	\$ 5,422,933	\$ -	
			...-PEAK	0.1313	0.1378	96,404,515	183,466,067	\$ 12,657,913	\$ 25,281,624	0.1322	0.1378	62,724,217	117,929,285	\$ 8,292,142	\$ 16,250,655	
	ARHLD WRHLD	ARHLD WRHLD	...-FIXD	0.4500	-	-	-	\$ -	\$ -	0.4500	-	-	-	\$ -	\$ -	
			...-OFPK	-	-	-	-	\$ -	\$ -	-	-	-	-	\$ -	\$ -	
			...-OFPK	0.0328	-	-	-	\$ -	\$ -	0.0328	-	-	-	\$ -	\$ -	
			...-OFPK	0.0328	-	-	-	\$ -	\$ -	0.0328	-	-	-	\$ -	\$ -	
			...-PEAK	0.1263	-	-	-	\$ -	\$ -	0.1263	-	-	-	\$ -	\$ -	
	ARUS WRUS	ARNSU WRNSU	...-FIXD	1.3000	1.1200	7,304,506	5,106,423	\$ 9,495,858	\$ 5,719,194	1.3000	1.1200	4,787,843	4,415,188	\$ 6,224,196	\$ 4,945,011	
			...-24UC	0.0164	0.0530	121,641,908	74,803,401	\$ 1,994,927	\$ 3,964,580	0.0164	0.0530	91,652,048	81,644,055	\$ 1,503,094	\$ 4,327,135	
			...-INJT	-	-	1,032,157	530,980	\$ -	\$ -	-	-	-	1,285,174	925,984	\$ -	\$ -
	ARCS WRCS	ARNSC WRNSU	...-FIXD	1.2800	1.1200	9,652,525	11,022,100	\$ 12,355,232	\$ 12,344,752	1.3000	1.1200	6,815,981	9,032,567	\$ 8,860,775	\$ 10,116,475	
			...-AICO	0.0164	0.0468	243,134,844	270,889,218	\$ 3,987,411	\$ 12,677,615	0.0164	0.0468	185,806,265	238,982,395	\$ 3,047,223	\$ 11,184,376	
			...-INJT	-	-	697,345	703,258	\$ -	\$ -	-	-	-	795,799	966,388	\$ -	\$ -
	ARHS WRHS	ARHSU WRHSU	...-FIXD	1.3000	1.1200	7,249,174	3,796,986	\$ 9,423,926	\$ 4,252,624	1.3000	1.1200	7,094,501	4,107,043	\$ 9,222,851	\$ 4,599,888	
			...-OFPK	-	0.0229	65,730,942	61,509,887	\$ -	\$ 1,408,576	-	0.0229	70,222,793	77,499,897	\$ -	\$ 1,774,748	
			...-OFPK	-	-	27,845,877	-	\$ -	\$ -	-	-	28,017,247	-	\$ -	\$ -	
			...-OFPK	-	-	75,979,335	-	\$ -	\$ -	-	-	67,145,800	-	\$ -	\$ -	
			...-PEAK	0.0935	0.1205	35,156,486	25,104,577	\$ 3,287,131	\$ 3,025,101	0.0935	0.1205	31,698,603	32,194,071	\$ 2,963,819	\$ 3,879,386	
	ARHSC WRHSC	ARHSC WRHSC	...-FIXD	1.2800	1.1200	16,979,523	22,240,376	\$ 21,733,789	\$ 24,909,221	1.3000	1.1200	16,594,284	16,665,435	\$ 21,572,569	\$ 18,665,287	
			...-OFPK	-	0.0229	129,504,658	450,846,250	\$ -	\$ 10,324,379	-	0.0229	159,825,703	335,232,017	\$ -	\$ 7,676,813	
			...-OFPK	-	-	51,314,573	-	\$ -	\$ -	-	-	63,450,861	-	\$ -	\$ -	
			...-OFPK	-	-	228,230,516	-	\$ -	\$ -	-	-	183,636,938	-	\$ -	\$ -	
			...-PEAK	0.0935	0.1004	99,136,655	191,091,332	\$ 9,269,277	\$ 19,185,570	0.0935	0.1004	79,900,500	142,826,473	\$ 7,470,697	\$ 14,339,778	
	ARHSD WRHSD	ARHSD WRHSD	...-FIXD	1.1700	-	-	-	\$ -	\$ -	-	1.1700	-	-	-	\$ -	\$ -
			...-OFPK	-	-	-	-	\$ -	\$ -	-	-	-	-	-	\$ -	\$ -
			...-OFPK	-	-	-	-	\$ -	\$ -	-	-	-	-	-	\$ -	\$ -
...-PEAK			0.0935	-	-	-	\$ -	\$ -	-	-	0.0935	-	-	-	\$ -	\$ -
...-INJT			-	-	-	-	\$ -	\$ -	-	-	-	-	-	-	\$ -	\$ -

Consumer group, price category & code				Auckland						Northern					
2023	2024			Pi, 2024	Pi, 2023	Qi, 2024	Qi, 2023	Pi, 2024 × Qi, 2024	Pi, 2023 × Qi, 2023	Pi, 2024	Pi, 2023	Qi, 2024	Qi, 2023	Pi, 2024 × Qi, 2024	Pi, 2023 × Qi, 2023
General	ABSU	ABSU	...-FIXD	0.0550	0.0813	27,100,147	26,749,157	\$ 1,490,508	\$ 2,174,706	0.0550	0.0813	17,427,906	17,185,590	\$ 958,535	\$ 1,397,188
	WBSU	WBSU	...-24UC	0.0226	0.0257	15,737,964	15,676,512	\$ 355,678	\$ 402,886	0.0226	0.0257	9,851,594	9,713,667	\$ 222,646	\$ 249,641
	ABSU WBSU	ABSU WBSU	...-FIXD	1.5200	1.1200	8,066,605	9,210,954	\$ 12,261,240	\$ 10,316,268	1.5200	1.1200	3,638,555	4,810,939	\$ 5,530,604	\$ 5,388,252
			...-24UC	0.0164	0.0530	354,978,122	410,960,835	\$ 5,821,641	\$ 21,780,924	0.0164	0.0530	139,301,146	181,775,849	\$ 2,284,539	\$ 9,634,120
	ABSH WBSH	ABSH WBSH	...-INJT	-	-	546,736	445,127	\$ -	\$ -	-	-	364,653	373,613	\$ -	\$ -
			...-FIXD	1.5200	1.1200	5,377,138	4,367,909	\$ 8,173,250	\$ 4,892,058	1.5200	1.1200	4,689,458	3,755,103	\$ 7,127,976	\$ 4,205,715
			...-OFFPK	-	0.0229	122,353,786	194,575,431	\$ -	\$ 4,455,777	-	0.0229	90,916,101	137,272,298	\$ -	\$ 3,143,536
			...-OFFPK	-	-	47,318,226	-	\$ -	\$ -	-	-	35,430,664	-	\$ -	\$ -
			...-OFFPK	-	-	118,120,887	-	\$ -	\$ -	-	-	80,223,372	-	\$ -	\$ -
			...-PEAK	0.0935	0.1205	49,323,015	78,422,035	\$ 4,611,702	\$ 9,449,855	0.0935	0.1205	33,930,302	55,767,114	\$ 3,172,483	\$ 6,719,937
	...-INJT	-	-	507,345	321,743	\$ -	\$ -	-	-	349,276	234,756	\$ -	\$ -		

**Table 33: Commercial consumers' PY23 & PY24 total line charge revenues**

			Auckland						Northern						
Consumer group, price category & code			PI, 2024	PI, 2023	QI, 2024	QI, 2023	PI, 2024 × QI, 2024	PI, 2023 × QI, 2023	PI, 2024	PI, 2023	QI, 2024	QI, 2023	PI, 2024 × QI, 2024	PI, 2023 × QI, 2023	
Low voltage	ALVN WLVN	...-FIXD	2.1000	1.8300	840,102	851,495	\$ 1,764,214	\$ 1,558,236	5.9200	5.92	301,993	306,207	\$ 1,787,799	\$ 1,812,745	
		...-24UC	0.0424	0.0553	225,278,570	232,648,699	\$ 9,551,811	\$ 12,865,473	0.0202	0.0340	95,614,560	96,521,656	\$ 1,931,414	\$ 3,281,736	
		...-CAPY	0.0469	0.0469	123,792,846	125,620,592	\$ 5,805,884	\$ 5,891,606	0.0436	0.0396	43,690,904	44,384,551	\$ 1,904,923	\$ 1,757,628	
		...-PWRF	0.2917	0.2917	6,670	11,632	\$ 1,946	\$ 3,393	0.2917	0.2917	-	1,336	\$ -	\$ 390	
		...-INJT	-	-	917,852	647,993	\$ -	\$ -	-	-	161,048	268,555	\$ -	\$ -	
		...-FIXD	2.1000	-	575,891	-	\$ 1,209,371	\$ -	11.1500	11.1500	156,868	137,494	\$ 1,749,078	\$ 1,533,058	
	ALVT WLVT	...-24UC	0.0129	0.0123	549,521,079	539,002,671	\$ 7,088,822	\$ 6,629,733	0.0059	0.0053	158,119,721	151,563,645	\$ 932,906	\$ 803,287	
		...-CAPY	0.0469	0.0469	153,351,741	145,272,780	\$ 7,192,197	\$ 6,813,293	0.0436	0.0396	37,223,357	33,244,978	\$ 1,622,938	\$ 1,316,501	
		...-DAMD	0.1364	0.3123	46,842,549	45,297,674	\$ 6,389,324	\$ 14,146,463	0.1249	0.2924	13,099,187	12,259,149	\$ 1,636,088	\$ 3,584,575	
		...-PWRF	0.2917	0.2917	3,486,590	3,640,136	\$ 1,017,038	\$ 1,061,828	0.2917	0.2917	922,024	850,276	\$ 268,954	\$ 248,026	
		...-INJT	-	-	576,842	324,009	\$ -	\$ -	-	-	280,098	51,584	\$ -	\$ -	
		...-FIXD	2.10	1.83	56,844	57,928	\$ 119,372	\$ 106,008	5.92	5.92	28,835	29,696	\$ 170,703	\$ 175,800	
	Transformer	ATXN WTXN	...-24UC	0.0424	0.0553	21,806,347	22,447,466	\$ 924,589	\$ 1,241,345	0.0202	0.0340	15,124,650	16,442,415	\$ 305,518	\$ 559,042
			...-CAPY	0.0450	0.0450	12,890,637	13,077,167	\$ 580,079	\$ 588,473	0.0419	0.0380	6,703,594	6,908,785	\$ 280,881	\$ 262,534
...-PWRF			0.2917	0.2917	-	1,456	\$ -	\$ 425	0.2917	0.2917	-	-	\$ -	\$ -	
...-INJT			-	-	151,561	139,777	\$ -	\$ -	-	-	-	-	\$ -	\$ -	
...-FIXD			2.1000	-	375,574	-	\$ 788,705	\$ -	11.1500	11.1500	145,018	134,343	\$ 1,616,951	\$ 1,497,924	
...-24UC			0.0129	0.0123	1,139,943,807	1,127,199,243	\$ 14,705,275	\$ 13,864,551	0.0059	0.0053	409,047,754	387,503,389	\$ 2,413,382	\$ 2,053,768	
ATXT WTXH		...-CAPY	0.0450	0.0450	275,507,646	268,198,210	\$ 12,397,844	\$ 12,068,919	0.0419	0.0380	100,939,071	93,265,310	\$ 4,229,347	\$ 3,544,082	
		...-DAMD	0.1309	0.2998	90,849,886	89,138,187	\$ 11,892,250	\$ 26,723,628	0.1199	0.2807	32,817,674	31,409,378	\$ 3,934,839	\$ 8,816,612	
		...-PWRF	0.2917	0.2917	3,868,565	3,589,688	\$ 1,128,461	\$ 1,047,112	0.2917	0.2917	1,472,100	1,351,518	\$ 429,412	\$ 394,238	
		...-INJT	-	-	1,276,158	541,147	\$ -	\$ -	-	-	213,450	84,287	\$ -	\$ -	
		...-FIXD	2.10	1.83	2,196	2,404	\$ 4,612	\$ 4,399	5.92	5.92	-	-	\$ -	\$ -	
		...-24UC	0.0424	0.0553	531,571	577,817	\$ 22,539	\$ 31,953	0.0202	0.0340	-	-	\$ -	\$ -	
High voltage		AHVN WHVN	...-CAPY	0.0432	0.0432	468,846	497,097	\$ 20,254	\$ 21,475	0.0402	0.0365	-	-	\$ -	\$ -
			...-PWRF	0.2917	0.2917	2,651	2,201	\$ 773	\$ 642	0.2917	0.2917	-	-	\$ -	\$ -
	...-INJT		-	-	-	-	\$ -	\$ -	-	-	-	-	\$ -	\$ -	
	...-FIXD		2.1000	-	55,858	-	\$ 117,302	\$ -	11.1500	11.1500	11,498	9,675	\$ 128,203	\$ 107,876	
	...-24UC		0.0129	0.0123	426,496,057	431,604,164	\$ 5,501,799	\$ 5,308,731	0.0059	0.0053	144,901,449	121,045,565	\$ 854,919	\$ 641,541	
	...-CAPY		0.0432	0.0432	71,065,167	70,471,529	\$ 3,070,015	\$ 3,044,370	0.0402	0.0365	21,893,442	17,436,324	\$ 880,116	\$ 636,426	
	AHVT WHVT	...-DAMD	0.1257	0.2878	32,364,781	32,157,307	\$ 4,068,253	\$ 9,254,873	0.1151	0.2695	10,563,337	8,770,197	\$ 1,215,840	\$ 2,363,568	
		...-DEXA	0.8000	0.9504	69,502	24,889	\$ 55,601	\$ 23,655	0.8000	0.8030	770,135	53,044	\$ 616,108	\$ 42,594	
		...-PWRF	0.2917	0.2917	1,094,794	1,209,875	\$ 319,351	\$ 352,920	0.2917	0.2917	283,657	254,633	\$ 82,743	\$ 74,277	
		...-INJT	-	-	1,915,168	1,851,856	\$ -	\$ -	-	-	15,953	7,301	\$ -	\$ -	
		...-FIXD	2.1000	-	732	-	\$ 1,537	\$ -	2.1000	-	-	-	\$ -	\$ -	
		...-24UC	0.0059	0.0058	60,131,635	-	\$ 354,777	\$ -	0.0059	0.0058	-	-	\$ -	\$ -	
	Zone substation	AZST WZSH	...-CAPY	0.1050	0.1228	10,324,860	-	\$ 1,084,110	\$ -	0.1050	0.1228	-	-	\$ -	\$ -
			...-DAMD	0.0261	0.1228	5,407,178	-	\$ 141,127	\$ -	0.0261	0.1228	-	-	\$ -	\$ -
...-DEXA			0.8000	0.8000	68,453	-	\$ 54,762	\$ -	0.8000	0.8000	-	-	\$ -	\$ -	
...-PWRF			0.2917	0.2917	250,366	-	\$ 73,032	\$ -	0.2917	0.2917	-	-	\$ -	\$ -	
...-INJT			-	-	255,098	-	\$ -	\$ -	-	-	-	-	\$ -	\$ -	
...-FIXD			2.1000	-	-	-	\$ -	\$ -	2.1000	-	-	-	\$ -	\$ -	
Sub-transmission		ASTT WSTH	...-24UC	0.0059	-	-	-	\$ -	\$ -	0.0059	-	-	-	\$ -	\$ -
			...-CAPY	0.0840	-	-	-	\$ -	\$ -	0.0840	-	-	-	\$ -	\$ -
			...-DAMD	0.0209	-	-	-	\$ -	\$ -	0.0209	-	-	-	\$ -	\$ -
			...-DEXA	0.8000	-	-	-	\$ -	\$ -	0.8000	-	-	-	\$ -	\$ -
...-PWRF	0.2917	-	-	-	\$ -	\$ -	0.2917	-	-	-	\$ -	\$ -			
...-INJT	-	-	-	-	\$ -	\$ -	-	-	-	-	\$ -	\$ -			

**Table 34: Transmission revenues under the GXP methodology**

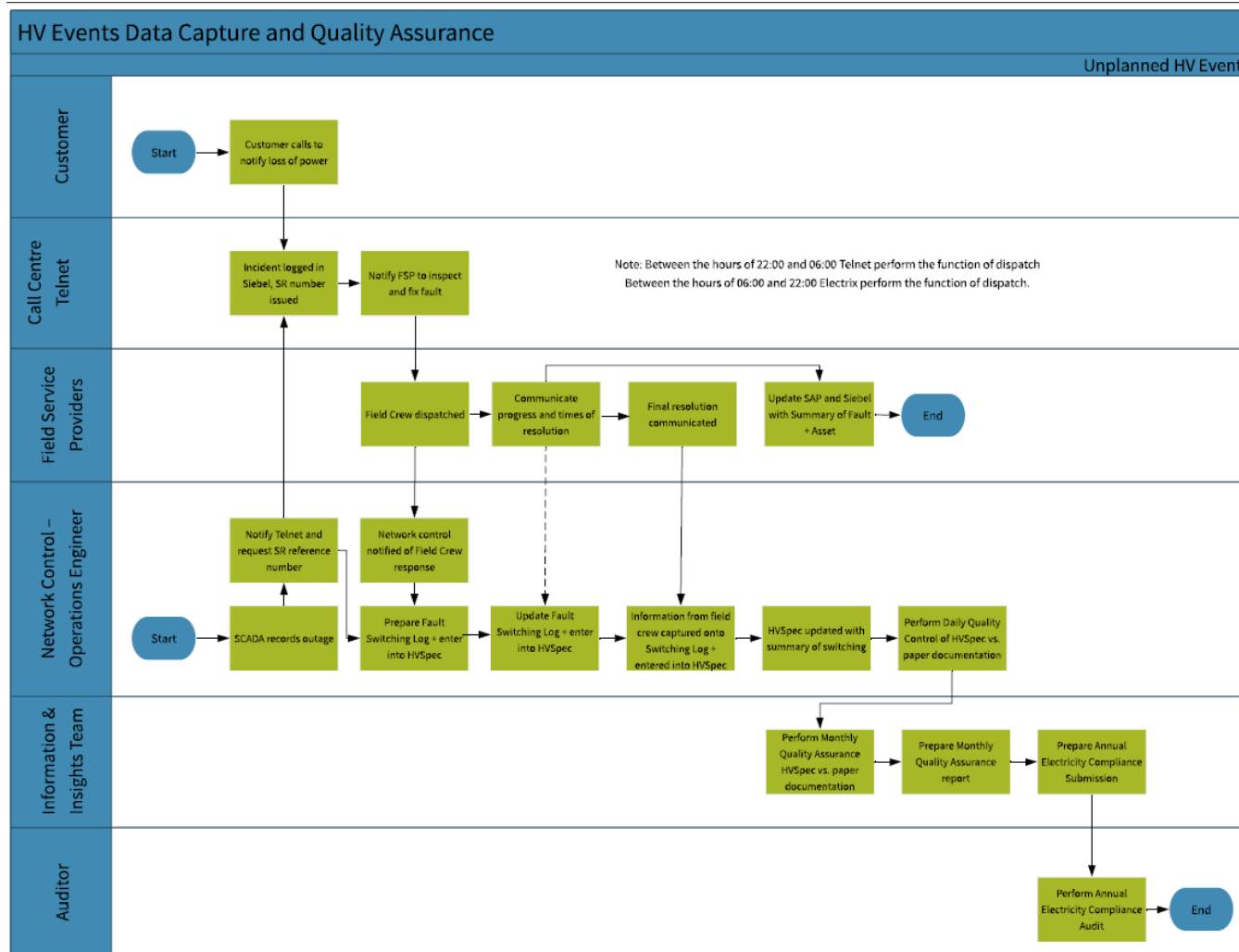
	Price category		Description	Units	<i>P<sub>i</sub>, 2024</i>	<i>Q<sub>i</sub>, 2024</i>	<i>P<sub>i</sub>, 2024</i> <i>Q<sub>i</sub>, 2024</i>
Auckland	GXP	HEP	Fixed	\$/month per 1/1000%	\$ 11.25123	183,781	\$ 2,067,766
	GXP	LFD	Fixed	\$/month per 1/1000%	\$ 0.74528	1,200,000	\$ 894,333
	GXP	HOB	Fixed	\$/month per 1/1000%	\$ 6.37056	1,200,000	\$ 7,644,668
	GXP	MNG	Fixed	\$/month per 1/1000%	\$ 10.75169	1,200,000	\$ 12,902,028
	GXP	OTA	Fixed	\$/month per 1/1000%	\$ 5.23233	1,200,000	\$ 6,278,799
	GXP	PAK	Fixed	\$/month per 1/1000%	\$ 11.55126	1,200,000	\$ 13,861,508
	GXP	PEN	Fixed	\$/month per 1/1000%	\$ 38.03831	1,200,000	\$ 45,645,977
	GXP	ROS	Fixed	\$/month per 1/1000%	\$ 12.17516	1,200,000	\$ 14,610,189
	GXP	TAK	Fixed	\$/month per 1/1000%	\$ 8.83563	1,200,000	\$ 10,602,759
	GXP	WIR	Fixed	\$/month per 1/1000%	\$ 9.50884	1,200,000	\$ 11,410,614
Northern	GXP	ALB	Fixed	\$/month per 1/1000%	\$ 16.51054	1,200,000	\$ 19,812,653
	GXP	HEN	Fixed	\$/month per 1/1000%	\$ 8.19714	1,200,000	\$ 9,836,569
	GXP	HEP	Fixed	\$/month per 1/1000%	\$ 11.25123	1,016,219	\$ 11,433,707
	GXP	SVL	Fixed	\$/month per 1/1000%	\$ 7.88746	1,200,000	\$ 9,464,958
	GXP	WEL	Fixed	\$/month per 1/1000%	\$ 2.92921	1,200,000	\$ 3,515,048
	GXP	WRD	Fixed	\$/month per 1/1000%	\$ 6.66063	1,200,000	\$ 7,992,759

## Appendix 2: Quality incentive adjustment

Table 34: Quality Incentive Adjustment				
<b>Formula:</b> $REV_{RISK} = 0.02 \times ANAR_{2024}$				
ANAR <sub>2024</sub>				\$438,352,000
REV <sub>RISK</sub>				\$8,767,040
<b>Formulae:</b> $A = (SAIDI_{unplanned,target} - SAIDI_{unplanned,assessed}) * IR;$ $B = (SAIDI_{planned,target} - SAIDI_{planned,assessed}) * 0.5 * IR$				
<b>Component</b>	<b>A (SAIDI<sub>unplanned</sub>)</b>		<b>B (SAIDI<sub>planned</sub>)</b>	
cap <sup>41</sup>	104.83		117.08	
target - assess	89.28 – 98.37	-9.09	39.03 – 55.77	-16.74
Multiplier	1	-9.09	0.5	-8.37
Incentive rate (IR)	84,519	<b>A = (\$768,277.71)</b>	84,519	<b>B = (\$707,424.03)</b>
<b>Formula:</b> Quality incentive adjustment = $\min (REV_{RISK} \text{ or } A + B) \times (1 + 67\text{th percentile estimate of post-tax WACC})^2$				
min (REV <sub>RISK</sub> or A + B)	min (\$8,767,040 or (-\$768,277.71-\$707,424.03)		min (\$8,767,040 or -\$1,475,701.74)	(\$1,475,701.74)
Time value of money (WACC = 4.23%)				(\$127,484.83)
<b>Quality Incentive Adjustment</b> for the assessment period 2026				<b>(\$1,603,186.57)</b>

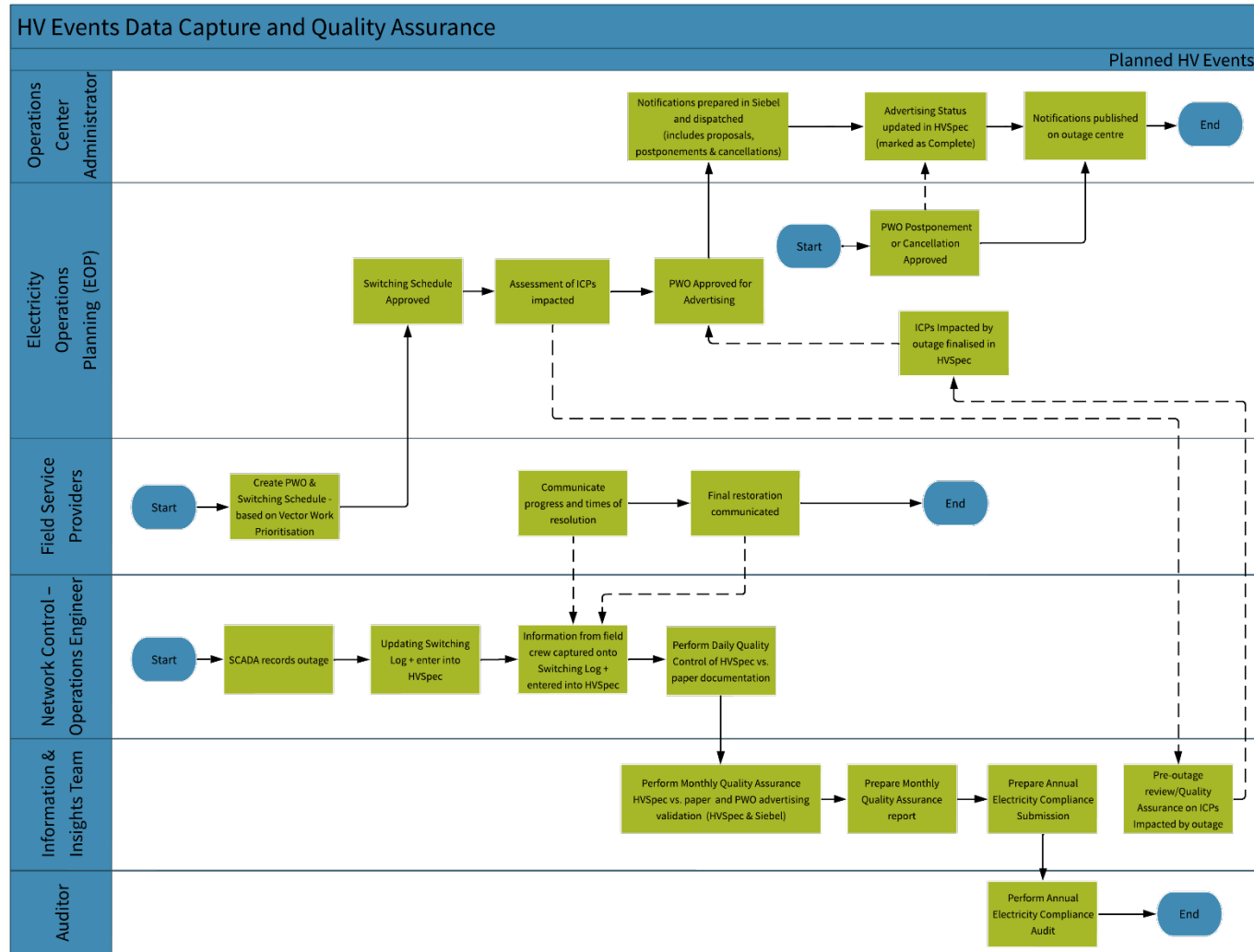
<sup>41</sup> Where SAIDI<sub>unplanned/planned, assessed</sub> is greater than the SAIDI unplanned/planned interruption cap specified for the non-exempt EDB for the assessment period set out in Tables 4.1 and 4.2 of Schedule 4 of the Determination, SAIDI<sub>unplanned/planned, assessed</sub> equals the SAIDI unplanned/planned interruption cap.

## Appendix 3a: HVSPEC data capture and quality assurance – unplanned





## Appendix 3b: HVSPEC data capture and quality assurance – planned



## Appendix 4a: Major SAIDI events

SAIDI Major Event ME1 details								
Date and time	SAIDI	SAIDI	SAIDI	Major SAIDI Event	Boundary Value	Normalised SAIDI	Normalised or not	1/48 Boundary Value
(half-hour commencing)	(half-hour)	(previous 24-hour)	(max rolling 24-hour)					
13/06/2023 7:30	0	0.0078942	10.77107088	Yes	4.83	0	No	0.1006250
13/06/2023 8:00	0	0.0078942	10.77107088	Yes	4.83	0	No	0.1006250
13/06/2023 8:30	0	0.0078942	10.77107088	Yes	4.83	0	No	0.1006250
13/06/2023 9:00	0	0.0078942	10.77107088	Yes	4.83	0	No	0.1006250
13/06/2023 9:30	0.002881	0.0107752	10.77107088	Yes	4.83	0.002881	No	0.1006250
13/06/2023 10:00	0	0.0107752	10.77107088	Yes	4.83	0	No	0.1006250
13/06/2023 10:30	0	0.0047339	10.77107088	Yes	4.83	0	No	0.1006250
13/06/2023 11:00	0	0.0047339	10.77107088	Yes	4.83	0	No	0.1006250
13/06/2023 11:30	0	0.0047339	10.77107088	Yes	4.83	0	No	0.1006250
13/06/2023 12:00	0.004804	0.0076847	10.78183956	Yes	4.83	0.004804	No	0.1006250
13/06/2023 12:30	0	0.0076847	10.78183956	Yes	4.83	0	No	0.1006250
13/06/2023 13:00	0	0.0076847	10.78183956	Yes	4.83	0	No	0.1006250
13/06/2023 13:30	0	0.0076847	10.78183956	Yes	4.83	0	No	0.1006250
13/06/2023 14:00	0	0.0076847	10.78183956	Yes	4.83	0	No	0.1006250
13/06/2023 14:30	0	0.0076847	10.78183956	Yes	4.83	0	No	0.1006250
13/06/2023 15:00	0	0.0076847	10.78183956	Yes	4.83	0	No	0.1006250
13/06/2023 15:30	0	0.0076847	10.78183956	Yes	4.83	0	No	0.1006250
13/06/2023 16:00	0	0.0076847	10.78183956	Yes	4.83	0	No	0.1006250
13/06/2023 16:30	0	0.0076847	10.78183956	Yes	4.83	0	No	0.1006250
13/06/2023 17:00	0	0.0076847	10.78183956	Yes	4.83	0	No	0.1006250
13/06/2023 17:30	0	0.0076847	10.82929582	Yes	4.83	0	No	0.1006250
13/06/2023 18:00	0	0.0076847	10.82929582	Yes	4.83	0	No	0.1006250
13/06/2023 18:30	0	0.0076847	10.82929582	Yes	4.83	0	No	0.1006250

SAIDI Major Event ME1 details								
Date and time	SAIDI	SAIDI	SAIDI	Major SAIDI Event	Boundary Value	Normalised SAIDI	Normalised or not	1/48 Boundary Value
(half-hour commencing)	(half-hour)	(previous 24-hour)	(max rolling 24-hour)					
13/06/2023 19:00	0	0.0076847	10.82929582	Yes	4.83	0	No	0.1006250
13/06/2023 19:30	0	0.0076847	10.82929582	Yes	4.83	0	No	0.1006250
13/06/2023 20:00	0	0.0076847	10.82929582	Yes	4.83	0	No	0.1006250
13/06/2023 20:30	0	0.0076847	10.82929582	Yes	4.83	0	No	0.1006250
13/06/2023 21:00	0	0.0076847	10.82929582	Yes	4.83	0	No	0.1006250
13/06/2023 21:30	0	0.0076847	10.86971858	Yes	4.83	0	No	0.1006250
13/06/2023 22:00	0	0.0076847	10.86971858	Yes	4.83	0	No	0.1006250
13/06/2023 22:30	0	0.0076847	10.86971858	Yes	4.83	0	No	0.1006250
13/06/2023 23:00	0	0.0076847	10.86971858	Yes	4.83	0	No	0.1006250
13/06/2023 23:30	0	0.0076847	10.86971858	Yes	4.83	0	No	0.1006250
14/06/2023 0:00	0	0.0076847	10.87261253	Yes	4.83	0	No	0.1006250
14/06/2023 0:30	0	0.0076847	10.87261253	Yes	4.83	0	No	0.1006250
14/06/2023 1:00	0	0.0076847	10.87261253	Yes	4.83	0	No	0.1006250
14/06/2023 1:30	0	0.0076847	10.87261253	Yes	4.83	0	No	0.1006250
14/06/2023 2:00	0	0.0076847	10.87261253	Yes	4.83	0	No	0.1006250
14/06/2023 2:30	0	0.0076847	10.87261253	Yes	4.83	0	No	0.1006250
14/06/2023 3:00	0	0.0076847	10.87261253	Yes	4.83	0	No	0.1006250
14/06/2023 3:30	0	0.0076847	10.87261253	Yes	4.83	0	No	0.1006250
14/06/2023 4:00	0	0.0076847	10.87261253	Yes	4.83	0	No	0.1006250
14/06/2023 4:30	0	0.0076847	10.87261253	Yes	4.83	0	No	0.1006250
14/06/2023 5:00	0	0.0076847	10.87261253	Yes	4.83	0	No	0.1006250
14/06/2023 5:30	0	0.0076847	10.87261253	Yes	4.83	0	No	0.1006250
14/06/2023 6:00	0	0.0076847	10.87261253	Yes	4.83	0	No	0.1006250
14/06/2023 6:30	0	0.0076847	10.87261253	Yes	4.83	0	No	0.1006250
14/06/2023 7:00	10.76339	10.771071	10.87261253	Yes	4.83	0.100625	Yes	0.1006250
14/06/2023 7:30	0	10.771071	10.87261253	Yes	4.83	0	No	0.1006250

SAIDI Major Event ME1 details								
Date and time	SAIDI	SAIDI	SAIDI	Major SAIDI Event	Boundary Value	Normalised SAIDI	Normalised or not	1/48 Boundary Value
(half-hour commencing)	(half-hour)	(previous 24-hour)	(max rolling 24-hour)					
14/06/2023 8:00	0	10.771071	10.87261253	Yes	4.83	0	No	0.1006250
14/06/2023 8:30	0	10.771071	10.87261253	Yes	4.83	0	No	0.1006250
14/06/2023 9:00	0	10.771071	10.87261253	Yes	4.83	0	No	0.1006250
14/06/2023 9:30	0	10.76819	10.87261253	Yes	4.83	0	No	0.1006250
14/06/2023 10:00	0	10.76819	10.87261253	Yes	4.83	0	No	0.1006250
14/06/2023 10:30	0	10.76819	10.87261253	Yes	4.83	0	No	0.1006250
14/06/2023 11:00	0	10.76819	10.87261253	Yes	4.83	0	No	0.1006250
14/06/2023 11:30	0.01365	10.78184	10.87261253	Yes	4.83	0.01365	No	0.1006250
14/06/2023 12:00	0	10.777036	10.87261253	Yes	4.83	0	No	0.1006250
14/06/2023 12:30	0	10.777036	10.87261253	Yes	4.83	0	No	0.1006250
14/06/2023 13:00	0	10.777036	10.87261253	Yes	4.83	0	No	0.1006250
14/06/2023 13:30	0	10.777036	10.87261253	Yes	4.83	0	No	0.1006250
14/06/2023 14:00	0	10.777036	10.87261253	Yes	4.83	0	No	0.1006250
14/06/2023 14:30	0	10.777036	10.87261253	Yes	4.83	0	No	0.1006250
14/06/2023 15:00	0	10.777036	10.87261253	Yes	4.83	0	No	0.1006250
14/06/2023 15:30	0	10.777036	10.87261253	Yes	4.83	0	No	0.1006250
14/06/2023 16:00	0	10.777036	10.87261253	Yes	4.83	0	No	0.1006250
14/06/2023 16:30	0	10.777036	10.87261253	Yes	4.83	0	No	0.1006250
14/06/2023 17:00	0.05226	10.829296	10.87261253	Yes	4.83	0.05226	No	0.1006250
14/06/2023 17:30	0	10.829296	10.87261253	Yes	4.83	0	No	0.1006250
14/06/2023 18:00	0	10.829296	10.87261253	Yes	4.83	0	No	0.1006250
14/06/2023 18:30	0	10.829296	10.87261253	Yes	4.83	0	No	0.1006250
14/06/2023 19:00	0	10.829296	10.87261253	Yes	4.83	0	No	0.1006250
14/06/2023 19:30	0	10.829296	10.87261253	Yes	4.83	0	No	0.1006250
14/06/2023 20:00	0	10.829296	10.87261253	Yes	4.83	0	No	0.1006250

SAIDI Major Event ME1 details								
Date and time	SAIDI	SAIDI	SAIDI	Major SAIDI Event	Boundary Value	Normalised SAIDI	Normalised or not	1/48 Boundary Value
(half-hour commencing)	(half-hour)	(previous 24-hour)	(max rolling 24-hour)					
14/06/2023 20:30	0	10.829296	10.87261253	Yes	4.83	0	No	0.1006250
14/06/2023 21:00	0.040423	10.869719	10.87261253	Yes	4.83	0.040423	No	0.1006250
14/06/2023 21:30	0	10.869719	10.87261253	Yes	4.83	0	No	0.1006250
14/06/2023 22:00	0	10.869719	10.87261253	Yes	4.83	0	No	0.1006250
14/06/2023 22:30	0	10.869719	10.87261253	Yes	4.83	0	No	0.1006250
14/06/2023 23:00	0	10.869719	10.87261253	Yes	4.83	0	No	0.1006250
14/06/2023 23:30	0.002894	10.872613	10.87261253	Yes	4.83	0.002894	No	0.1006250
15/06/2023 0:00	0	10.872613	10.87261253	Yes	4.83	0	No	0.1006250
15/06/2023 0:30	0	10.872613	10.87261253	Yes	4.83	0	No	0.1006250
15/06/2023 1:00	0	10.872613	10.87261253	Yes	4.83	0	No	0.1006250
15/06/2023 1:30	0	10.872613	10.87261253	Yes	4.83	0	No	0.1006250
15/06/2023 2:00	0	10.872613	10.87261253	Yes	4.83	0	No	0.1006250
15/06/2023 2:30	0	10.872613	10.87261253	Yes	4.83	0	No	0.1006250
15/06/2023 3:00	0	10.872613	10.87261253	Yes	4.83	0	No	0.1006250
15/06/2023 3:30	0	10.872613	10.87261253	Yes	4.83	0	No	0.1006250
15/06/2023 4:00	0	10.872613	10.87261253	Yes	4.83	0	No	0.1006250
15/06/2023 4:30	0	10.872613	10.87261253	Yes	4.83	0	No	0.1006250
15/06/2023 5:00	0	10.872613	10.87261253	Yes	4.83	0	No	0.1006250
15/06/2023 5:30	0	10.872613	10.87261253	Yes	4.83	0	No	0.1006250
15/06/2023 6:00	0	10.872613	10.87261253	Yes	4.83	0	No	0.1006250
15/06/2023 6:30	0	10.872613	10.87261253	Yes	4.83	0	No	0.1006250
<b>SAIDI value before and after normalisation</b>	<b>10.8803</b>					<b>0.2175</b>		

SAIDI Major Event ME2 details								
Date and time	SAIDI	SAIDI	SAIDI	Major SAIDI Event	Boundary Value	Normalised SAIDI	Normalised or not	1/48 Boundary Value
(half-hour commencing)	(half-hour)	(previous 24-hour)	(max rolling 24-hour)					
29/10/2023 8:30	0	0.139463	5.262439	Yes	4.83	0	No	0.1006250
29/10/2023 9:00	0	0.139463	5.262439	Yes	4.83	0	No	0.1006250
29/10/2023 9:30	0.059899	0.199363	5.262439	Yes	4.83	0.059899	No	0.1006250
29/10/2023 10:00	0.000481	0.199843	5.262439	Yes	4.83	0.000481	No	0.1006250
29/10/2023 10:30	0.025334	0.225178	5.268857	Yes	4.83	0.025334	No	0.1006250
29/10/2023 11:00	0.006567	0.191477	5.268857	Yes	4.83	0.006567	No	0.1006250
29/10/2023 11:30	0.118064	0.309541	5.30417	Yes	4.83	0.100625	Yes	0.1006250
29/10/2023 12:00	0.083179	0.39272	5.30417	Yes	4.83	0.083179	No	0.1006250
29/10/2023 12:30	0.539868	0.932588	5.30417	Yes	4.83	0.100625	Yes	0.1006250
29/10/2023 13:00	0	0.932588	5.30417	Yes	4.83	0	No	0.1006250
29/10/2023 13:30	0.004333	0.936921	5.30417	Yes	4.83	0.004333	No	0.1006250
29/10/2023 14:00	0	0.936921	5.30417	Yes	4.83	0	No	0.1006250
29/10/2023 14:30	0.071957	1.008878	5.30417	Yes	4.83	0.071957	No	0.1006250
29/10/2023 15:00	0.41366	1.422538	5.30417	Yes	4.83	0.100625	Yes	0.1006250
29/10/2023 15:30	0.007222	1.42976	5.30417	Yes	4.83	0.007222	No	0.1006250
29/10/2023 16:00	0	1.42976	5.30417	Yes	4.83	0	No	0.1006250
29/10/2023 16:30	0.383941	1.813701	5.30417	Yes	4.83	0.100625	Yes	0.1006250
29/10/2023 17:00	0.001315	1.815016	5.30417	Yes	4.83	0.001315	No	0.1006250
29/10/2023 17:30	0.006782	1.821798	5.30417	Yes	4.83	0.006782	No	0.1006250
29/10/2023 18:00	0.016641	1.838439	5.30417	Yes	4.83	0.016641	No	0.1006250
29/10/2023 18:30	0	1.838439	5.30417	Yes	4.83	0	No	0.1006250
29/10/2023 19:00	0.271268	2.109707	5.30417	Yes	4.83	0.100625	Yes	0.1006250
29/10/2023 19:30	0.028988	2.138695	5.30417	Yes	4.83	0.028988	No	0.1006250
29/10/2023 20:00	0.094024	2.23272	5.30417	Yes	4.83	0.094024	No	0.1006250
29/10/2023 20:30	0.035596	2.268316	5.30417	Yes	4.83	0.035596	No	0.1006250
29/10/2023 21:00	0.085825	2.35414	5.30417	Yes	4.83	0.085825	No	0.1006250

SAIDI Major Event ME2 details								
Date and time	SAIDI	SAIDI	SAIDI	Major SAIDI Event	Boundary Value	Normalised SAIDI	Normalised or not	1/48 Boundary Value
(half-hour commencing)	(half-hour)	(previous 24-hour)	(max rolling 24-hour)					
29/10/2023 21:30	0.749259	3.103399	5.30417	Yes	4.83	0.100625	Yes	0.1006250
29/10/2023 22:00	0	3.103399	5.30417	Yes	4.83	0	No	0.1006250
29/10/2023 22:30	0	3.103399	5.30417	Yes	4.83	0	No	0.1006250
29/10/2023 23:00	0	3.103399	5.30417	Yes	4.83	0	No	0.1006250
29/10/2023 23:30	0	3.103399	5.30417	Yes	4.83	0	No	0.1006250
30/10/2023 0:00	0	3.103399	5.30417	Yes	4.83	0	No	0.1006250
30/10/2023 0:30	0.036355	3.139754	5.30417	Yes	4.83	0.036355	No	0.1006250
30/10/2023 1:00	0.265363	3.405118	5.30417	Yes	4.83	0.100625	Yes	0.1006250
30/10/2023 1:30	0	3.405118	5.30417	Yes	4.83	0	No	0.1006250
30/10/2023 2:00	0.011439	3.317362	5.30417	Yes	4.83	0.011439	No	0.1006250
30/10/2023 2:30	0	3.317362	5.30417	Yes	4.83	0	No	0.1006250
30/10/2023 3:00	0.044213	3.361575	5.30417	Yes	4.83	0.044213	No	0.1006250
30/10/2023 3:30	0	3.361575	5.30417	Yes	4.83	0	No	0.1006250
30/10/2023 4:00	0.095899	3.457475	5.30417	Yes	4.83	0.095899	No	0.1006250
30/10/2023 4:30	0.020064	3.477539	5.30417	Yes	4.83	0.020064	No	0.1006250
30/10/2023 5:00	0	3.477539	5.30417	Yes	4.83	0	No	0.1006250
30/10/2023 5:30	0	3.477539	5.30417	Yes	4.83	0	No	0.1006250
30/10/2023 6:00	0.302954	3.780493	5.30417	Yes	4.83	0.100625	Yes	0.1006250
30/10/2023 6:30	0.007431	3.787925	5.30417	Yes	4.83	0.007431	No	0.1006250
30/10/2023 7:00	0.269308	4.057233	5.30417	Yes	4.83	0.100625	Yes	0.1006250
30/10/2023 7:30	0.424786	4.482018	5.30417	Yes	4.83	0.100625	Yes	0.1006250
30/10/2023 8:00	0.78042	5.262439	5.30417	Yes	4.83	0.100625	Yes	0.1006250
30/10/2023 8:30	0	5.262439	5.30417	Yes	4.83	0	No	0.1006250
30/10/2023 9:00	0	5.262439	5.30417	Yes	4.83	0	No	0.1006250
30/10/2023 9:30	0	5.202539	5.30417	Yes	4.83	0	No	0.1006250
30/10/2023 10:00	0.066798	5.268857	5.30417	Yes	4.83	0.066798	No	0.1006250

SAIDI Major Event ME2 details								
Date and time (half-hour commencing)	SAIDI (half-hour)	SAIDI (previous 24-hour)	SAIDI (max rolling 24-hour)	Major SAIDI Event	Boundary Value	Normalised SAIDI	Normalised or not	1/48 Boundary Value
30/10/2023 10:30	0	5.243522	5.30417	Yes	4.83	0	No	0.1006250
30/10/2023 11:00	0.067215	5.30417	5.30417	Yes	4.83	0.067215	No	0.1006250
30/10/2023 11:30	0.002111	5.188217	5.257323	Yes	4.83	0.002111	No	0.1006250
30/10/2023 12:00	0.152285	5.257323	5.257323	Yes	4.83	0.100625	Yes	0.1006250
<b>SAIDI value before and after normalisation</b>	<b>5.5508</b>					<b>2.0872</b>		



## Appendix 4b: Major SAIFI events

SAIFI Major Event ME3 details								
Date and time (half-hour commencing)	SAIFI (half-hour)	SAIFI (previous 24-hour)	SAIFI (max rolling 24-hour)	Major SAIFI Event	Boundary Value	Normalised SAIFI	Normalised or not	1/48 Boundary Value
28/10/2023 22:00	0	0.000904564	0.038503324	Yes	0.0371	0	No	0.0007729
28/10/2023 22:30	0	0.000904564	0.038503324	Yes	0.0371	0	No	0.0007729
28/10/2023 23:00	0	0.000904564	0.038503324	Yes	0.0371	0	No	0.0007729
28/10/2023 23:30	0	0.000904564	0.038503324	Yes	0.0371	0	No	0.0007729
29/10/2023 0:00	0	0.000904564	0.038503324	Yes	0.0371	0	No	0.0007729
29/10/2023 0:30	0	0.000904564	0.038503324	Yes	0.0371	0	No	0.0007729
29/10/2023 1:00	0	0.000782764	0.039368915	Yes	0.0371	0	No	0.0007729
29/10/2023 1:30	0	0.000782764	0.040900347	Yes	0.0371	0	No	0.0007729
29/10/2023 2:00	0.000102312	0.000885076	0.040900347	Yes	0.0371	0.000102312	No	0.0007729
29/10/2023 2:30	0	0.000885076	0.040900347	Yes	0.0371	0	No	0.0007729
29/10/2023 3:00	0	0.000885076	0.040900347	Yes	0.0371	0	No	0.0007729
29/10/2023 3:30	0	0.000885076	0.040929579	Yes	0.0371	0	No	0.0007729
29/10/2023 4:00	0	0.000885076	0.040929579	Yes	0.0371	0	No	0.0007729
29/10/2023 4:30	0	0.000885076	0.041587299	Yes	0.0371	0	No	0.0007729
29/10/2023 5:00	0	0.000885076	0.041644139	Yes	0.0371	0	No	0.0007729
29/10/2023 5:30	0	0.000875332	0.041644139	Yes	0.0371	0	No	0.0007729
29/10/2023 6:00	0	0.000875332	0.041644139	Yes	0.0371	0	No	0.0007729
29/10/2023 6:30	0	0.000875332	0.042582811	Yes	0.0371	0	No	0.0007729
29/10/2023 7:00	0	0.000875332	0.042595803	Yes	0.0371	0	No	0.0007729
29/10/2023 7:30	0	0.000875332	0.044115864	Yes	0.0371	0	No	0.0007729
29/10/2023 8:00	0	0.000875332	0.044387072	Yes	0.0371	0	No	0.0007729
29/10/2023 8:30	0	0.000875332	0.047389843	Yes	0.0371	0	No	0.0007729
29/10/2023 9:00	0	0.000875332	0.047389843	Yes	0.0371	0	No	0.0007729
29/10/2023 9:30	0.000266336	0.001141668	0.047389843	Yes	0.0371	0.000266336	No	0.0007729

SAIFI Major Event ME3 details								
Date and time (half-hour commencing)	SAIFI (half-hour)	SAIFI (previous 24-hour)	SAIFI (max rolling 24-hour)	Major SAIFI Event	Boundary Value	Normalised SAIFI	Normalised or not	1/48 Boundary Value
29/10/2023 10:00	0.000003248	0.001144916	0.047389843	Yes	0.0371	0.000003248	No	0.0007729
29/10/2023 10:30	0.00012992	0.001274836	0.047389843	Yes	0.0371	0.00012992	No	0.0007729
29/10/2023 11:00	0.000019488	0.000521304	0.047389843	Yes	0.0371	0.000019488	No	0.0007729
29/10/2023 11:30	0.00065772	0.001179024	0.04762045	Yes	0.0371	0.00065772	No	0.0007729
29/10/2023 12:00	0.000225736	0.00140476	0.04762045	Yes	0.0371	0.000225736	No	0.0007729
29/10/2023 12:30	0.016390977	0.017795737	0.04762045	Yes	0.0371	0.0007729	Yes	0.0007729
29/10/2023 13:00	0	0.017795737	0.04762045	Yes	0.0371	0	No	0.0007729
29/10/2023 13:30	0.000149407	0.017945144	0.04762045	Yes	0.0371	0.000149407	No	0.0007729
29/10/2023 14:00	0	0.017945144	0.04762045	Yes	0.0371	0	No	0.0007729
29/10/2023 14:30	0.00027608	0.018221224	0.04762045	Yes	0.0371	0.00027608	No	0.0007729
29/10/2023 15:00	0.000920806	0.01914203	0.04762045	Yes	0.0371	0.0007729	Yes	0.0007729
29/10/2023 15:30	0.000047096	0.019189126	0.04762045	Yes	0.0371	0.000047096	No	0.0007729
29/10/2023 16:00	0	0.019189126	0.04762045	Yes	0.0371	0	No	0.0007729
29/10/2023 16:30	0.000329672	0.019518798	0.04762045	Yes	0.0371	0.000329672	No	0.0007729
29/10/2023 17:00	0.000009744	0.019528542	0.04762045	Yes	0.0371	0.000009744	No	0.0007729
29/10/2023 17:30	0.000006496	0.019535038	0.04762045	Yes	0.0371	0.000006496	No	0.0007729
29/10/2023 18:00	0.002760798	0.022295836	0.04762045	Yes	0.0371	0.0007729	Yes	0.0007729
29/10/2023 18:30	0	0.022295836	0.04762045	Yes	0.0371	0	No	0.0007729
29/10/2023 19:00	0.005576811	0.027872647	0.04762045	Yes	0.0371	0.0007729	Yes	0.0007729
29/10/2023 19:30	0.000022736	0.027895383	0.04762045	Yes	0.0371	0.000022736	No	0.0007729
29/10/2023 20:00	0.002375912	0.030271295	0.04762045	Yes	0.0371	0.0007729	Yes	0.0007729
29/10/2023 20:30	0.001044232	0.031315527	0.04762045	Yes	0.0371	0.0007729	Yes	0.0007729
29/10/2023 21:00	0.001557416	0.032872943	0.04762045	Yes	0.0371	0.0007729	Yes	0.0007729
29/10/2023 21:30	0.005630381	0.038503324	0.04762045	Yes	0.0371	0.0007729	Yes	0.0007729
29/10/2023 22:00	0	0.038503324	0.04762045	Yes	0.0371	0	No	0.0007729
29/10/2023 22:30	0	0.038503324	0.04762045	Yes	0.0371	0	No	0.0007729

SAIFI Major Event ME3 details								
Date and time (half-hour commencing)	SAIFI (half-hour)	SAIFI (previous 24-hour)	SAIFI (max rolling 24-hour)	Major SAIFI Event	Boundary Value	Normalised SAIFI	Normalised or not	1/48 Boundary Value
29/10/2023 23:00	0	0.038503324	0.04762045	Yes	0.0371	0	No	0.0007729
29/10/2023 23:30	0	0.038503324	0.04762045	Yes	0.0371	0	No	0.0007729
30/10/2023 0:00	0	0.038503324	0.04762045	Yes	0.0371	0	No	0.0007729
30/10/2023 0:30	0.000865591	0.039368915	0.04762045	Yes	0.0371	0.0007729	Yes	0.0007729
30/10/2023 1:00	0.001531432	0.040900347	0.04762045	Yes	0.0371	0.0007729	Yes	0.0007729
30/10/2023 1:30	0	0.040900347	0.04762045	Yes	0.0371	0	No	0.0007729
30/10/2023 2:00	0.000009744	0.040807779	0.04762045	Yes	0.0371	0.000009744	No	0.0007729
30/10/2023 2:30	0	0.040807779	0.04762045	Yes	0.0371	0	No	0.0007729
30/10/2023 3:00	0.0001218	0.040929579	0.04762045	Yes	0.0371	0.0001218	No	0.0007729
30/10/2023 3:30	0	0.040929579	0.04762045	Yes	0.0371	0	No	0.0007729
30/10/2023 4:00	0.00065772	0.041587299	0.04762045	Yes	0.0371	0.00065772	No	0.0007729
30/10/2023 4:30	0.00005684	0.041644139	0.04762045	Yes	0.0371	0.00005684	No	0.0007729
30/10/2023 5:00	0	0.041644139	0.04762045	Yes	0.0371	0	No	0.0007729
30/10/2023 5:30	0	0.041644139	0.04762045	Yes	0.0371	0	No	0.0007729
30/10/2023 6:00	0.000938672	0.042582811	0.04762045	Yes	0.0371	0.000772916	Yes	0.0007729
30/10/2023 6:30	0.000012992	0.042595803	0.04762045	Yes	0.0371	0.000012992	No	0.0007729
30/10/2023 7:00	0.001520061	0.044115864	0.04762045	Yes	0.0371	0.0007729	Yes	0.0007729
30/10/2023 7:30	0.000271208	0.044387072	0.04762045	Yes	0.0371	0.000271208	No	0.0007729
30/10/2023 8:00	0.003002771	0.047389843	0.04762045	Yes	0.0371	0.0007729	Yes	0.0007729
30/10/2023 8:30	0	0.047389843	0.04762045	Yes	0.0371	0	No	0.0007729
30/10/2023 9:00	0	0.047389843	0.04762045	Yes	0.0371	0	No	0.0007729
30/10/2023 9:30	0	0.047123507	0.04762045	Yes	0.0371	0	No	0.0007729
30/10/2023 10:00	0.000183511	0.04730377	0.04762045	Yes	0.0371	0.000183511	No	0.0007729
30/10/2023 10:30	0	0.04717385	0.04762045	Yes	0.0371	0	No	0.0007729
30/10/2023 11:00	0.000466088	0.04762045	0.04762045	Yes	0.0371	0.000466088	No	0.0007729
30/10/2023 11:30	0.000001624	0.046964354	0.047378473	Yes	0.0371	0.000001624	No	0.0007729

SAIFI Major Event ME3 details								
Date and time (half-hour commencing)	SAIFI (half-hour)	SAIFI (previous 24-hour)	SAIFI (max rolling 24-hour)	Major SAIFI Event	Boundary Value	Normalised SAIFI	Normalised or not	1/48 Boundary Value
30/10/2023 12:00	0.000639855	0.047378473	0.047378473	Yes	0.0371	0.000639855	No	0.0007729
<b>SAIFI value before and after normalisation</b>	<b>0.0488</b>					<b>0.0147</b>		