Wellington Electricity Annual Compliance Statement

Year ended 31 March 2022

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# Contents

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	Contact	details	3
1	Intro	duction	4
	1.1	2020 DPP Determination requirements	4
	1.2	Disclaimer	5
	1.3	Rounding	5
2	Com	pliance statements	6
	2.1	Presentation of the Annual Compliance Statement	6
	2.2	Wash-up calculation statement	6
	2.3	Quality standard statement	6
	2.3.1	Compliance with the annual reliability assessment	6
	2.4	Statement preparation date	7
	2.5	Transaction statement	7
	2.6	Assurance report	7
	2.7	Director's certification	7
3	Was	h-up amount calculation and supporting information	8
	3.1	Actual allowable revenue calculation	9
	3.2	Actual revenue calculation	9
	3.3	Actual net allowable revenue calculation	11
	3.3.1	Actual net allowable revenue for the first assessment period calculation	12
	3.4	Actual pass-through costs and recoverable costs calculation	13
	3.4.1	Quality incentive adjustment calculation	14
	3.4.2	IRIS incentive adjustment calculation	14
	3.5	Revenue wash-up draw down amount calculation	15
	3.5.1	67 <sup>th</sup> percentile estimate of post-tax WACC	15
4	Qual	ity standard calculations and supporting information	16
	4.1	Capturing reliability information	16
	4.1.1	Recording interruptions	16
	4.1.2	Data validation and review	17
	4.1.3	Calculating the assessed values	18
	4.1.4	Keeping customers informed	18
	4.1.5	Notified planned interruptions	18
	4.2	Planned interruptions quality standard	19
	4.3	Unplanned interruptions quality standard	19
	4.4	Extreme event standard	20



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5	Appendix A: Audit assurance report	21
6	Appendix B: Director's certification	24
7	Appendix C: Published prices for the second assessment period	25
8	Appendix D: Detailed revenue calculation	27
9	Appendix E: Quality incentive calculation 2020	28
10	Appendix F: Quality incentive adjustment 2022	31
11	Appendix G: Opex incentive amount calculation	34
12	Appendix H: Capex incentive amount calculation	37
13	Appendix I: Planned SAIDI and SAIFI assessed value calculation	40
14	Appendix J: Unplanned SAIDI and SAIFI assessed value calculation	42
15	Appendix K: Average customer number calculation	47

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A copy of this Annual Compliance Statement and the Asset Management Plan can be downloaded from www.welectricity.co.nz/disclosures

Any comments or suggestions regarding the Annual Compliance Statement can be made to:

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# **1** Introduction

Wellington Electricity Lines Limited (WELL) owns and operates the electricity distribution network in the Wellington region. WELL manages the poles, wires and equipment that provide electricity to approximately 400,000 customers in the Wellington, Porirua, Lower Hutt and Upper Hutt areas.



Under Part 4 of the Commerce Act 1986, the Commerce Commission (Commission) regulates markets where competition is limited, including electricity distribution services. Regulation for electricity distribution services includes regulation of price and quality through a price-quality path to ensure incentives and pressures, similar to those in a workably competitive market, are faced by distributors so that consumers will benefit in the long term.

The price-quality path set by the Commission includes the allowances WELL has to operate the network, how much revenue WELL can collect from its customers and the quality levels that WELL must perform to. To demonstrate that WELL has met these performance targets, it is required to provide two compliance statements, the *Annual Price-Setting Compliance Statement*, and the *Annual Compliance Statement*.

The Annual Price-Setting Compliance Statement confirmed that WELL's forecast prices for the 12-month period ended 31 March 2022 were set at a level to collect the allowances determined by the price-quality path set by the Commission. The Annual Price-Setting Compliance Statement for the year ended 31 March 2022 was submitted to the Commission and provided on WELL's website in February 2021 (https://www.welectricity.co.nz/disclosures/price-quality-path-annual-compliance-statements/).

This document is the *Annual Compliance Statement* (Compliance Statement). The Compliance Statement confirms that WELL has met its revenue and quality expectations determined by the price-quality path set by the Commission. The price-quality path compliance targets and the requirements of the Annual Compliance Statement are provided in *Electricity Distribution Services Default Price-Quality Path (Wellington Electricity transition) Amendments Determination 2020* (2020 DPP Determination or DPP).

This statement is WELL's Annual Compliance Statement for the second DPP assessment period ended 31 March 2022 (second assessment period).

# 1.1 2020 DPP Determination requirements

This Compliance Statement is made in accordance with the requirements of clause 11.5 of the 2020 DPP Determination. The statement includes WELL's compliance with the requirement to calculate the wash-up amount in clause 8.6, WELL's compliance with the quality standards in clause 9 and WELL's compliance to provide the transaction notifications in clause 10.





This Compliance Statement provides supporting information to demonstrate WELL has complied with clauses 8.6, 9,10.1-10.18 and Schedule 4. The supporting information meets the minimal specifications detailed in clause 11.6 of the 2020 DPP Determination.

# 1.2 Disclaimer

The information contained in the Compliance Statement has been prepared for the express purpose of complying with the requirements of clause 11 of the 2020 DPP Determination. The Compliance Statement has not been prepared for any other purpose. WELL expressly disclaims any liability to any other party who may rely on the Compliance Statement for any other purpose.

Representations in this Compliance Statement made by WELL relate solely to the services offered on the electricity distribution network in the Wellington region.

# 1.3 Rounding

For presentation purposes some numbers in this document have been rounded. In most cases calculations are based on more detailed numbers (i.e. to more decimal places than shown in this document). This may cause small discrepancies or rounding inconsistencies when aggregating some of the information presented in this document. Any rounding discrepancies do not affect the overall compliance calculations which have been based on the more detailed information.





# **2** Compliance statements

The following statements are made in accordance with the requirements of clause 11.4 and 11.5 of the 2020 DPP Determination.

## 2.1 Presentation of the Annual Compliance Statement

The Compliance Statement has been presented in accordance with clause 11.4:

Presentation requirement	Confirmation
Clause 11.4 (a) provide to the Commission 5 months after the end of the assessment period	To be emailed to the Commission
Clause 11.4 (b) make public available on its website at the same time it provides it to the Commission	To be made publicly available on WELL's website
Clause 11.4 (c) provide prices and actual quantities used to calculate the wash-up amount in Excel to the Commission	To be emailed to the Commission

### 2.2 Wash-up calculation statement

As per clause 11.5 (a)(i) of the 2020 DPP Determination, WELL confirms that it has complied with the requirement to calculate the wash-up amount in clause 8.6 for the second assessment period.

The wash-up amount, as provided by clause 8.6, has been calculated as:

Wash-up amount calculation	Amount	
	\$000	
Actual allowable revenue	\$154,562	
less actual revenue	\$159,717	
less revenue foregone	\$0	
Wash-up amount	(\$5,154)	

The detailed calculation and supporting information are provided in section 3, 'Wash-up amount calculation and supporting information'.

#### 2.3 Quality standard statement

As per clause 11.5 (a)(ii) of the 2020 DPP Determination, WELL confirms that it has complied with the quality standards provided in clause 9 for the second assessment period.

#### 2.3.1 Compliance with the annual reliability assessment

WELL confirms that it has complied with the annual reliability assessment provided in clause 9.7 and 9.9 for the second assessment period.

Compliance with clause 9.1 will be assessed at the end of the fifth assessment period in line with the requirements of clause 9.2. WELL's accumulated assessed value at the end of the second assessment period is less than the adjusted planned accumulated limit provided below.





Quality standard	Accumulated assessed value	Adjusted planned accumulated limit <sup>1</sup>	Variance
Planned SAIDI	8.60	55.76	(47.16)
Planned SAIFI	0.0635	0.4429	(0.3794)

For the second assessment period, the unplanned SAIDI and SAIFI assessed values did not exceed the limits specified in Schedule 3.2 of 2020 DPP Determination:

Quality standard	Assessed value	Limit	Variance
Unplanned SAIDI	25.32	39.81	(14.49)
Unplanned SAIFI	0.3783	0.6135	(0.2352)

For the assessment period, the WELL did not have an extreme event and therefore complied with the extreme event standard.

The detailed calculation and supporting information are provided in section 4, 'Quality standard calculations and supporting information'.

## 2.4 Statement preparation date

As per clause 11.5 (b) of the 2020 DPP Determination, WELL states that this Compliance Statement was prepared and approved on 20 July 2022.

### 2.5 Transaction statement

As per clause 11.5 (c) of the 2020 DPP Determination, WELL states that it has not entered into any agreement with another EDB or Transpower for an amalgamation, merger, major transaction or transfer for the second assessment period.

#### 2.6 Assurance report

As per clause 11.5 (e) of the 2020 DPP Determination and Schedule 8, WELL has provided an assurance report by an independent auditor. The auditor's assurance report is provided in Appendix A. The assurance report confirms that the Annual Compliance Statement has been prepared in accordance with Standard on Assurance Engagements 3100 – Compliance Engagements (SAE 3100) and International Standard on Assurance Engagements (New Zealand) 3000 (ISAE (NZ) 3000).

## 2.7 Director's certification

As per clause 11.5 (d) of the 2020 DPP Determination, WELL has provided a signed director's certificate. The director's certificate is provided in Appendix B. This certificate certifies that the information contained in this Compliance Statement is true and accurate. The attached director's certificate is in the form required by Schedule 7 of the 2020 DPP Determination.

<sup>&</sup>lt;sup>1</sup> The adjusted accumulated limits for WELL's four-year DPP regulatory period have been calculated in line with clause 9.6 of the 2020 DPP Determination.





# 3 Wash-up amount calculation and supporting information

As per clause 11.5 (a)(i) of the 2020 DPP Determination, WELL has calculated the wash-up amount using the methodology provided in clause 8.6 (which refers to schedule 1.6) for the second assessment period. The calculations include the supporting information reasonably necessary to demonstrate whether WELL has complied with clause 8.6. At a minimum the supporting information includes the information requested in clause 11.6 (a). The wash-up amount has been calculated as:

Wash-up amount calculation	Definition	Amount \$000	Reference to supporting calculation/ information
Actual allowable revenue	Actual net allowable revenue <i>plus</i> actual pass-through costs and recoverable costs <i>plus</i> revenue wash-up draw down amount <i>plus</i> pass-through balance annual recovery	\$154,562	Supporting calculation provided in section 3.1
<i>less</i> actual revenue	Means the sum of actual revenue from prices plus other regulated income for the assessment period 1 April 2021 to 31 March 2022	\$159,717	Supporting calculation provided in section 3.2
<i>less</i> revenue foregone	Where the <i>revenue reduction percentage</i> is greater than 20%, the 'revenue foregone' must be calculated in accordance with the formula: actual net allowable revenue X (revenue reduction percentage – 20%); where the revenue reduction percentage is not greater than 20%, the 'revenue foregone' is nil. Revenue reduction percentage is -2.8% which is less than 20%. Therefore revenue foregone is nil. Revenue reduction percentage is 1 minus (actual revenue from prices ÷ forecast revenue from prices); 1 – (\$158,977 ÷ \$154,675) = -2.8%	\$0	Calculation method provided in clause 4.2 of the 2020 DPP Determination. Actual revenue from prices provided in section 3.2. Forecast revenue from prices is provided in section 2.1 of WELL's 2021- 22 Annual Price Setting Compliance Statement <sup>2</sup> .
Wash-up amount		(\$5,154)	

<sup>&</sup>lt;sup>2</sup> This can be found at: <u>https://www.welectricity.co.nz/disclosures/price-quality-path-annual-compliance-statements/</u>





# 3.1 Actual allowable revenue calculation

Actual allowable revenue has been calculated using the methodology provided in schedule 1.6 (4).

For the second assessment period, actual allowable revenue is calculated as:

Actual allowable revenue calculation	Definition	Amount \$000	Reference to supporting calculation/ information
Actual net allowable revenue	For the second assessment period, the amount calculated in accordance with Schedule 1.6 (5).	\$91,109	Supporting calculation provided in section 3.3.
<i>plus</i> actual pass- through costs and recoverable costs	For the second assessment period, the sum of all pass-through costs and recoverable costs that were incurred in the assessment period, excluding any recoverable cost that is a revenue wash-up draw down amount.	\$65,012	Supporting calculation provided in section 3.4.
<i>plus</i> revenue wash-up draw down amount	For the second assessment period, means the 'opening wash-up account balance' calculated in accordance with Schedule 1.6, including voluntary undercharging amount foregone.	(\$1,559)	Supporting calculation provided in section 3.5.
Actual allowable revenue		\$154,562	

## 3.2 Actual revenue calculation

WELL's actual revenue is equal to the actual revenue from prices plus other regulated income. Actual revenue from prices is equal to the total of each of its prices multiplied by the actual quantities used. A detailed description of WELL's prices and how they are calculated are provided on its website: <a href="https://www.welectricity.co.nz/disclosures/pricing/">https://www.welectricity.co.nz/disclosures/pricing/</a>.

Published prices for the second assessment period are provided in Appendix C.

Other regulated income comprises of 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.





A summary of actual revenue is provided in the table below.

Actual revenue calculation	Amount
	\$000
Actual revenue from prices	
Residential (includes low user, standard user and EVB)	\$105,973
General Low Voltage	\$29,190
General Transformer	\$18,059
Unmetered	\$3,727
Non-standard consumers (individual contracts) & prior year wash-ups	\$2,028
Total actual revenue from prices	\$158,977
Other regulated income	
Total other regulated income - as defined in the Electricity Distribution Services	\$739
Input Methodologies Determination 2012 consolidated 20 May 2020 (IMs)	
Total actual revenue	\$159,717

As per clause 11.6, WELL has provided detailed revenue calculations for each price category in Appendix D.





# 3.3 Actual net allowable revenue calculation

For the second assessment period, actual net allowable revenue is calculated as the actual net allowable revenue of the previous assessment period inflated by the derived change in CPI. The table below provides the calculation prescribed in schedule 1.6 (5).

Actual net allowable revenue calculation Actual net allowable revenue of the previous	Definition For the second assessment period, the actual net allowable revenue for the first assessment period.	Amount \$000 <sup>3</sup> \$86,525	Reference to supporting calculation/ information Supporting calculation provided in section 3.3.1
assessment period multiplied by (1 + derived change in the CPI)	For the second assessment period, the derived change in the CPI is 0.0530. This is calculated in accordance with the below formula: $\frac{\Delta CPI}{Derived change in the CPI to be applied for the assessment period. calculated in accordance with the formula= \Delta CPI = \frac{CPI_{Jun,t-1} + CPI_{Sep,t-1} + CPI_{Dec,t-1} + CPI_{Mar,t-1}}{CPI_{Jun,t-2} + CPI_{Sep,t-2} + CPI_{Dec,t-2} + CPI_{Mar,t-1}} - 1 where=\frac{CPI_{at:a}}{Derived change in the CPI for the quarter year ending q in the 12-month period n vears prior to vear t. and t is the vear in which the assessment period ends. \Delta CPI = \left(\frac{1082+1106+1122+1142}{1047+1054+1059+1068}\right) -1$	1.0530	Calculation method as specified in Schedule 1.6 (5) of the 2020 DPP Determination. CPI quarterly information sourced from Statistics NZ 'All Groups Index SE9A' as specified in clause 1.1.4 (2) of the IMs.
<i>multiplied by</i> (1 - the annual rate of change) Actual net allowable revenue	= 0.0530 For the second assessment period, the annual rate of change is 0%. (1 - 0%) = 1	1 \$91,109	As specified in clause 8.2 of the 2020 DPP Determination.

<sup>&</sup>lt;sup>3</sup> Only applies to the "Actual net allowable revenue of the previous assessment period" and the total "Actual net allowable revenue". The other numbers in this table are whole numbers.



#### 3.3.1 Actual net allowable revenue for the first assessment period calculation

As per Schedule 1.6 (7), for the second assessment period, actual net allowable revenue for the first assessment period means the forecast net allowable revenue for the first assessment period. The table below provides the calculation prescribed in schedule 1.6 (8).

Forecast net allowable revenue for the first assessment period calculation	Definition	Amount \$000⁴	Reference to supporting calculation/ information
\$91.109 million	For the second assessment period, the amount prescribed in Schedule 1.5 (8).	\$91,109	As prescribed in Schedule 1.6 (8) of the 2020 DPP Determination.
<i>divided by</i> (1 + derived change in the CPI for the second assessment period)	For the second assessment period, the derived change in the CPI that applied in respect of the second assessment period is 0.0530. $1 + \Delta CPI_{2022}$ = (1 + 0.0530) = 1.0530	1.0530	As calculated in section 3.3 of the Compliance Statement.
<i>multiplied by</i> (1 - the annual rate of change)	For the second assessment period, the annual rate of change is 0%. 1 - 0% = 1	1	As specified in Schedule 1.2 (2) of the 2020 DPP Determination.
Forecast net allowable revenue for the first assessment period		\$86,525	

<sup>&</sup>lt;sup>4</sup> Only applies to the "91,109" and the total "Forecast net allowable revenue for the first assessment period". The other numbers in this table are whole numbers.



# 3.4 Actual pass-through costs and recoverable costs calculation

For the second assessment period, actual pass-through costs and recoverable costs are calculated as the sum of all pass-through costs and recoverable costs that were incurred or, in the case of drawn down amounts from the innovation project allowance, approved by the Commission in the assessment period, excluding any recoverable cost that is a revenue wash-up draw down amount. Pass-through and recoverable costs are defined in the IMs.

Description	IM reference <sup>5</sup>	Amount \$000	Reference to supporting calculation/information
Pass-through costs			
Council rates	3.1.2 (2) (a)	\$2,964	As invoiced/incurred during the assessment year.
Commerce Act levies	3.1.2 (2) (b) (i)	\$345	As invoiced/incurred during the assessment year.
Industry levies	3.1.2 (2) (b) (ii)	\$489	As invoiced/incurred during the assessment year.
Utilities Dispute Limited levies	3.1.2 (2) (b) (iii)	\$100	As invoiced/incurred during the assessment year.
Pass-through costs		\$3,897	
Recoverable costs			
Electricity lines service charge payable to Transpower	3.1.3 (1) (b)	\$54,243	As invoiced/incurred during the assessment year.
Transpower new investment contract charges	3.1.3 (1) (c)	\$874	As invoiced/incurred during the assessment year.
Distributed generation allowance	3.1.3 (1) (f)	\$1,702	As invoiced/incurred during the assessment year.
Fire and Emergency New Zealand levies	3.1.3 (1) (w)	\$53	As invoiced/incurred during the assessment year.
Quality incentive adjustment	3.1.3 (1) (o)	\$1,180	Supporting calculation provided in section 3.4.1.
Capex wash-up adjustment	up adjustment 3.1.3 (1) (p) \$		Nil for the first DPP disclosure year as specified in 3.1.3 (1)(p) of the IM Determination
IRIS incentive adjustment	3.1.3 (1) (a) (i)	\$3,062	Supporting calculation provided in section 3.4.2.
Recoverable costs		\$61,115	
Pass-through and recoverable costs		\$65,012	

<sup>&</sup>lt;sup>5</sup> Reference to Electricity distribution services input methodologies determination 2012 consolidated 3 April 2018



#### 3.4.1 Quality incentive adjustment calculation

As per Schedule 4 (1) of the 2020 DPP Determination, and WELL's past 2018 CPP Determination, the quality incentive adjustment is calculated following the expiration of the assessment period and is a recoverable cost in the assessment period following the year in which it was calculated. Therefore, for this Compliance Statement, the quality incentive adjustment is based on the quality performance from the regulatory year finishing 31 March 2020 – a two-year lag after the assessment period. WELL calculated the quality incentive adjustment following the end of the 31 March 2020 assessment period using the methodology provided in Schedule 4 of the 2018 CPP Determination. Details of that quality incentive adjustment are presented below:

Quality incentive adjustment calculation	Definition	Amount \$000	Reference to supporting calculation/information
Ssaidi	SAIDI quality incentive in the second assessment period of the CPP.	\$515	Appendix E
<i>plus</i> S <sub>SAIFI</sub>	SAIFI quality incentive in the second assessment period of the CPP.	\$526	Appendix E
<i>plus</i> Sresilience	For the second assessment period of the CPP the resilience incentive was nil.	\$0	Schedule 4 (10) (a) (i) of the 2018 CPP Determination.
STOTAL		\$1,041	
S <sub>TOTAL</sub> (adjusted for the time value of money)	Adjusted for the time value of money, as per Schedule 4 (1) of the 2018 CPP Determination. S <sub>TOTAL</sub> x (1+67 <sup>th</sup> percentile estimate of post-tax WACC) <sup>2</sup> Post tax WACC for the 67 <sup>th</sup> percentile is 6.44%.	\$1,180	Refer to Section 3.5.1 of the Compliance Statement.

#### 3.4.2 IRIS incentive adjustment calculation

As per clause 3.3.1 of the IMs, a non-exempt EDB must calculate the IRIS incentive adjustment for each disclosure year of each regulatory period. The IRIS incentive adjustment is made up of the opex incentive amount and the capex incentive amount. The IRIS incentive adjustment has been calculated as:

IRIS incentive adjustment calculation	Definition	Amount \$000	Reference to supporting calculation/information
Opex incentive amount	Annual opex IRIS adjustment.	\$2,956	Supporting calculation provided in Appendix G.
<i>plus</i> Capex incentive amount	Annual capex IRIS adjustment.	\$106	Supporting calculation provided in Appendix H.
Total IRIS incentive adjustment		\$3,062	



## 3.5 Revenue wash-up draw down amount calculation

From Schedule 1.7 (2)(a) of the 2020 DPP Determination, the opening wash-up account balance means for the second assessment period, the closing wash-up account balance of the previous assessment period. The calculation of the closing wash-up account balance as prescribed in Schedule 1.7 (3) in presented in the table below.

Closing wash-up account balance of the previous assessment period calculation	Definition	Amount \$000 <sup>6</sup>	Reference to supporting calculation/information
Wash-up amount for the previous assessment period	For the second assessment period, the wash-up amount calculated for the 2020 regulatory year.	(\$1,435)	As calculated in section 2.2 of the 2020 Wellington Electricity Annual Compliance Statement.
<i>less</i> voluntary undercharging amount foregone for the previous assessment period	For the second assessment period, this is the voluntary undercharging amount foregone calculated for the 2020 regulatory year.	\$0	As calculated in section 3.1 of the 2020 Wellington Electricity Annual Compliance Statement.
<i>multiplied by</i> (1 + 67 <sup>th</sup> percentile estimate of post- tax WACC) <sup>2</sup>	67 <sup>th</sup> percentile estimate of post-tax WACC is 4.23%.	1.0864	Refer to section 3.5.1 of the Compliance Statement.
Closing wash-up account balance of the previous assessment period		(\$1,559)	

#### 3.5.1 67<sup>th</sup> percentile estimate of post-tax WACC

The WACC calculation for Price-Quality Determinations is provided in clause 4.4.1 of the IMs. As per clause 5.3.22 of the IMs, the WACC used for calculations completed from the third assessment period of 2018 CPP Determination was determined by the DPP3 price reset.

Components of the WACC calculation for the DPP3 Price-Quality Path are provided by *Cost of capital determination for electricity distribution businesses' 2020-2025 default price-quality paths and Transpower New Zealand Limited's individual price-quality path [2019] NZCC 12 (Cost of Capital Determination 2019).* 

The 67<sup>th</sup> percentile estimate of post-tax WACC applying from 1 April 2020 is 4.23%.

Inputs from the first or second assessment period which form part of this Compliance Statement were determined by the DPP2 price reset assumptions.

Components of the WACC calculation for the DPP2 Price-Quality Path are provided by Cost of capital determination for electricity distribution businesses' default price-quality paths and Transpower's individual price-quality path [2014] NZCC 28 (Cost of Capital Determination 2014).

The 67th percentile estimate of post-tax WACC applying until 31 March 2020 was calculated as 6.44%.

<sup>&</sup>lt;sup>6</sup> Does not apply to the WACC component of this calculation, which is a whole number.



# 4 Quality standard calculations and information

and supporting

This section of the Compliance Statement provides supporting information and calculations on WELL's compliance with the quality standards under clause 9 of the 2020 DPP Determination for the second assessment period. At a minimum the supporting information includes the information requested in clause 11.6 (b) to (h).

To comply with the quality standards, WELL must comply with:

- The planned interruption quality standards,
- The unplanned interruptions quality standards, and
- The extreme event standard

WELL outperformed the quality targets for the second assessment period of the DPP. The performance was a result of the continued refinements to WELL's quality improvement programme. At a high level, the quality improvement programme for the second assessment period included:

- Continued work on improving feeder performance by undertaking refurbishment projects on 11 kV feeders.
- Trialing cable testing technology by testing poor performing cables with a variety of diagnostic tools.
- Trailing more detailed weather forecasting services from both NIWA and Metservice.

WELL will continue to investigate ways to improve the reliability of the network. WELL's AMP provides an analysis of critical trends and an annual update to the reliability performance improvement programme (the AMP can be found at: <u>https://www.welectricity.co.nz/disclosures/asset-management-plan</u>).

The 2020 DPP Determination specifies two reliability measures:

- 1. SAIDI (system average interruption duration index) which measures the average duration of interruptions on WELL's network during the assessment period
- 2. SAIFI (system average interruption frequency index) which measures the average number of interruptions on WELL's network during the assessment period

## 4.1 Capturing reliability information

Clause 11.6 (f) requires WELL to provide a description of the policies and procedures used to capture and record Class B and C interruptions, and to calculate planned and unplanned SAIDI and SAIFI assessed values for the assessment period.

#### 4.1.1 Recording interruptions

The control system WELL uses to record SAIDI and SAIFI information is the Power On Fusion (PoF) SCADA network management system (the system). The system is used for the real-time management and monitoring of the high voltage network. Specifically, the system provides information about the status of the network, including customer connection points and devices like circuit breakers and fuses. The system automatically records interruption information (including SAIDI and SAIFI details) in a database, including:

• All planned and unplanned interruptions on the high voltage network (11kV and higher), including details about the length of the interruption and how many customers were impacted; and



• All unplanned faults less than one minute in duration, including successful auto-reclose events. Faults less than a minute interruption are not included in the SAIDI and SAIFI counts.

All the interruption information is then error checked and validated daily by the Control Room Manager and the Asset Engineer to ensure it is correct. The reviewed data is recorded in the Reliability Report Sheet. The procedure to capture and validate network performance information for planned and unplanned interruptions is shown in Figure 1 below.





For unplanned interruptions, the system identifies there has been an interruption, automatically logs the incident and time stamps when it occurred. Any subsequent switching operations are also recorded and time stamped.

For interruptions on devices that are not directly monitored by the system and there is no definitive customer report, the interruption is recorded from the time the on-site faultman confirms there has been a high voltage interruption. Subsequent switching operations are manually recorded, and time stamped within the system. If an interruption has been reported by a customer and it is confirmed that there is an interruption on the high voltage network, the start time for the interruption is taken from the time of the first phone call.

Successive interruptions have been consistently treated across regulatory periods - where an interruption to the supply of electricity distribution services is followed by restoration, and then by a successive interruption within the same event, WELL records this as a single interruption.

#### 4.1.2 Data validation and review

After an interruption is resolved, an interruption report is generated which includes notes from the Network Controllers on duty. The information is then validated for the following:

- 1 Date interruption started and ended;
- 2 Time interruption started and ended;



- 3 Duration of interruption;
- 4 Number of customers impacted;
- 5 Total customers minutes lost (based on switching operations);
- 6 Total customer number (on network);
- 7 SAIDI for interruption;
- 8 SAIFI for interruption;
- 9 Interruption type; and
- 10 Interruption cause.

The data is reviewed for accuracy. Particularly attention is given to non-system interruptions where the information is manually entered by the Network Controller. System interruptions are automatically generated and rarely have errors. The Control Room Team Leader reviews all interruptions and approves the daily interruption reports as accurate.

The Asset Engineer then compiles the reviewed individual event reports into a Monthly Network Reliability Report which is used for monthly reporting of SAIDI and SAIFI indices. The monthly reports are then aggregated into the master database from which WELL's regulatory quality reporting is based on.

For planned interruptions, the proposed switching operations are entered into the system by the Network Controller prior to the event. During the event, the system creates an incident, and the Network Controller enters the time the operation occurred. Planned events are validated by the Network Controllers and the Network Control Team Leader by referring to the specific job documents. The validation process considers whether LV back feeds or portable generation has been used to ensure there was no loss of supply.

#### 4.1.3 Calculating the assessed values

WELL calculates SAIDI and SAIFI by summing the duration and frequency of interruptions recorded in the master database. WELL also analyses the database for trends and common types of interruptions. This information is used to inform the quality improvement programme.

WELL's AMP provides a detailed overview of its reliability programme, including a detailed analysis of the reliability performance. WELL's AMP can be found at: <u>https://www.welectricity.co.nz/disclosures/asset-management-plan</u>.

#### 4.1.4 Keeping customers informed

WELL provides up-to-date customer information on interruption events and their restoration times through its website and interruption mobile device application. The website and application provide live updates on restoration times when power interruptions occur. WELL also surveys those customers who have recently had an interruption to understand whether the price-quality service they receive is appropriately balanced. The results suggest that customers are broadly satisfied with their current level of reliability and the price for delivering that service.

#### 4.1.5 Notified planned interruptions

For the second assessment period WELL has utilised the notified planned interruptions mechanism to reduce the SAIDI value on specific interruptions. To achieve this, these interruptions follow a notification process where retailers, via email, are notified this is a notified planned interruptions and the details of the interruption are uploaded onto WELLs website for consumers to review. Both notifications are provided with at least 10 working days' notice. These planned interruptions, in all other respects, follow our planned interruptions policies and procedures.





# 4.2 Planned interruptions quality standard

As per clause 9.2 of the 2020 DPP Determination, the reliability standard for planned interruptions is assessed at the end of the fifth assessment period based on accumulated SAIDI and SAIFI results.

As WELL was on a CPP for the first assessment period of the DPP regulatory period, WELL's planned accumulated SAIDI and SAIFI limits for the DPP have been adjusted in accordance with clause 9.6 of the 2020 DPP Determination.

To provide a progress update on WELL's planned interruptions, the table below compares the accumulated planned SAIDI and SAIFI assessed values to the adjusted planned accumulated SAIDI and SAIFI limits for the DPP regulatory period.

The accumulated assessed values at the end of the second assessment period, is less than the adjusted planned accumulated limit.

Quality standard	Accumulated assessed value	Adjusted planned accumulated limit <sup>7</sup>	Variance
Planned SAIDI	8.60	55.76	(47.16)
Planned SAIFI	0.0635	0.4429	(0.3794)

Further information supporting the calculation of the planned SAIDI and SAFI assessed values is provided in Appendix I.

The information outlined in clause 12.1 and 12.2 of the 2020 DPP Determination be provided if required as part of the fifth assessment period when the planned interruption reliability standard is assessed.

## 4.3 Unplanned interruptions quality standard

As per clause 9.7 of the 2020 DPP Determination, WELL must comply with the annual unplanned interruptions reliability assessment in respect of each assessment period.

To comply with the annual unplanned interruptions reliability assessment, WELLs unplanned SAIDI and SAIFI assessed values must not exceed the unplanned SAIDI and SAIFI limits as specified in Schedule 3.2 (1) of the 2020 DPP Determination.

For the second assessment period, WELL has complied with the annual unplanned interruptions reliability assessment.

Quality standard	Assessed value	Limit <sup>8</sup>	Variance
Unplanned SAIDI	25.32	39.81	(14.49)
Unplanned SAIFI	0.3783	0.6135	(0.2352)

<sup>&</sup>lt;sup>7</sup> The adjusted accumulated limits for WELL's four-year DPP regulatory period have been calculated in line with clause 9.6 of the 2020 DPP Determination.

<sup>&</sup>lt;sup>8</sup> The adjusted accumulated limits for the five-year DPP regulatory period as specified in schedule 3.1 (1) of the 2020 DPP Determination



Further information supporting the calculation of the unplanned SAIDI and SAFI assessed values is provided in Appendix J.

The information outlined in clause 12.3 and 12.4 of the 2020 DPP Determination is not required to be provided as WELL has complied with the unplanned interruption quality standards.

## 4.4 Extreme event standard

As per clause 9.9 of the 2020 DPP Determination, WELL must comply with the extreme event standard in respect of each assessment period.

To comply with the extreme event standard is the assessment period, WELL must not have an extreme event where the unplanned interruptions exceed the extreme event standard limits.

As per Schedule 3.3 the extreme event standard limits for unplanned interruptions are:

- 1. unplanned SAIDI value greater than 120 minutes during any 24-hour period, excluding unplanned interruptions from major external factors; or
- 2. customer interruption minutes greater than six million during any 24-hour period, excluding unplanned interruptions from major external factors.

For the second assessment period, WELL has complied with the extreme event standard as there were no interruptions that exceeded the extreme event standard limits.

The information outlined in clause 12.5 and 12.6 of the 2020 DPP Determination is not required to be provided as WELL has complied with the extreme event quality standards.





# **5** Appendix A: Audit assurance report

# Deloitte.

#### INDEPENDENT ASSURANCE REPORT TO THE DIRECTORS OF WELLINGTON ELECTRICITY LINES LIMITED

Report on Wellington Electricity Lines Limited Electricity Distribution Default Price-Quality Path Compliance Statement 2022

We have conducted a reasonable assurance engagement on whether the information disclosed by Wellington Electricity Lines Limited ('the Company') on pages 4 to 20 and related Appendices B to K of the Company's Electricity Distribution Default Price-Quality Path Compliance Statement ('the Annual Compliance Statement') for the period 1 April 2021 to 31 March 2022 has been prepared, in all material respects, with the Electricity Distribution Services Default Price-Quality Path Determination 2020 as amended by the Electricity Distribution Services Default Price-Quality Path (Wellington Electricity transition) Amendments issued 26 November 2020 ('the Determination').

In our opinion, for the period 1 April 2021 to 31 March 2022:

- the Company has complied, in all material aspects, with the Determination in preparing the Annual Compliance Statement; and
- as far as appears from an examination of the records, the information used in the preparation of the Disclosure Information has been properly extracted from the Company's accounting and other records and has been sourced, where appropriate, from the Company's financial and non-financial systems.

#### **Basis for Opinion**

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

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

#### **Board of Directors' Responsibilities**

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 Company's compliance 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 (Revised): Code of Ethics for Assurance Practitioners 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, the provision of other assurance services, and the provision of taxation services, we have no relationship with or interests in the Company or any of its subsidiaries. These services have not impaired our independence as auditor.







The firm applies Professional and Ethical Standard 3 (Amended): Quality Control for Firms that Perform Audits and Reviews of Financial Statements, and Other Assurance Engagements issued by the New Zealand Auditing and Assurance Standards Board, and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

#### **Our Responsibilities**

Our responsibility is to express an opinion on whether the Company has complied, in all material respects, with the Determination in preparing its Annual Compliance Statement. ISAE (NZ) 3000 (Revised) and SAE 3100 (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 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:

- evaluating the methodologies used in preparing the Annual Compliance Statement and confirming that they are in accordance with the requirements set out in the Determination;
- identifying key inputs to the information;
- 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 nonfinancial systems;
- assessing significant estimates and judgements, if any, made by the Company in the preparation of the Annual Compliance Statement; and
- ensuring that the calculations are mathematically correct.

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 its Annual Compliance Statement for the period 1 April 2021 to 31 March 2022.

#### **Inherent Limitations**

Because of the inherent limitations of evidence gathering procedures, it is possible that fraud, error or noncompliance may occur and not be detected. As the procedures performed for this engagement are not performed continuously throughout the period 1 April 2021 to 31 March 2022 and the procedures performed in respect of the Company's compliance with 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. The opinion expressed in this report has been formed on the above basis.





#### **Use of Report**

This report is provided solely for your exclusive 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 above. We agree that a copy of our report may be provided to the Commerce Commission. This report 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

Wellington, New Zealand 20 July 2022

This reasonable assurance report relates to the Annual Compliance Statement of Wellington Electricity Lines Limited ('the Company') for the year ended 31 March 2022 included on Wellington Electricity Lines Limited's website. The Board of Directors are responsible for the maintenance and integrity of the Company's website. We have not been engaged to report on the integrity of the Company's website. We accept no responsibility for any changes that may have occurred to the Annual Compliance Statement since they were initially presented on the website. The reasonable assurance report refers only to the Annual Compliance Statement named above. It does not provide an opinion on any other information which may have been hyperlinked to/from this Annual Compliance statement. If readers of this report are concerned with the inherent risks arising from electronic data communication they should refer to the published hard copy of the Annual Compliance Statement and related reasonable assurance report dated 20 July 2022 to confirm the information included in the Annual Compliance Statement presented on this website.





# 6 Appendix B: Director's certification

#### **Directors' Certification**

I, Richard Pearson, being director of Wellington Electricity Lines Limited certify that, having made all reasonable enquiry, to the best of my knowledge and belief, the attached annual compliance statement of Wellington Electricity Lines 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.

Director 20 July 2022

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





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# 7 Appendix C: Published prices for the second assessment period

			1 April	2021 to 31 Ma	rch 2022
Code	Description	Units	Distribution price	Pass-through and recoverable price	Delivery price
Residential					
RLU-FIXD	Residential low user daily	\$/con/day	0.0900	0.0600	0.1500
RLU-24UC	Residential low user uncontrolled	\$/kWh	0.0606	0.0412	0.1018
RLU-AICO	Residential low user all inclusive	\$/kWh	0.0487	0.0330	0.0817
RLU-CTRL	Residential low user controlled	\$/kWh	0.0293	0.0199	0.0492
RLU-NITE	Residential low user night boost	\$/kWh	0.0099	0.0068	0.0167
RLU-DGEN	Residential low user small scale distributed generation	\$/kWh	0.0000	0.0000	0.0000
RSU-FIXD	Residential standard user daily	\$/con/day	0.5486	0.4489	0.9975
RSU-24UC	Residential standard user uncontrolled	\$/kWh	0.0380	0.0259	0.0639
RSU-AICO	Residential standard user all inclusive	\$/kWh	0.0262	0.0177	0.0439
RSU-CTRL	Residential standard user controlled	\$/kWh	0.0117	0.0078	0.0195
RSU-NITE	Residential standard user night boost	\$/kWh	0.0091	0.0061	0.0152
RSU-DGEN	Residential standard user small scale distributed generation	\$/kWh	0.0000	0.0000	0.0000
Residential Electri	c Vehicle and Battery Storage <sup>1</sup>				
RLUEV B-FIXD	Residential EV & battery storage low user daily	\$/con/day	0.0900	0.0600	0.1500
RLUEVB-PEAK	Residential EV & battery storage low user peak <sup>2</sup>	\$/kWh	0.0837	0.0765	0.1602
RLUEVB-OFFPEAK	Residential EV & battery storage low user off-peak <sup>3</sup>	\$/kWh	0.0372	0.0341	0.0713
RLUEVB-CTRL	Residential EV & battery storage low user controlled	\$/kWh	0.0293	0.0199	0.0492
RLUEVB-DGEN	Residential EV & battery storage low user small scale distributed generation	\$/kWh	0.0000	0.0000	0.0000
RSUEVB-FIXD	Residential EV & battery storage standard user daily	\$/con/day	0.6530	0.5133	1.1663
RSUEVB-PEAK	Residential EV & battery storage standard user peak <sup>2</sup>	\$/kWh	0.0602	0.0549	0.1151
RSUEVB-OFFPEAK	Residential EV & battery storage standard user off-peak <sup>3</sup>	\$/kWh	0.0137	0.0124	0.0261
RSUEVB-CTRL	Residential EV & battery storage standard user controlled	\$/kWh	0.0117	0.0078	0.0195
RSUEV B-DGEN	Residential EV & battery storage standard user small scale distributed generation	\$/kWh	0.0000	0.0000	0.0000
Residential Time of					
RLUTOU-FIXD	Residential time of use low user daily	\$/con/day	0.0900	0.0600	0.1500
RLUTOU-UC	Residential time of use low user uncontrolled	\$/kWh	0.0606	0.0412	0.1018
RLUTOU-AICO	Residential time of use low user all inclusive	\$/kWh	0.0487	0.0330	0.0817
RLUTOU-P-UC	Residential time of use low user peak <sup>2</sup>	\$/kWh	0.0703	0.0670	0.1373
RLUTOU-OP-UC	Residential time of use low user off-peak <sup>3</sup>	\$/kWh	0.0563	0.0297	0.0860
RLUTOU-P-AI	Residential time of use low user all inclusive peak <sup>2</sup>	\$/kWh	0.0634	0.0560	0.1194
RLUTOU-OP-AI	Residential time of use low user all inclusive off-peak <sup>3</sup>	\$/kWh \$/kWh	0.0420	0.0226	0.0646
RLUTOU-CTRL	Residential time of use low user controlled			0.0199	0.0492
RLUTOU-NITE	Residential time of use low user night boost	\$/kWh	0.0099	0.0068	0.0167
RLUTOU-DGEN	Residential time of use low user small scale distributed generation	\$/kWh	0.0000	0.0000	0.0000
RSUTOU-FIXD	Residential time of use standard user daily	\$/con/day	0.5486	0.4489	0.9975
RSUTOU-UC	Residential time of use standard user uncontrolled	\$/kWh	0.0380	0.0259	0.0639
RSUTOU-AICO	Residential time of use standard user all inclusive	\$/kWh	0.0262	0.0177	0.0439
RSUTOU-P-UC	Residential time of use standard user peak <sup>2</sup>	\$/kWh	0.0506	0.0481	0.0987
RSUTOU-OP-UC	Residential time of use standard user off-peak <sup>3</sup>	\$/kWh	0.0325	0.0163	0.0488
RSUTOU-P-AI	Residential time of use standard user all inclusive peak <sup>2</sup>	\$/kWh	0.0416	0.0367	0.0783
RSUTOU-OP-AI	Residential time of use standard user all inclusive off-peak <sup>3</sup>	\$/kWh	0.0193	0.0091	0.0284
RSUTOU-CTRL	Residential time of use standard user controlled	\$/kWh	0.0117	0.0078	0.0195
RSUTOU-NITE	Residential time of use standard user night boost	\$/kWh	0.0091	0.0061	0.0152
RSUTOU-DGEN General Low Volta	Residential time of use standard user small scale distributed generation age Connection	\$/kWh	0.0000	0.0000	0.0000
GLV15-FIXD	General low voltage <=15kVA daily	\$/con/day	0.3282	0.2235	0.5517
GLV15-24UC	General low voltage <=15kVA uncontrolled	\$/kWh	0.0297	0.0202	0.0499
GLV15-DGEN	Small scale distributed generation <=15kVA low voltage	\$/kWh	0.0000	0.0000	0.0000
GLV69-FIXD	General low voltage >15kVA and <=69kVA daily	\$/con/day	0.8118	0.5529	1.3647
GLV69-24UC	General low voltage >15kVA and <=69kVA uncontrolled	\$/kWh	0.0206	0.0140	0.0346
GLV69-DGEN	Small scale distributed generation >15kVA and <=69kVA low voltage	\$/kWh	0.0000	0.0000	0.0000
GLV138-FIXD	General low voltage >69kVA and <=138kVA daily	\$/con/day	4.6000	3.1332	7.7332
GLV138-24UC	General low voltage >69kVA and <=138kVA uncontrolled	\$/kWh	0.0243	0.0167	0.0410
GLV138-DGEN	Small scale distributed generation >69kVA and <=138kVA low voltage	\$/kWh	0.0000	0.0000	0.0000
GLV300-FIXD	General low voltage >138kVA and <=300kVA daily	\$/con/day	6.5526	4.4633	11.0159
GLV300-24UC	General low voltage >138kVA and <=300kVA uncontrolled	\$/kWh	0.0101	0.0069	0.0170
GLV300-DGEN	Small scale distributed generation >138kVA and <=300kVA low voltage	\$/kWh	0.0000	0.0000	0.0000
GLV1500-FIXD	General low voltage >300kVA and <=1500kVA daily	\$/con/day	16.5232	11.2546	27.7778
GLV1500-24UC	General low voltage >300kVA and <=1500kVA daily	\$/con/day \$/kWh	0.0045	0.0030	0.0075
GLV1500-DAMD	General low voltage >300kVA and <=1500kVA directioned	\$/kVA/month	4.0078	2.7299	6.7377
		\$/kVA/monut \$/kWh		0.0000	
GLV1500-DGEN	Small scale distributed generation >300kVA and <=1500kVA low voltage		0.0000		0.0000



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			1 Apri	2021 to 31 Ma	rch 2022
Code	Description	Units	Distribution price	Pass-through and recoverable price	Delivery price
General Transfo	rmer Connection				
GTX15-FIXD	General transformer <=15kVA daily	\$/con/day	0.2979	0.2030	0.5009
GTX15-24UC	General transformer <=15kVA uncontrolled	\$/kWh	0.0276	0.0189	0.0465
GTX15-DGEN	Small scale distributed generation <=15kVA transformer	\$/kWh	0.0000	0.0000	0.0000
GTX69-FIXD	General transformer >15kVA and <=69kVA daily	\$/con/day	0.7368	0.5017	1.2385
GTX69-24UC	General transformer >15kVA and <=69kVA uncontrolled	\$/kWh	0.0194	0.0132	0.0326
GTX69-DGEN	Small scale distributed generation >15kVA and <=69kVA transformer	\$/kWh	0.0000	0.0000	0.0000
GTX138-FIXD	General transformer >69kVA and <=138kVA daily	\$/con/day	4.1740	2.8430	7.0170
GTX138-24UC	General transformer >69kVA and <=138kVA uncontrolled	\$/kWh	0.0228	0.0155	0.0383
GTX138-DGEN	Small scale distributed generation >69kVA and <=138kVA transformer	\$/kWh	0.0000	0.0000	0.0000
GTX300-FIXD	General transformer >138kVA and <=300kVA daily	\$/con/day	5.9459	4.0500	9.9959
GTX300-24UC	General transformer >138kVA and <=300kVA uncontrolled	\$/kWh	0.0094	0.0064	0.0158
GTX300-DGEN	Small scale distributed generation >138kVA and <=300kVA transformer	\$/kWh	0.0000	0.0000	0.0000
GTX1500-FIXD	General transformer >300kVA and <=1500kVA daily	\$/con/day	12.8291	8.7383	21.5674
GTX1500-24UC	General transformer >300kVA and <=1500kVA uncontrolled	\$/kWh	0.0037	0.0024	0.0061
GTX1500-CAPY	General transformer >300kVA and <=1500kVA capacity	\$/kVA/day	0.0087	0.0061	0.0148
GTX1500-DAMD	General transformer >300kVA and <=1500kVA demand	\$/kVA/month	3.3688	2.2946	5.6634
GTX1500-DGEN	Small scale distributed generation >300kVA and <=1500kVA transformer	\$/kWh	0.0000	0.0000	0.0000
GTX1501-FIXD	General transformer >1500kVA connection daily	\$/con/day	0.0285	0.0195	0.0480
GTX1501-24UC	General transformer >1500kVA connection uncontrolled	\$/kWh	0.0008	0.0006	0.0014
GTX1501-CAPY	General transformer >1500kVA connection capacity	\$/kVA/day	0.0154	0.0106	0.0260
GTX1501-DOPC	General transformer >1500kVA connection on-peak demand <sup>4</sup>	\$/kW/month	6.3472	4.3233	10.6705
GTX1501-PWRF	General transformer >1500kVA connection pow er factor <sup>5</sup>	\$/kVAr/month	4.5831	3.1218	7.7049
GTX1501-DGEN	Small scale distributed generation >1500kVA transformer	\$/kWh	0.0000	0.0000	0.0000
Unmetered					
G001-FIXD	Non-street lighting daily	\$/fitting/day	0.0227	0.0154	0.0381
G001-24UC	Non-street lighting uncontrolled	\$/kWh	0.0734	0.0500	0.1234
G002-FIXD	Street lighting daily <sup>6</sup>	\$/fitting/day	0.1211	0.0827	0.2038
G002-24UC	Street lighting uncontrolled	\$/kWh	0.0000	0.0000	0.0000

Pricing notes for 01/04/2021 to 31/03/2022

- 8 The EVB plan is available to consumers with electric vehicles of 12kWh capacity and above and consumers with household battery storage systems of 4kWh capacity and above.
- 9 The EVB and residential ToU plan peak hours are: Monday to Friday (including public holidays) 7:00am 11:00am, 5:00pm 9:00pm.
- 10 The EVB and residential ToU plan off-peak hours are: Monday to Friday (including public holidays) 9:00pm – 7:00am, 11:00am – 5:00pm and all weekend.
- 11 On-peak demand charge is applicable to demand measured from 7:30am 9:30am, 5:30pm 7:30pm on weekdays (including public holidays).
- 12 Power factor charge is applicable for power factor <0.95 from 7:00am 8:00pm on weekdays where the kVAr charge amount represents twice the largest difference between the recorded kVArh and one third of the recorded kWh in any one half-hour period.
- 13 Streetlight charges are provided to traders who in turn bill the councils and other parties for providing streetlight services. Streetlights are charged per fitting rather than on energy usage to better reflect the costs of maintaining the streetlight network.



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# 8 Appendix D: Detailed revenue calculation

Code	Units	Description	Quantity	1 April 2021 Distribution price	to 31 March 2022 Transmission & pass-through price	Revenue
Residential	<b>A</b> ( <b>a a a</b> ( <b>d a a</b> )	De stide of et la successive de lles	4 050 400	0.0000	0.0000	070.0
RLU-FIXD RLU-24UC	\$/con/day \$/kWh	Residential Low user daily Residential Low user uncontrolled	1,853,463 69,954,265	0.0900	0.0600	278,0
RLU-AICO	\$/kWh	Residential Low user all inclusive	38.270.271	0.0000	0.0330	3,126,6
RLU-CTRL	\$/kWh	Residential Low user controlled	3,664,981	0.0293	0.0330	3,126,6
RLU-NITE	\$/kWh	Residential Low user night boost	254,923	0.0293	0.0068	4,2
SU-FIXD	\$/con/day	Residential Standard user daily	1,610,589	0.5486	0.4489	1,606,5
SU-24UC	\$/kWh	Residential Standard user uncontrolled	85,418,338	0.0380	0.0259	5,458,2
SU-AICO	\$/kWh	Residential Standard user all inclusive	53,260,152	0.0380	0.0259	2,338,1
RSU-CTRL	\$/kWh	Residential Standard user controlled	5,503,744	0.0202	0.0078	2,336,1
RSU-NITE	\$/kWh	Residential Standard user controlled	757,931	0.0091	0.0061	11,5
tesidential electric v	whicle and batters	u storago			SUBTOTAL	20,232,3
LUEVB-FIXD	\$/con/day	Residential EV & battery storage low user daily	65,527	0.0900	0.0600	9,8
LUEVB-PEAK	\$/kWh	Residential EV & battery storage low user yeak	410,676	0.0837	0.0765	65,
RLUEVB-OFFPEAK	\$/kWh	Residential EV & battery storage low user off-peak	1,074,681	0.0372	0.0341	76,0
LUEVB-CTRL	\$/kWh	Residential EV& battery storage low user controlled	13,788	0.0293	0.0199	
RSUEVB-FIXD	\$/con/day	Residential EV& battery storage standard user daily	52,828	0.6530	0.5133	61,0
SUEVB-PEAK	\$/kWh	Residential EV& battery storage standard user peak	705,769	0.0602	0.0549	81,3
SUEVB-OFFPEAK	\$/kWh	Residential EV& battery storage standard user peak	1,538,900	0.0137	0.0124	40,
SUEVB-CTRL	\$/kWh	Residential EV& battery storage standard user on poak	27,616	0.0117	0.0078	40,
ODEVD-OTHE	ψπαντη	Residential EV & battery storage standard user controlled	27,010		SUBTOTAL	336,
esidential Time of L LUTOU-FIXD	Jse \$/con/day	Residential Time of Lise low year daily	31,665,502	0.0900	0.0600	4,749,8
LUTOU-FIXD	\$/con/day \$/kWh	Residential Time of Use low user daily Residential Time of Use low user uncontrolled	121.252.543	0.0900	0.0600	4,749,8
LUTOU-AICO	\$/kWh	Residential Time of Use low user uncontrolled Residential Time of Use low user all inclusive	78.229.170	0.0606	0.0412	6,391,
RLUTOU-AICO	\$/kWh	Residential Time of Use low user all inclusive Residential Time of Use low user peak	34,718,541	0.0487	0.0330	
RLUTOU-P-UC	\$/kWh		55,767,321	0.0703	0.0670	4,766,
		Residential Time of Use low user off-peak	20,419,665			1 1
	\$/kWh	Residential Time of Use low user all inclusive peak		0.0634	0.0560	2,438,
	\$/kWh	Residential Time of Use low user all inclusive off-peak	45,917,163 12,492,262	0.0420	0.0226	2,966,
RLUTOU-CTRL	\$/kWh	Residential Time of Use low user controlled		0.0293	0.0199	614,
RLUTOU-NITE	\$/kWh	Residential Time of Use low user night boost	1,850,789	0.0099	0.0068	30,
RSUTOU-FIXD	\$/con/day	Residential Time of Use standard user daily	21,129,057	0.5486	0.4489	21,076,
SUTOU-UC	\$/kWh	Residential Time of Use standard user uncontrolled	131,808,672	0.0380	0.0259	8,422,
RSUTOU-AICO	\$/kWh	Residential Time of Use standard user all inclusive	120,836,755	0.0262	0.0177	5,304,
SUTOU-P-UC	\$/kWh	Residential Time of Use standard user peak	40,780,511	0.0506	0.0481	4,025,
SUTOU-OP-UC	\$/kWh	Residential Time of Use standard user off-peak	64,162,961	0.0325	0.0163	3,131,
SUTOU-P-AI	\$/kWh	Residential Time of Use standard user all inclusive peak	27,482,987	0.0416	0.0367	2,151,
RSUTOU-OP-AI	\$/kWh	Residential Time of Use standard user all inclusive off-peak	63,220,595	0.0193	0.0091	1,795,4
RSUTOU-CTRL	\$/kWh	Residential Time of Use standard user controlled	17,905,004	0.0117	0.0078	349,
RSUTOU-NITE	\$/kWh	Residential Time of Use standard user night boost	3,329,383	0.0091	0.0061	50,6
General low voltage of	connection				SUBTOTAL	85,404,2
GLV15-FIXD	\$/con/day	General low voltage <=15kVA daily	1,944,677	0.3282	0.2235	1,072,8
GLV15-24UC	\$/kWh	General low voltage <=15kVA uncontrolled	39,869,671	0.0297	0.0202	1,989,4
GLV69-FIXD	\$/con/day	General low voltage >15kVA and <=69kVA daily	3,594,422	0.8118	0.5529	4,905,3
GLV69-24UC	\$/kWh	General low voltage >15kVA and <=69kVA uncontrolled	271,084,040	0.0206	0.0140	9,379,
GLV138-FIXD	\$/con/day	General low voltage >69kVA and <=138kVA daily	155,338	4.6000	3.1332	1,201,
GLV138-24UC	\$/kWh	General low voltage >69kVA and <=138kVA uncontrolled	49,437,042	0.0243	0.0167	2,026,
GLV300-FIXD	\$/con/day	General low voltage >138kVA and <=130kVA dialonitolied	133,918	6.5526	4.4633	
		General low voltage >138kVA and <=300kVA daily General low voltage >138kVA and <=300kVA uncontrolled		0.0020		
			05 605 240	0.0101	0.0060	1,475,
GLV300-24UC	\$/kWh		95,605,248	0.0101	0.0069	1,625,
LV1500-FIXD	\$/con/day	General low voltage >300kVA and <=1500kVA daily	74,437	16.5232	11.2546	1,625, 2,067,
LV1500-FIXD LV1500-24UC	\$/con/day \$/kWh	General low voltage >300kVA and <=1500kVA daily General low voltage >300kVA and <=1500kVA uncontrolled	74,437 121,209,793	16.5232 0.0045	11.2546 0.0030	1,625, 2,067, 909,
LV1500-FIXD LV1500-24UC	\$/con/day	General low voltage >300kVA and <=1500kVA daily	74,437	16.5232 0.0045 4.0078	11.2546	1,625, 2,067, 909, 2,537,
ELV1500-FIXD SLV1500-24UC SLV1500-DAMD	\$/con/day \$/kWh \$/kVA/month	General low voltage >300kVA and <=1500kVA daily General low voltage >300kVA and <=1500kVA uncontrolled General low voltage >300kVA and <=1500kVA demand	74,437 121,209,793 376,555	16.5232 0.0045 4.0078	11.2546 0.0030 2.7299 SUBTOTAL	1,625, 2,067, 909, 2,537, <b>29,189</b> ,
LV1500-FIXD LV1500-24UC SLV1500-DAMD Seneral transformer STX15-FIXD	\$/con/day \$/kWh \$/kVA/month connection \$/con/day	General low voltage >300kVA and <=1500kVA daily General low voltage >300kVA and <=1500kVA uncontrolled General low voltage >300kVA and <=1500kVA demand General transformer <=15kVA daily	74,437 121,209,793 376,555 761	16.5232 0.0045 4.0078 0.2979	11.2546 0.0030 2.7299 SUBTOTAL 0.2030	1,625, 2,067, 909, 2,537, <b>29,189,</b>
ELV1500-FIXD ELV1500-24UC ELV1500-DAMD Eneral transformer ETX15-FIXD ETX15-FIXD ETX15-24UC	\$/con/day \$/kWh \$/kVA/month connection \$/con/day \$/kWh	General low voltage >300kVA and <=1500kVA daily General low voltage >300kVA and <=1500kVA uncontrolled General low voltage >300kVA and <=1500kVA demand General transformer <=15kVA daily General transformer <=15kVA uncontrolled	74,437 121,209,793 376,555 761 31,543	16.5232 0.0045 4.0078 0.2979 0.0276	11.2546 0.0030 2.7299 SUBTOTAL 0.2030 0.0189	1,625, 2,067, 909, 2,537, <b>29,189,</b>
ELV1500-FIXD ELV1500-24UC ELV1500-DAMD Eneral transformer ETX15-FIXD ETX15-FIXD ETX15-24UC ETX69-FIXD	\$/con/day \$/kWh \$/kVA/month connection \$/con/day \$/kWh \$/con/day	General low voltage >300kVA and <=1500kVA daily General low voltage >300kVA and <=1500kVA uncontrolled General low voltage >300kVA and <=1500kVA demand General transformer <=15kVA daily General transformer <=15kVA uncontrolled General transformer <=15kVA and <=69kVA daily	74,437 121,209,793 376,555 761 31,543 6,510	16.5232 0.0045 4.0078 0.2979 0.0276 0.7368	11.2546 0.0030 2.7299 SUBTOTAL 0.2030 0.0189 0.5017	1,625, 2,067, 909, 2,537, <b>29,189</b> , 1, 8,
LV1500-FIXD LV1500-24UC LV1500-DAMD eneral transformer TX15-FIXD TX15-FIXD TX69-FIXD TX69-FIXD TX69-24UC	\$/con/day \$/kWh \$/kVA/month connection \$/con/day \$/kWh \$/con/day \$/kWh	General low voltage >300kVA and <=1500kVA daily General low voltage >300kVA and <=1500kVA uncontrolled General low voltage >300kVA and <=1500kVA demand General transformer <=15kVA daily General transformer <=15kVA uncontrolled General transformer >15kVA and <=69kVA daily General transformer >15kVA and <=69kVA uncontrolled	74,437 121,209,793 376,555 761 31,543 6,510 575,075	16.5232 0.0045 4.0078 0.2979 0.0276 0.7368 0.0194	11.2546 0.0030 2.7299 SUBTOTAL 0.2030 0.0189 0.5017 0.0132	1,625, 2,067, 909, 2,537, <b>29,189</b> , 1, 8, 18,
LV1500-FIXD LV1500-24UC LV1500-DAMD eneral transformer TX15-FIXD TX15-FIXD TX69-FIXD TX69-24UC TX138-FIXD	\$/con/day \$/kWh \$/kVA/month Connection \$/con/day \$/kWh \$/con/day \$/kWh \$/con/day	General low voltage >300kVA and <=1500kVA daily General low voltage >300kVA and <=1500kVA uncontrolled General low voltage >300kVA and <=1500kVA demand General transformer <=15kVA daily General transformer <=15kVA uncontrolled General transformer >15kVA and <=69kVA daily General transformer >15kVA and <=69kVA uncontrolled General transformer >69kVA and <=138kVA daily	74,437 121,209,793 376,555 761 31,543 6,510 575,075 6,455	16.5232 0.0045 4.0078 0.2979 0.0276 0.7368 0.0194 4.1740	11.2546 0.0030 2.7299 SUBTOTAL 0.2030 0.0189 0.5017 0.0132 2.8430	1,625, 2,067, 909, 2,537, <b>29,189</b> , 1, , 8, 18, 45,
LV1500-FIXD LV1500-24UC LV1500-DAMD eneral transformer TX15-FIXD TX15-FIXD TX15-FIXD TX69-24UC TX138-FIXD TX138-FIXD TX138-24UC	\$/con/day \$/kWh \$/kVA/month Connection \$/con/day \$/kWh \$/con/day \$/kWh \$/con/day \$/kWh	General low voltage >300kVA and <=1500kVA daily General low voltage >300kVA and <=1500kVA uncontrolled General iow voltage >300kVA and <=1500kVA demand General transformer <=15kVA daily General transformer >15kVA uncontrolled General transformer >15kVA and <=69kVA daily General transformer >15kVA and <=69kVA uncontrolled General transformer >69kVA and <=138kVA daily General transformer >69kVA and <=138kVA uncontrolled	74,437 121,209,793 376,555 761 31,543 6,510 575,075 6,455 2,395,268	16.5232 0.0045 4.0078 0.2979 0.0276 0.7368 0.0194 4.1740 0.0228	11.2546 0.0030 2.7299 SUBTOTAL 0.2030 0.0189 0.5017 0.0132 2.8430 0.0155	1,625, 2,067, 909, 2,537, <b>29,189,</b> 1, 8, 18, 45, 91,
LV1500-FIXD LV1500-24UC LV1500-DAMD eneral transformer TX15-FIXD TX15-24UC TX69-FIXD TX69-FIXD TX69-24UC TX138-FIXD TX138-24UC TX138-24UC TX300-FIXD	\$/con/day \$/k/Vh \$/k/VA/month connection \$/con/day \$/k/Vh \$/con/day \$/k/Vh \$/con/day \$/k/Vh	General low voltage >300kVA and <=1500kVA daily General low voltage >300kVA and <=1500kVA uncontrolled General voltage >300kVA and <=1500kVA demand General transformer <=15kVA daily General transformer >15kVA uncontrolled General transformer >15kVA and <=69kVA daily General transformer >69kVA and <=138kVA uncontrolled General transformer >69kVA and <=138kVA uncontrolled General transformer >69kVA and <=138kVA uncontrolled General transformer >69kVA and <=300kVA daily	74,437 121,209,793 376,555 761 31,543 6,510 575,075 6,455 2,395,268 41,394	16.5232 0.0045 4.0078 0.2979 0.0276 0.7368 0.0194 4.1740 0.0228 5.9459	11.2546 0.0030 2.7299 SUBTOTAL 0.2030 0.0189 0.5017 0.0132 2.8430 0.0155 4.0500	1,625, 2,067, 909, 2,537, <b>29,189</b> , 1, 8, 18, 45, 91, 413,
LV1500-FIXD LV1500-24UC LV1500-DAMD eneral transformer TX15-FIXD TX15-24UC TX69-FIXD TX69-FIXD TX69-24UC TX138-FIXD TX138-FIXD TX138-FIXD TX300-FIXD TX300-24UC	\$/con/day \$/kWh \$/kVA/month Connection \$/con/day \$/kWh \$/con/day \$/kWh \$/con/day \$/kWh	General low voltage >300kVA and <=1500kVA daily General low voltage >300kVA and <=1500kVA duncontrolled General voltage >300kVA and <=1500kVA demand General transformer <=15kVA daily General transformer <=15kVA uncontrolled General transformer >15kVA and <=69kVA daily General transformer >69kVA and <=138kVA daily General transformer >69kVA and <=138kVA daily General transformer >69kVA and <=138kVA daily General transformer >138kVA and <=300kVA daily General transformer >138kVA and <=300kVA daily	74,437 121,209,793 376,555 761 31,543 6,510 575,075 6,455 2,395,268 41,394 47,918,582	16.5232 0.0045 4.0078 0.2979 0.0276 0.7368 0.0194 4.1740 0.0228 5.9459 0.0094	11.2546 0.0030 2.7299 SUBTOTAL 0.2030 0.0189 0.5017 0.0132 2.8430 0.0155 4.0500 0.0064	1,625, 2,067, 9099, 2,537, <b>29,189</b> , 11, 8, 18, 45, 911, 413, 757,
LV1500-FIXD LV1500-24UC LV1500-DAMD eneral transformer TX15-FIXD TX15-24UC TX69-FIXD TX69-FIXD TX69-24UC TX138-FIXD TX138-FIXD TX138-FIXD TX300-FIXD TX300-24UC	\$/con/day \$/kVVh \$/kVA/month <b>Connection</b> \$/con/day \$/kVVh \$/con/day \$/kVVh \$/con/day \$/kVVh \$/con/day \$/kVVh	General low voltage >300kVA and <=1500kVA daily General low voltage >300kVA and <=1500kVA duncontrolled General low voltage >300kVA and <=1500kVA demand General transformer <=15kVA daily General transformer <=15kVA uncontrolled General transformer >15kVA and <=69kVA daily General transformer >69kVA and <=138kVA daily General transformer >138kVA and <=300kVA daily General transformer >138kVA and <=300kVA daily General transformer >38kVA and <=300kVA daily	74,437 121,209,793 376,555 761 31,543 6,510 575,075 6,455 2,395,268 41,394 47,918,582 99,674	16.5232 0.0045 4.0078 0.2979 0.0276 0.7368 0.0194 4.1740 0.0228 5.9459	11.2546 0.0030 2.7299 SUBTOTAL 0.2030 0.0189 0.5017 0.0132 2.8430 0.0155 4.0500	1,625, 2,067, 909, 2,537, <b>29,189</b> , 1, 8, 18, 45, 91, 413, 757, 2,149,
LV1500-FIXD LV1500-24UC LV1500-DAMD eneral transformer ITX15-FIXD ITX15-FIXD ITX69-FIXD ITX69-FIXD ITX69-24UC ITX138-FIXD ITX138-FIXD ITX30-FIXD ITX300-FIXD ITX300-FIXD	\$/con/day \$/kWh \$/kVA/month *connection \$/con/day \$/kWh \$/con/day \$/kWh \$/con/day \$/kWh \$/con/day \$/kWh	General low voltage >300kVA and <=1500kVA daily General low voltage >300kVA and <=1500kVA duncontrolled General voltage >300kVA and <=1500kVA demand General transformer <=15kVA daily General transformer <=15kVA uncontrolled General transformer >15kVA and <=69kVA daily General transformer >69kVA and <=138kVA daily General transformer >69kVA and <=138kVA daily General transformer >69kVA and <=138kVA daily General transformer >138kVA and <=300kVA daily General transformer >138kVA and <=300kVA daily	74,437 121,209,793 376,555 761 31,543 6,510 575,075 6,455 2,395,268 41,394 47,918,582 99,674 327,144,403	16.5232 0.0045 4.0078 0.2979 0.0276 0.7368 0.0194 4.1740 0.0228 5.9459 0.0094	11.2546 0.0030 2.7299 SUBTOTAL 0.2030 0.0189 0.5017 0.0132 2.8430 0.0155 4.0500 0.0064	1,625 2,067 909 2,537 <b>29,189</b> 1 1 1 8 8 45 91 413 757 2,149
LV1500-FIXD LV1500-24UC LV1500-DAMD eneral transformer TX15-FIXD TX15-24UC TX69-FIXD TX69-FIXD TX138-FIXD TX138-FIXD TX138-24UC TX300-FIXD TX300-FIXD TX300-FIXD TX1500-FIXD	\$/con/day \$/kVVh \$/kVA/month <b>Connection</b> \$/con/day \$/kVVh \$/con/day \$/kVVh \$/con/day \$/kVVh \$/con/day \$/kVVh	General low voltage >300kVA and <=1500kVA daily General low voltage >300kVA and <=1500kVA duncontrolled General low voltage >300kVA and <=1500kVA demand General transformer <=15kVA daily General transformer <=15kVA uncontrolled General transformer >15kVA and <=69kVA daily General transformer >69kVA and <=138kVA daily General transformer >138kVA and <=300kVA daily General transformer >138kVA and <=300kVA daily General transformer >38kVA and <=300kVA daily	74,437 121,209,793 376,555 761 31,543 6,510 575,075 6,455 2,395,268 41,394 47,918,582 99,674	16.5232 0.0045 4.0078 0.2979 0.0276 0.7368 0.0194 4.1740 0.0228 5.9459 0.0094 12.8291	11.2546 0.0030 2.7299 SUBTOTAL 0.2030 0.0189 0.5017 0.0132 2.8430 0.0155 4.0500 0.0064 8.7383	1,625 2,067 9099 2,537 <b>29,189</b> 1 1 8 4 1 8 45 91 413 757 2,149 1,995
LV1500-FIXD LV1500-24UC LV1500-DAMD eneral transformer TX15-FIXD TX69-FIXD TX69-FIXD TX69-FIXD TX69-FIXD TX300-FIXD TX300-FIXD TX300-FIXD TX1500-24UC TX1500-CAPY	\$/con/day \$/kVVh \$/kVA/month connection \$/con/day \$/kWh \$/con/day \$/kVh \$/con/day \$/kVh \$/con/day \$/kWh	General low voltage >300kVA and <=1500kVA daily General low voltage >300kVA and <=1500kVA duncontrolled General low voltage >300kVA and <=1500kVA demand General transformer <=15kVA daily General transformer >15kVA uncontrolled General transformer >15kVA and <=69kVA daily General transformer >15kVA and <=69kVA daily General transformer >15kVA and <=138kVA daily General transformer >138kVA and <=138kVA daily General transformer >138kVA and <=300kVA daily General transformer >138kVA and <=300kVA uncontrolled General transformer >138kVA and <=300kVA uncontrolled General transformer >138kVA and <=300kVA daily General transformer >138kVA and <=1500kVA daily General transformer >300kVA and <=1500kVA daily	74,437 121,209,793 376,555 761 31,543 6,510 575,075 6,455 2,395,268 41,394 47,918,582 99,674 327,144,403	16.5232 0.0045 4.0078 0.2979 0.0276 0.7368 0.0194 4.1740 0.0228 5.9459 0.0094 12.8291 0.0037	11.2546 0.0030 2.7299 SUBTOTAL 0.2030 0.0189 0.5017 0.0132 2.8430 0.0155 4.0500 0.0065 4.0500 0.0064	1,625, 2,067, 909, 2,537, <b>29,189</b> , 11, 8, 18, 18, 18, 18, 18, 18, 18, 18,
LV1500-FIXD LV1500-24UC LV1500-DAMD eneral transformer TX15-FIXD TX15-FIXD TX89-FIXD TX89-FIXD TX89-FIXD TX138-FIXD TX138-FIXD TX130-FIXD TX300-FIXD TX1500-FIXD TX1500-24UC TX1500-CAPY TX1500-CAPY	\$/con/day \$/k/Wh \$/k/VA/month *connection \$/con/day \$/k/Wh \$/con/day \$/k/Wh \$/con/day \$/k/Wh \$/con/day \$/k/Wh \$/con/day \$/k/Wh	General low voltage >300kVA and <=1500kVA daily General low voltage >300kVA and <=1500kVA uncontrolled General voltage >300kVA and <=1500kVA demand General transformer <=15kVA daily General transformer >15kVA uncontrolled General transformer >15kVA and <=69kVA daily General transformer >69kVA and <=138kVA uncontrolled General transformer >69kVA and <=138kVA uncontrolled General transformer >69kVA and <=138kVA uncontrolled General transformer >13kVA and <=30kVA daily General transformer >13kVA and <=30kVA daily General transformer >138kVA and <=30kVA uncontrolled General transformer >300kVA and <=1500kVA uncontrolled General transformer >300kVA and <=1500kVA uncontrolled General transformer >300kVA and <=1500kVA uncontrolled	74,437 121,209,793 376,555 761 31,543 6,510 575,075 6,455 2,395,268 41,394 47,918,582 99,674 327,144,403 76,828,698	16.5232 0.0045 4.0078 0.2979 0.0276 0.7368 0.0194 4.1740 0.0228 5.9459 0.0094 12.8291 0.0037 0.0087	11.2546 0.0030 2.7299 SUBTOTAL 0.2030 0.0189 0.5017 0.0132 2.8430 0.0155 4.0500 0.0064 8.7383 0.0024 0.0061	1,625, 2,067, 909, 2,537, <b>29,189,</b> 1, 8, 18, 413, 757, 2,149, 1,995, 1,137, 5,314,
LV1500-FIXD LV1500-24UC LV1500-DAMD eneral transformer TX15-FIXD TX15-24UC TX69-FIXD TX69-FIXD TX138-FIXD TX138-FIXD TX138-24UC TX138-24UC TX1300-FIXD TX1500-FIXD TX1500-CAPY TX1500-CAPY TX1500-CAPY TX1500-AMD TX1501-FIXD	\$/con/day \$/kVVh \$/kVA/month connection \$/con/day \$/kVVh \$/con/day \$/kVVh \$/con/day \$/kWh \$/con/day \$/kWh \$/con/day \$/kVVh \$/con/day \$/kVh	General low voltage >300kVA and <=1500kVA daily General low voltage >300kVA and <=1500kVA uncontrolled General low voltage >300kVA and <=1500kVA demand General transformer <=15kVA daily General transformer >15kVA uncontrolled General transformer >15kVA and <=69kVA daily General transformer >15kVA and <=69kVA uncontrolled General transformer >15kVA and <=69kVA uncontrolled General transformer >15kVA and <=138kVA daily General transformer >138kVA and <=138kVA daily General transformer >138kVA and <=300kVA daily General transformer >138kVA and <=300kVA daily General transformer >300kVA and <=1500kVA daily General transformer >100kVA and <=1500kVA daily General transformer >100kVA and <=1500kVA daily General transformer >100kVA and <=1500kVA daily General transformer >1500kVA connection daily	74,437 121,209,793 376,555 761 31,543 6,510 575,075 6,6455 2,395,268 41,394 47,918,582 99,674 327,144,403 76,828,698 938,407	16.5232 0.0045 4.0078 0.2979 0.0276 0.7368 0.0194 4.1740 0.0228 5.9459 0.0094 12.8291 0.0037 0.0087 3.3688 0.0285	11.2546 0.0030 2.7299 SUBTOTAL 0.2030 0.0189 0.5017 0.0132 2.8430 0.0155 4.0500 0.0064 8.7383 0.0024 0.0061 2.2946 0.0195	1,625, 2,067, 909, 2,537, <b>29,189</b> , 1, 8, 18, 45, 91, 413, 757, 2,149, 1,995, 1,137, 5,314,
LV1500-FIXD LV1500-24UC LV1500-DAMD eneral transformer TX15-FIXD TX15-24UC TX15-24UC TX138-FIXD TX89-FIXD TX138-FIXD TX138-24UC TX1300-FIXD TX1300-FIXD TX1500-24UC TX1500-CAPY TX1500-CAPY TX1500-CAPY TX1501-24UC	\$/con/day \$/k/Vh \$/k/VA/month * connection \$/con/day \$/k/Vh \$/con/day \$/k/Vh \$/con/day \$/k/Vh \$/con/day \$/k/Vh \$/con/day \$/k/Vh \$/con/day \$/k/Vh	General low voltage >300kVA and <=1500kVA daily General low voltage >300kVA and <=1500kVA uncontrolled General low voltage >300kVA and <=1500kVA demand General transformer <=15kVA daily General transformer <=15kVA uncontrolled General transformer >15kVA and <=69kVA daily General transformer >15kVA and <=69kVA daily General transformer >15kVA and <=138kVA uncontrolled General transformer >69kVA and <=138kVA uncontrolled General transformer >138kVA and <=300kVA daily General transformer >138kVA and <=300kVA daily General transformer >30kVA and <=1500kVA uncontrolled General transformer >300kVA and <=1500kVA daily General transformer >300kVA and <=1500kVA daily General transformer >300kVA and <=1500kVA daily General transformer >300kVA and <=1500kVA demand General transformer >300kVA and <=1500kVA demand General transformer >300kVA and <=1500kVA demand General transformer >1500kVA connection daily General transformer >1500kVA connection daily	74,437 121,209,793 376,555 761 31,543 6,510 575,075 6,455 2,395,268 41,394 47,918,582 99,674 327,144,403 76,828,698 938,407 14,315	16.5232 0.0045 4.0078 0.2979 0.0276 0.7368 0.0194 4.1740 0.0228 5.9459 0.0094 12.8291 0.0037 0.0087 3.3688 0.0285 0.0008	11.2546 0.0030 2.7299 SUBTOTAL 0.2030 0.0189 0.5017 0.0132 2.8430 0.0155 4.0500 0.0064 8.7383 0.0024 0.0061 0.0195 0.0006	1,625, 2,067, 909, 2,537, <b>29,189</b> , 1, 8, 18, 45, 91, 413, 757, 2,149, 1,995, 1,137, 5,314, 225,
LV1500-FIXD LV1500-24UC LV1500-DAMD eneral transformer TX15-FIXD TX69-FIXD TX69-FIXD TX69-24UC TX138-FIXD TX300-FIXD TX300-FIXD TX300-FIXD TX1500-FIXD TX1500-24UC TX1500-24UC TX1500-CAPY TX1501-FIXD TX1501-FIXD TX1501-FIXD TX1501-FIXD TX1501-FIXD	\$/con/day \$/kVVh \$/kVA/month Connection \$/con/day \$/kWh \$/con/day \$/kWh \$/con/day \$/kWh \$/con/day \$/kWh \$/con/day \$/kWh \$/con/day \$/kVA/month \$/con/day \$/kVA/month \$/con/day	General low voltage >300kVA and <=1500kVA daily General low voltage >300kVA and <=1500kVA uncontrolled General low voltage >300kVA and <=1500kVA demand General transformer <=15kVA daily General transformer >15kVA uncontrolled General transformer >15kVA and <=69kVA daily General transformer >69kVA and <=138kVA uncontrolled General transformer >69kVA and <=138kVA uncontrolled General transformer >69kVA and <=138kVA uncontrolled General transformer >13kVA and <=30kVA daily General transformer >13kVA and <=300kVA daily General transformer >30kVA and <=1500kVA capacity General transformer >300kVA and <=1500kVA capacity General transformer >300kVA and <=1500kVA demand General transformer >300kVA and <=1500kVA demand General transformer >300kVA and <=1500kVA demand General transformer >1500kVA connection daily General transformer >1500kVA connection daily General transformer >1500kVA connection daily	74,437 121,209,793 376,555 761 31,543 6,510 575,075 6,455 2,395,268 41,394 47,918,852 99,674 327,144,403 76,828,698 938,407 14,315 160,910,227	16.5232 0.0045 4.0078 0.2979 0.0276 0.7368 0.0194 4.1740 0.0228 5.9459 0.0094 12.8291 0.0037 0.0087 3.3688 0.0285	11.2546 0.0030 2.7299 SUBTOTAL 0.2030 0.0189 0.5017 0.0132 2.8430 0.0155 4.0500 0.0064 8.7383 0.0024 0.0061 2.2946 0.0195 0.0006	1,625, 2,067, 909, 2,537, <b>29,189</b> , 11, 8, 14, 8, 18, 18, 18, 14, 13, 757, 2,149, 1,995, 1,137, 5,314, 225, 928,
LV1500-FIXD LV1500-24UC SLV1500-DAMD SLV1500-DAMD STX15-FIXD TTX15-FIXD TTX89-FIXD TTX89-FIXD TTX89-FIXD TTX300-24UC TTX300-FIXD STX1500-FIXD STX1500-FIXD STX1500-CAPY STX1501-24UC TTX1501-24UC ST	\$/con/day \$/k/Vh \$/k/VA/month * connection \$/con/day \$/k/Vh \$/con/day \$/k/Vh \$/con/day \$/k/Vh \$/con/day \$/k/Vh \$/con/day \$/k/Vh \$/con/day \$/k/Vh	General low voltage >300kVA and <=1500kVA daily General low voltage >300kVA and <=1500kVA uncontrolled General low voltage >300kVA and <=1500kVA demand General transformer <=15kVA daily General transformer <=15kVA uncontrolled General transformer >15kVA and <=69kVA daily General transformer >15kVA and <=69kVA daily General transformer >15kVA and <=138kVA uncontrolled General transformer >69kVA and <=138kVA uncontrolled General transformer >138kVA and <=300kVA daily General transformer >138kVA and <=300kVA daily General transformer >30kVA and <=1500kVA uncontrolled General transformer >300kVA and <=1500kVA daily General transformer >300kVA and <=1500kVA daily General transformer >300kVA and <=1500kVA daily General transformer >300kVA and <=1500kVA demand General transformer >300kVA and <=1500kVA demand General transformer >300kVA and <=1500kVA demand General transformer >1500kVA connection daily General transformer >1500kVA connection daily	74,437 121,209,793 376,555 761 31,543 6,510 575,075 6,455 2,395,268 41,394 47,918,582 99,674 327,144,403 76,628,698 938,407 14,315 160,910,227 35,700,749	16.5232 0.0045 4.0078 0.2979 0.0276 0.7368 0.0194 4.1740 0.0228 5.9459 0.0094 12.8291 0.0037 0.0087 3.3688 0.0285 0.0008 0.0154 6.3472 4.5831	11.2546 0.0030 2.7299 SUBTOTAL 0.2030 0.0189 0.5017 0.0132 2.8430 0.0155 4.0500 0.0064 8.7383 0.0024 0.0064 0.0095 0.0006 0.0195 0.0006 0.0195 0.0006 0.0195 3.3218	1,625, 2,067, 909, 2,537, <b>29,189</b> , 1, 1, 8, 45, 91, 413, 757, 2,149, 1,995, 1,137, 5,314, 225, 928, 4,773, 197,
SLV1500-FIXD SLV1500-24UC SLV1500-DAMD SLV1500-DAMD SLV1500-DAMD SLV1500-DAMD STX15-FIXD STX15-24UC STX150-24UC STX130-FIXD STX130-FIXD STX1500-FIXD STX1500-FIXD STX1500-CAPY STX1501-CAPY STX1501-CAPY STX1501-DOPC STX1501-DOPC STX1501-PWRF	\$/con/day \$/k/Vh \$/k/VA/month Connection \$/con/day \$/k/Vh \$/con/day \$/k/Vh \$/con/day \$/k/Vh \$/con/day \$/k/Vh \$/con/day \$/k/Vh \$/con/day \$/k/Vh \$/con/day \$/k/Vh \$/con/day \$/k/Vh	General low voltage >300kVA and <=1500kVA daily General low voltage >300kVA and <=1500kVA duncontrolled General vansformer <=150VA and <=1500kVA demand General transformer <=15kVA daily General transformer <=15kVA uncontrolled General transformer >15kVA and <=69kVA daily General transformer >69kVA and <=138kVA daily General transformer >69kVA and <=138kVA daily General transformer >69kVA and <=138kVA daily General transformer >618kVA and <=300kVA daily General transformer >30kVA and <=1500kVA daily General transformer >300kVA and <=1500kVA daily General transformer >300kVA and <=1500kVA daily General transformer >300kVA and <=1500kVA capacity General transformer >300kVA and <=1500kVA demand General transformer >1500kVA connection daily General transformer >1500kVA connection uncontrolled General transformer >1500kVA connection capacity General transformer >1500kVA connection angacity General transformer >1500kVA connection angacity General transformer >1500kVA connection angacity General transformer >1500kVA connection angacity	74,437 121,209,793 376,555 761 31,543 6,510 575,075 6,455 2,395,268 41,394 47,918,582 99,674 327,144,403 76,828,698 938,407 14,315 160,910,27,49 35,700,749 447,358	16.5232 0.0045 4.0078 0.2979 0.0276 0.7368 0.0194 4.1740 0.0228 5.9459 0.0094 12.8291 0.0037 0.0087 3.3688 0.0285 0.0008 0.0154 6.3472 4.5831	11.2546 0.0030 2.7299 SUBTOTAL 0.2030 0.0189 0.5017 0.0132 2.8430 0.0155 4.0500 0.0064 8.7383 0.0024 0.0061 2.2946 0.0195 0.0006 0.0106 4.3233	1,625, 2,067, 909, 2,537, <b>29,189</b> , 1, 1, 8, 45, 91, 413, 757, 2,149, 1,995, 1,137, 5,314, 225, 928, 4,773, 197,
SLV1500-FIXD SLV1500-24UC SLV1500-DAMD SLV1500-DAMD STX15-FIXD STX15-24UC STX15-24UC STX59-FIXD STX59-FIXD STX59-24UC STX138-FIXD STX138-24UC STX1300-FIXD STX1500-FIXD STX1500-FIXD STX1500-24UC STX1500-DAMD STX1501-FIXD STX1501-FIXD STX1501-FIXD STX1501-CAPY STX1501-CAPY STX1501-DOPC STX1501-PWRF Inmetered	\$/con/day \$/kVVh \$/kVA/month connection \$/con/day \$/kWh \$/con/day \$/kWh \$/con/day \$/kWh \$/con/day \$/kVh \$/con/day \$/kVh \$/con/day \$/kVh \$/con/day \$/kVh \$/con/day \$/kVh \$/con/day \$/kVh \$/con/day \$/kVh	General low voltage >300kVA and <=1500kVA daily General low voltage >300kVA and <=1500kVA uncontrolled General van voltage >300kVA and <=1500kVA demand General transformer <=15kVA daily General transformer >15kVA uncontrolled General transformer >15kVA and <=69kVA daily General transformer >69kVA and <=138kVA uncontrolled General transformer >69kVA and <=138kVA uncontrolled General transformer >69kVA and <=138kVA uncontrolled General transformer >13kVA and <=300kVA daily General transformer >13kVA and <=300kVA daily General transformer >30kVA and <=1500kVA uncontrolled General transformer >300kVA and <=1500kVA uncontrolled General transformer >300kVA and <=1500kVA uncontrolled General transformer >300kVA and <=1500kVA demand General transformer >1500kVA connection daily General transformer >1500kVA connection capacity General transformer >1500kVA connection on-peak demand General transformer >1500kVA connection power factor	74,437 121,209,793 376,555 761 31,543 6,510 575,075 6,455 2,395,268 41,394 47,918,582 99,674 327,14,403 76,828,698 938,407 14,315 160,910,227 35,700,749 447,358 25,678	16.5232 0.0045 4.0078 0.2979 0.0276 0.7368 0.0194 4.1740 0.0228 5.9459 0.0094 12.8291 0.0094 12.8291 0.0094 13.3688 0.0285 0.0008 0.0154 6.3472 4.5831	11.2546 0.0030 2.7299 SUBTOTAL 0.2030 0.0189 0.5017 0.0132 2.8430 0.0155 4.0500 0.0064 8.7383 0.0024 0.0061 2.2946 0.0195 0.00061 2.2946 0.0195 0.00061 3.1218 SUBTOTAL	1,625, 2,067, 909, 2,537, <b>29,189</b> , 1, 8, 18, 45, 91, 413, 757, 2,149, 1,995, 1,137, 5,314, 225, 928, 4,773, 18,059,
SLV1500-FIXD           SLV1500-24UC           SLV1500-DAMD           Seneral transformer           STX15-FIXD           STX15-FIXD           STX89-FIXD           STX89-FIXD           STX89-FIXD           STX89-FIXD           STX30-FIXD           STX300-FIXD           STX1500-FIXD           STX1500-FIXD           STX1500-CAPY           STX1500-CAPY           STX1501-CAPY           STX1501-CAPY           STX1501-CAPY           STX1501-CAPY           STX1501-CAPY           STX1501-CAPY           STX1501-CAPY           STX1501-PWRF           Jametered           S001-FIXD	\$/con/day \$/kVVh \$/kVA/month */con/day \$/kWh \$/con/day \$/kWh \$/con/day \$/kWh \$/con/day \$/kWh \$/con/day \$/kWh \$/con/day \$/kWh \$/con/day \$/kVh \$/con/day \$/kVh \$/con/day \$/kVh \$/con/day \$/kVA/day \$/kV/A/day \$/kV/A/day \$/kV/A/day \$/kV/A/day	General low voltage >300kVA and <=1500kVA daily General low voltage >300kVA and <=1500kVA uncontrolled General vansformer <=15kVA daily General transformer <=15kVA daily General transformer >15kVA and <=69kVA daily General transformer >15kVA and <=69kVA daily General transformer >69kVA and <=138kVA uncontrolled General transformer >69kVA and <=138kVA daily General transformer >69kVA and <=138kVA uncontrolled General transformer >138kVA and <=300kVA daily General transformer >300kVA and <=1500kVA daily General transformer >300kVA and <=1500kVA capacity General transformer >300kVA and <=1500kVA daily General transformer >1500kVA connection daily General transformer >1500kVA connection capacity General transformer >1500kVA connection on-peak demand General transformer >1500kVA connection power factor	74,437 121,209,793 376,555 761 31,543 6,510 575,075 6,455 2,395,268 41,394 47,918,582 99,674 327,144,403 76,828,698 938,407 14,315 160,910,227 35,700,749 447,358 25,678	16.5232 0.0045 4.0078 0.2979 0.0276 0.7368 0.0194 4.1740 0.0228 5.9459 0.0094 12.8291 0.0087 3.3688 0.0285 0.0088 0.0154 6.3472 4.5831	11.2546 0.0030 2.7299 SUBTOTAL 0.2030 0.0189 0.5017 0.0132 2.8430 0.0155 4.0500 0.0064 8.7383 0.0024 0.0061 2.2946 0.0195 0.0006 4.3233 3.1218 SUBTOTAL 0.0154	1,625, 2,067, 909, 2,537, <b>29,189</b> , 1, 1, 8, 18, 45, 91, 413, 757, 2,149, 1,995, 1,137, 5,314, 5,314, 4,773, 1925, 928, 4,773, 197, <b>18,059</b> ,
iLV1500-FIXD           iLV1500-24UC           iLV1500-DAMD           ieneral transformer           iTX15-FIXD           iTX15-FIXD           iTX15-24UC           iTX15-24UC           iTX138-FIXD           iTX138-FIXD           iTX138-FIXD           iTX300-FIXD           iTX300-FIXD           iTX1500-24UC           iTX1500-24UC           iTX1500-24UC           iTX1500-24UC           iTX1500-24UC           iTX1501-24UC           iTX1501-DOPC           iTX1501-Q01-PWRF	\$/con/day \$/kVVh \$/kVA/month connection \$/con/day \$/kWh \$/con/day \$/kWh \$/con/day \$/kWh \$/con/day \$/kWh \$/con/day \$/kWh \$/con/day \$/kWh \$/con/day \$/kWh \$/con/day \$/kWh \$/con/day \$/kWh \$/con/day \$/kWh \$/con/day \$/kWh	General low voltage >300kVA and <=1500kVA daily General low voltage >300kVA and <=1500kVA uncontrolled General low voltage >300kVA and <=1500kVA demand General transformer <=15kVA daily General transformer >15kVA uncontrolled General transformer >15kVA and <=69kVA daily General transformer >15kVA and <=69kVA uncontrolled General transformer >15kVA and <=08kVA daily General transformer >69kVA and <=138kVA daily General transformer >138kVA and <=300kVA daily General transformer >138kVA and <=300kVA daily General transformer >138kVA and <=300kVA daily General transformer >300kVA and <=1500kVA daily General transformer >300kVA and <=1500kVA daily General transformer >300kVA and <=1500kVA capacity General transformer >300kVA and <=1500kVA demand General transformer >1500kVA connection uncontrolled General transformer >1500kVA connection power factor Non-street lighting daily Non-street lighting uncontrolled	74,437 121,209,793 376,555 761 31,543 6,510 575,075 6,455 2,395,268 41,394 47,918,582 99,674 327,144,403 76,828,698 938,407 14,315 160,910,227 35,700,749 447,358 25,678 421,629 2,191,726	16.5232 0.0045 4.0078 0.2979 0.0276 0.7368 0.0194 4.1740 0.0228 5.9459 0.0094 12.8291 0.0037 0.0087 3.3688 0.0285 0.0008 0.0154 6.3472 4.5831	11.2546 0.0030 2.7299 SUBTOTAL 0.2030 0.0189 0.5017 0.0132 2.8430 0.0155 4.0500 0.0064 8.7383 0.0024 0.0064 0.0195 0.0006 0.0195 0.0006 4.3233 3.1218 SUBTOTAL 0.0154 0.0500	1,625, 2,067, 909, 2,537, <b>29,189</b> , 1, 1, 8, 45, 91, 413, 757, 2,149, 1,995, 1,137, 5,314, 2258, 928, 4,773, 197, <b>18,059</b> ,
ILV1500-FIXD ILV1500-24UC ILV1500-DAMD ILV1500-DAMD ILV1500-DAMD ILV15-FIXD ITX15-FIXD ITX15-24UC ITX138-FIXD ITX69-FIXD ITX380-FIXD ITX380-FIXD ITX138-24UC ITX1300-FIXD ITX1500-PIXD ITX1500-PIXD ITX1501-FIXD ITX1501-FIXD ITX1501-PWRF ILV1501-FIXD ILV1501-FIXD ILV1501-PWRF ILV1501-PWRF ILV1501-24UC ILV1501-FIXD ILV1501-PWRF ILV1501-FIXD ILV1501-24UC ILV1501-PWRF ILV1501-24UC	\$/con/day \$/kVVh \$/kVA/month connection \$/con/day \$/kWh \$/con/day \$/kWh \$/con/day \$/kVWh \$/con/day \$/kVWh \$/con/day \$/kVWh \$/con/day \$/kVWh \$/con/day \$/kVWh \$/con/day \$/kVWh \$/con/day \$/kVWh \$/con/day \$/kVWh \$/con/day \$/kVWh \$/kVA/month \$/kV/honth \$/kVA/month \$/kVA/month \$/kVA/month	General low voltage >300kVA and <=1500kVA daily General low voltage >300kVA and <=1500kVA uncontrolled General low voltage >300kVA and <=1500kVA demand General transformer <=15kVA daily General transformer >15kVA and <=69kVA daily General transformer >15kVA and <=69kVA daily General transformer >69kVA and <=138kVA uncontrolled General transformer >69kVA and <=138kVA uncontrolled General transformer >13kVA and <=300kVA daily General transformer >138kVA and <=300kVA daily General transformer >30kVA and <=130kVA uncontrolled General transformer >30kVA and <=1500kVA daily General transformer >300kVA and <=1500kVA demand General transformer >1500kVA connection daily General transformer >1500kVA connection apacity General transformer >1500kVA connection on-peak demand General transformer >1500kVA connection power factor Non-street lighting daily Non-street lighting daily	74,437 121,209,793 376,555 761 31,543 6,510 575,075 6,455 2,395,268 41,394 47,918,852 99,674 327,144,403 76,828,698 938,407 14,315 160,910,227 35,700,749 447,358 25,678 421,629 2,191,726 16,882,356	16.5232 0.0045 4.0078 0.2979 0.0276 0.7368 0.0194 4.1740 0.0228 5.9459 0.0094 12.8291 0.0037 0.0087 3.3688 0.0285 0.0008 0.0154 6.3472 4.5831	11.2546 0.0030 2.7299 SUBTOTAL 0.2030 0.0189 0.5017 0.0132 2.8430 0.0155 4.0500 0.0064 8.7383 0.0024 0.0061 2.2946 0.0195 0.0006 4.3233 3.1218 SUBTOTAL 0.0154 0.0154	1,625, 2,067, 909, 2,537, <b>29,189</b> , 1, 1, 8, 18, 45, 91, 413, 757, 2,149, 1,995, 1,137, 5,314, 5,314, 4,773, 1925, 928, 4,773, 197, <b>18,059</b> ,
LV1500-FIXD LV1500-24UC LV1500-DAMD eneral transformer TX15-FIXD TX15-24UC TX69-FIXD TX69-FIXD TX69-FIXD TX138-24UC TX1300-FIXD TX1300-FIXD TX1500-24UC TX1500-24UC TX1500-CAPY TX1500-CAPY TX1501-FIXD TX1501-FIXD TX1501-CAPY TX1501-CAPY TX1501-CAPY TX1501-CAPY TX1501-DOPC TX1501-DOPC TX1501-DWRF	\$/con/day \$/kVVh \$/kVA/month connection \$/con/day \$/kWh \$/con/day \$/kWh \$/con/day \$/kWh \$/con/day \$/kWh \$/con/day \$/kWh \$/con/day \$/kWh \$/con/day \$/kWh \$/con/day \$/kWh \$/con/day \$/kWh \$/con/day \$/kWh \$/con/day \$/kWh	General low voltage >300kVA and <=1500kVA daily General low voltage >300kVA and <=1500kVA uncontrolled General low voltage >300kVA and <=1500kVA demand General transformer <=15kVA daily General transformer >15kVA uncontrolled General transformer >15kVA and <=69kVA daily General transformer >15kVA and <=69kVA uncontrolled General transformer >15kVA and <=08kVA daily General transformer >69kVA and <=138kVA daily General transformer >138kVA and <=300kVA daily General transformer >138kVA and <=300kVA daily General transformer >138kVA and <=300kVA daily General transformer >300kVA and <=1500kVA daily General transformer >300kVA and <=1500kVA daily General transformer >300kVA and <=1500kVA capacity General transformer >300kVA and <=1500kVA demand General transformer >1500kVA connection uncontrolled General transformer >1500kVA connection power factor Non-street lighting daily Non-street lighting uncontrolled	74,437 121,209,793 376,555 761 31,543 6,510 575,075 6,455 2,395,268 41,394 47,918,582 99,674 327,144,403 76,828,698 938,407 14,315 160,910,227 35,700,749 447,358 25,678 421,629 2,191,726	16.5232 0.0045 4.0078 0.2979 0.0276 0.7368 0.0194 4.1740 0.0228 0.0094 12.8291 0.0094 12.8291 0.0094 12.8291 0.0087 3.3688 0.0285 0.0008 0.0154 6.3472 4.5831 0.0227 0.0734 0.0734	11.2546 0.0030 2.7299 SUBTOTAL 0.2030 0.0189 0.5017 0.0132 2.8430 0.0155 4.0500 0.0064 8.7383 0.0024 0.0061 2.2946 0.0195 0.0006 0.0106 4.3233 3.1218 SUBTOTAL 0.0154 0.0500 0.0827 0.0000	1,625 2,067 909 2,537 <b>29,189</b> 1 1 8 18 45 91 413 757 2,149 1,995 1,137 5,314 2255 1,137 5,314 2255 1,137 18,059 928 4,773 197 <b>18,059</b>
LV1500-FIXD LV1500-24UC LV1500-2AUC LV1500-DAMD eneral transformer TX15-FIXD TX15-24UC TX150-24UC TX138-FIXD TX138-FIXD TX138-24UC TX1300-FIXD TX1500-24UC TX1500-CAPY TX1500-CAPY TX1500-CAPY TX1500-CAPY TX1501-FIXD TX1501-CAPY TX1501-CAPY TX1501-DAMD TX1501-DAMD TX1501-DAMD TX1501-DAMD TX1501-DAMD TX1501-DAMD TX1501-CAPY TX1501-DOPC TX1501-DOPC TX1501-PWRF	\$/con/day \$/kVVh \$/kVA/month connection \$/con/day \$/kVh \$/con/day \$/kWh \$/con/day \$/kWh \$/con/day \$/kWh \$/kVA/day \$/kVA/day \$/kV/month \$/con/day \$/kV/month \$/con/day \$/kV/month \$/con/day \$/kV/month \$/con/day \$/kV/month \$/con/day \$/kV/month \$/con/day \$/kV/month \$/con/day \$/kV/month \$/con/day \$/kV/month \$/con/day \$/kV/month \$/con/day \$/kV/month \$/con/day \$/kV/month \$/con/day \$/kV/month \$/con/day \$/kV/month \$/con/day \$/kV/month \$/con/day \$/kV/month \$/con/day \$/kV/month \$/con/day \$/kV/month \$/con/day \$/kV/month \$/kV/m	General low voltage >300kVA and <=1500kVA daily General low voltage >300kVA and <=1500kVA uncontrolled General low voltage >300kVA and <=1500kVA demand General transformer <=15kVA daily General transformer >15kVA and <=69kVA daily General transformer >15kVA and <=69kVA daily General transformer >69kVA and <=138kVA uncontrolled General transformer >69kVA and <=138kVA uncontrolled General transformer >13kVA and <=300kVA daily General transformer >138kVA and <=300kVA daily General transformer >30kVA and <=130kVA uncontrolled General transformer >30kVA and <=1500kVA daily General transformer >300kVA and <=1500kVA demand General transformer >1500kVA connection daily General transformer >1500kVA connection apacity General transformer >1500kVA connection on-peak demand General transformer >1500kVA connection power factor Non-street lighting daily Non-street lighting daily	74,437 121,209,793 376,555 761 31,543 6,510 575,075 6,455 2,395,268 41,394 47,918,852 99,674 327,144,403 76,828,698 938,407 14,315 160,910,227 35,700,749 447,358 25,678 421,629 2,191,726 16,882,356	16.5232 0.0045 4.0078 0.2979 0.0276 0.7368 0.0194 4.1740 0.0228 0.0094 12.8291 0.0094 12.8291 0.0094 12.8291 0.0087 3.3688 0.0285 0.0008 0.0154 6.3472 4.5831 0.0227 0.0734 0.0734	11.2546 0.0030 2.7299 SUBTOTAL 0.2030 0.0189 0.5017 0.0132 2.8430 0.0155 4.0500 0.0064 8.7383 0.0024 0.0061 2.2946 0.0195 0.0006 4.3233 3.1218 SUBTOTAL 0.0154 0.0154	1,625, 2,067, 9009, 2,537, <b>29,189</b> , 1, 1, 8, 413, 757, 2,149, 1,995, 1,137, 5,314, 2255, 928, 4,773, 197, <b>18,059</b> , 16, 270,
LV1500-FIXD LV1500-24UC LV1500-2AUC LV1500-DAMD eneral transformer TX15-FIXD TX69-FIXD TX69-FIXD TX69-FIXD TX138-24UC TX300-FIXD TX138-24UC TX300-FIXD TX1500-CAPY TX1500-CAPY TX1500-CAPY TX1501-CAPY TX1501-CAPY TX1501-CAPY TX1501-CAPY TX1501-DOPC TX1501-DOPC TX1501-DWRF metered 001-FIXD 001-24UC 002-FIXD 001-24UC	\$/con/day \$/kVVh \$/kVA/month connection \$/con/day \$/kVh \$/con/day \$/kWh \$/con/day \$/kWh \$/con/day \$/kWh \$/kVA/day \$/kVA/day \$/kV/month \$/con/day \$/kV/month \$/con/day \$/kV/month \$/con/day \$/kV/month \$/con/day \$/kV/month \$/con/day \$/kV/month \$/con/day \$/kV/month \$/con/day \$/kV/month \$/con/day \$/kV/month \$/con/day \$/kV/month \$/con/day \$/kV/month \$/con/day \$/kV/month \$/con/day \$/kV/month \$/con/day \$/kV/month \$/con/day \$/kV/month \$/con/day \$/kV/month \$/con/day \$/kV/month \$/con/day \$/kV/month \$/con/day \$/kV/month \$/kV/m	General low voltage >300kVA and <=1500kVA daily General low voltage >300kVA and <=1500kVA uncontrolled General low voltage >300kVA and <=1500kVA demand General transformer <=15kVA daily General transformer >15kVA uncontrolled General transformer >15kVA and <=69kVA uncontrolled General transformer >15kVA and <=69kVA uncontrolled General transformer >15kVA and <=69kVA uncontrolled General transformer >15kVA and <=138kVA daily General transformer >13kVA and <=138kVA daily General transformer >138kVA and <=300kVA daily General transformer >138kVA and <=300kVA daily General transformer >300kVA and <=1500kVA uncontrolled General transformer >300kVA and <=1500kVA uncontrolled General transformer >300kVA and <=1500kVA daily General transformer >1500kVA connection daily General transformer >1500kVA connection uncontrolled General transformer >1500kVA connection uncontrolled General transformer >1500kVA connection on-peak demand General transformer >1500kVA connection power factor Non-street lighting daily Non-street lighting uncontrolled Street lighting uncontrolled	74,437 121,209,793 376,555 761 31,543 6,510 575,075 6,455 2,395,268 41,394 47,918,852 99,674 327,144,403 76,828,698 938,407 14,315 160,910,227 35,700,749 447,358 25,678 421,629 2,191,726 16,882,356	16.5232 0.0045 4.0078 0.2979 0.0276 0.7368 0.0194 4.1740 0.0228 0.0094 12.8291 0.0094 12.8291 0.0094 12.8291 0.0087 3.3688 0.0285 0.0008 0.0154 6.3472 4.5831 0.0227 0.0734 0.0734	11.2546 0.0030 2.7299 SUBTOTAL 0.2030 0.0189 0.5017 0.0132 2.8430 0.0155 4.0500 0.0064 8.7383 0.0024 0.0061 2.2946 0.0195 0.0006 0.0106 4.3233 3.1218 SUBTOTAL 0.0154 0.0500 0.0827 0.0000	1,625 2,067 9009 2,537 <b>29,189</b> 1 1 8 413 757 2,149 1,995 1,137 5,314 2255 928 4,773 197 <b>18,059</b> 16 270 3,440
LV1500-FIXD LV1500-24UC LV1500-DAMD eneral transformer TX15-FIXD TX15-24UC TX15-24UC TX159-FIXD TX138-FIXD TX138-FIXD TX138-FIXD TX138-24UC TX300-FIXD TX1500-FIXD TX1500-FIXD TX1500-FIXD TX1500-FIXD TX1501-CAPY TX1501-CAPY TX1501-CAPY TX1501-CAPY TX1501-CAPY TX1501-DOPC TX1501-DOPC TX1501-PWRF	\$/con/day \$/kVVh \$/kVA/month connection \$/con/day \$/kVh \$/con/day \$/kVh \$/con/day \$/kVh \$/con/day \$/kVh \$/con/day \$/kVh \$/con/day \$/kVh \$/con/day \$/kVh	General low voltage >300kVA and <=1500kVA daily General low voltage >300kVA and <=1500kVA uncontrolled General low voltage >300kVA and <=1500kVA demand General transformer <=15kVA daily General transformer >15kVA and <=69kVA daily General transformer >15kVA and <=69kVA daily General transformer >69kVA and <=138kVA uncontrolled General transformer >69kVA and <=138kVA uncontrolled General transformer >13kVA and <=300kVA daily General transformer >138kVA and <=300kVA daily General transformer >30kVA and <=130kVA uncontrolled General transformer >30kVA and <=1500kVA daily General transformer >300kVA and <=1500kVA demand General transformer >1500kVA connection daily General transformer >1500kVA connection apacity General transformer >1500kVA connection on-peak demand General transformer >1500kVA connection power factor Non-street lighting daily Non-street lighting daily	74,437 121,209,793 376,555 761 31,543 6,510 575,075 6,455 2,395,268 41,394 47,918,852 99,674 327,144,403 76,828,698 938,407 14,315 160,910,227 35,700,749 447,358 25,678 421,629 2,191,726 16,882,356	16.5232 0.0045 4.0078 0.2979 0.0276 0.7368 0.0194 4.1740 0.0228 0.0094 12.8291 0.0094 12.8291 0.0094 12.8291 0.0087 3.3688 0.0285 0.0008 0.0154 6.3472 4.5831 0.0227 0.0734 0.0734	11.2546 0.0030 2.7299 SUBTOTAL 0.2030 0.0189 0.5017 0.0132 2.8430 0.0155 4.0500 0.0064 8.7383 0.0024 0.0061 2.2946 0.0195 0.0006 0.0106 4.3233 3.1218 SUBTOTAL 0.0154 0.0500 0.0827 0.0000	1,625 2,067 909 2,537 <b>29,189</b> 1 1 8 18 45 91 413 757 2,149 1,995 1,137 5,314 2255 1,137 5,314 2255 1,137 18,059 928 4,773 197 <b>18,059</b>



# **9** Appendix E: Quality incentive calculation 2020

As per Schedule 4 (1) of WELL's 2018 CPP Determination, the quality incentive applicable for this Compliance Statement is based on the quality performance from the regulatory year finishing 31 March 2020 – a two-year lag after the assessment period.

# 9.1 Calculating SAIDI incentive (S<sub>SAIDI</sub>)

Following the end of the 2020 assessment period, WELL calculated the SAIDI quality incentive adjustment using the methodology provided in Schedule 4 (6) of the 2018 CPP Determination.

SAIDI incentive (S <sub>SAIDI</sub> ) calculation	Definition	Amount \$000 <sup>9</sup>	Reference to supporting calculation/information
SAIDI <sub>IR</sub>	The SAIDI incentive rate for the 31 March 2020 regulatory year.	\$101	Supporting calculation provided in section 9.3.
<i>multiplied by</i> (SAIDI <sub>target</sub> – SAIDI <sub>assess</sub> )	SAIDI <sub>assess</sub> (30.3486) is less than the SAIDI <sub>cap</sub> (40.6302) and greater than the SAIDI <sub>collar</sub> (30.2414). Therefore, SAIDI <sub>assess</sub> equals the SAIDI assessed value. (35.4358 – 30.3486)	5.0872	As specified in Schedule 4 (6) of the 2018 CPP Determination. Reliability components in section 9.5.
Ssaidi		\$515	

# 9.2 Calculating SAIFI incentive (SSAIFI)

Following the end of the 2020 assessment period, WELL calculated the SAIFI quality incentive adjustment using the methodology provided in Schedule 4 (8) of the 2018 CPP.

SAIFI incentive (S <sub>SAIFI</sub> ) calculation	Definition	Amount \$000 <sup>10</sup>	Reference to supporting calculation/information
SAIFI <sub>IR</sub>	The SAIFI incentive rate for the 31 March 2020 regulatory year.	\$6,718	Supporting calculation provided in section 9.4.
<i>multiplied by</i> (SAIFI <sub>target</sub> – SAIFI <sub>assess</sub> )	SAIFI <sub>assess</sub> (0.4528) is less than the SAIFI <sub>collar</sub> (0.4682). Therefore, SAIFI <sub>assess</sub> equals the SAIFI <sub>collar</sub> . (0.5465 – 0.4682)	0.0783	As specified in Schedule 4 (8) of the 2018 CPP Determination. Reliability components in section 9.5.
Ssaifi		\$526	

 $<sup>^{9}</sup>$  Does not apply to the SAIDI\_{target} - SAIDI\_{assess} component of this calculation, which is a whole number.

<sup>&</sup>lt;sup>10</sup> Does not apply to the SAIFI<sub>target</sub> - SAIFI<sub>assess</sub> component of this calculation, which is a whole number.



# 9.3 Calculating SAIDIR

SAIDI incentive rate (SAIDI <sub>IR</sub> ) calculation	Definition	Amount \$000 <sup>11</sup>	Reference to supporting calculation/information
0.5 x REV <sub>RISK</sub>	Where REV <sub>RISK</sub> is 1% of the actual net allowable revenue for the first assessment period specified in Schedule 1.1 of the 2018 CPP Determination. 0.5 x 1% x \$105,206,000	\$526	As specified in Schedule 1.1 of the 2018 CPP Determination.
divided by (SAIDI <sub>cap</sub> – SAIDI <sub>target</sub> ) SAIDI <sub>IR</sub>	(40.6302 – 35.4358)	5.1944 <b>\$101</b>	Section 9.5.

SAIDI<sub>IR</sub> is calculated as per Schedule 4 (7) of the 2018 CPP Determination.

# 9.4 Calculating SAIFIIR

SAIFI<sub>IR</sub> is calculated as per Schedule 4 (9) of the 2018 CPP Determination.

SAIFI incentive rate (SAIFI <sub>IR</sub> ) calculation	Definition	Amount \$000 <sup>12</sup>	Reference to supporting calculation/information
0.5 x REV <sub>RISK</sub>	Where $REV_{RISK}$ is 1% of the actual net allowable revenue for the first assessment period specified in Schedule 1.1 of the 2018 CPP Determination. 0.5 x 1% x \$105,206,000	\$526	As specified in Schedule 1.1 of the 2018 CPP Determination.
divided by (SAIFI <sub>cap</sub> – SAIFI <sub>target</sub> ) SAIFI <sub>IR</sub>	(0.6248 - 0.5465)	0.0783 <b>\$6,718</b>	Section 9.5.

 $<sup>^{11}</sup>$  Does not apply to the  $\text{SAIDI}_{\text{cap}}$  -  $\text{SAIDI}_{\text{target}}$  component of this calculation, which is a whole number.

<sup>&</sup>lt;sup>12</sup> Does not apply to the SAIFI<sub>cap</sub> - SAIFI<sub>target</sub> component of this calculation, which is a whole number.



# 9.5 Reliability components for year ended 31 March 2020

Reliability component	Component value	Reference to supporting calculation/information
SAIDI		
Assessed value	30.3486	From WELL's Compliance Statement for period ended 31 March 2020.
Сар	40.6302	From WELL's Compliance Statement for period ended 31 March 2020.
Collar	30.2414	From WELL's Compliance Statement for period ended 31 March 2020.
Target	35.4358	From WELL's Compliance Statement for period ended 31 March 2020.
Assessment period	ended 31/03/2020	As specified in Schedule 4 (1) of the 2018 CPP Determination.
SAIFI		
Assessed value	0.4528	From WELL's Compliance Statement for period ended 31 March 2020.
Сар	0.6248	From WELL's Compliance Statement for period ended 31 March 2020.
Collar	0.4682	From WELL's Compliance Statement for period ended 31 March 2020.
Target	0.5465	From WELL's Compliance Statement for period ended 31 March 2020.
Assessment period	ended 31/03/2020	As specified in Schedule 4 (1) of the 2018 CPP Determination.





# **10 Appendix F: Quality incentive adjustment 2022**

As per Schedule 4 (1) of the 2020 DPP Determination, the quality incentive adjustment is calculated based on the 31 March 2022 quality performance will be included in the Compliance Statement for the regulatory year finishing 31 March 2024 – a two-year lag after the assessment period.

# **10.1 Quality incentive adjustment calculation**

To determine the quality incentive adjustment, Schedule 4 (5)(b) of the 2020 DPP Determination requires the calculated value based on Schedule 4 (5)(a) to be adjusted for the time-value of money.

Quality incentive adjustment calculation	Definition	Amount <sup>13</sup> \$000	Reference to supporting calculation/information
Lessor amount of revenue at risk and the SAIDI quality incentive	The lessor amount as outlined in Schedule 4 (5)(a) of the 2020 DPP Determination	\$91	Refer to the calculations in section 10.2 and section 10.3
multiplied by (1 + 67th percentile estimate of post-tax WACC) <sup>2</sup>	As specified in Schedule 4 (5)(b) of the 2020 DPP Determination. (1 + 67th percentile estimate of post- tax WACC) <sup>2</sup> = $(1 + 4.23\%)^2$ = 1.09	1.09	The 67th percentile estimate of post-tax WACC per clause 4.2 of the 2020 DPP Determination is 4.23%
Quality incentive adjustment		\$99	

# **10.2** Revenue at risk calculation

Schedule 4 (6)(h) of the 2020 DPP Determination provides the 'revenue at risk' calculation as:

Revenue at risk calculation	Definition	Amount <sup>14</sup> \$000	Reference to supporting calculation/information
0.02	0.02 as prescribed in the formula of Schedule 4 (6)(h) of the 2020 DPP Determination	0.02	As prescribed in Schedule 4 (6)(h) of the 2020 DPP Determination
multiplied by ANAR	Is the actual net allowable revenue for the second assessment period	\$91,109	As calculated in section 3.3
Revenue at risk		\$1,822	

<sup>&</sup>lt;sup>14</sup> Does not apply to the 0.02 component of this calculation, which is a whole number.



<sup>&</sup>lt;sup>13</sup> Does not apply to the WACC component of this calculation, which is a whole number.



# 10.3 SAIDI quality incentive value calculation

The SAIDI quality incentive value calculation is outlined in Schedule 4 (5)(a) of the DPP Determination.

Quality calculation	Definition	Amount \$000	Reference to supporting calculation/information
SAIDIunplanned	SAIDI unplanned quality incentive	\$137	As calculated in section 10.4
SAIDIplanned	SAIDI planned quality incentive	(\$46)	As calculated in section 10.5
SAIDI quality incentive		\$91	

# **10.4** Calculating the SAIDI unplanned quality incentive value

Quality calculation	Definition	Amount <sup>15</sup> \$000	Reference to supporting calculation/information
(SAIDIunplanned,target — SAIDIunplanned,assess)	SAIDI <sub>unplanned,assess</sub> (25.32) is less than the SAIDI <sub>unplanned,cap</sub> (39.81). Therefore, SAIDI <sub>unplanned,assess</sub> equals the SAIDI assessed value. = (31.2 - 25.32)	5.88	As specified in Schedule 4 (6)(c)
<i>multiplied by</i> incentive rate	The incentive rate for the 31 March 2022 regulatory year	\$23	As per Schedule 4 (4) of the 2020 DPP Determination
SAIDI unplanned quality incentive		\$137	

Calculated as specified in Schedule 4 (5)(a)(i) A. of the 2020 DPP Determination.

<sup>&</sup>lt;sup>15</sup> Does not apply to the SAIDI unplanned quality differential component of this calculation, which is a whole number.



# 10.5 Calculating the SAIDI planned quality incentive

Quality calculation	Definition	Amount <sup>16</sup> \$000	Reference to supporting calculation/information
(SAIDI <sub>planned,target</sub> — SAIDI <sub>planned,assess</sub> )	SAIDI <sub>planned,assess</sub> (8.60) is less than the SAIDI <sub>planned,cap</sub> (13.94). Therefore, SAIDI <sub>planned,assess</sub> equals the SAIDI assessed value. = (4.65 - 8.60)	(3.95)	As specified in Schedule 4 (6)(g)
multiplied by 0.5	0.5 as prescribed in the formula of Schedule 4 (5)(a)(i) B. of the 2020 DPP Determination	0.5	As prescribed in Schedule 4 (5)(a)(i) B. of the 2020 DPP Determination
<i>multiplied by</i> incentive rate	The incentive rate for the 31 March 2022 regulatory year	\$23	As per Schedule 4 (4) of the 2020 DPP Determination
SAIDI planned quality incentive		(\$46)	

Calculated as specified in Schedule 4 (5)(a)(i) B. of the 2020 DPP Determination.

# 10.6 Reliability components for year ended 31 March 2022

Reliability components	Component value	Reference to supporting calculation/information
Unplanned SAIDI		
Assessed value	25.32	Supporting calculation provided in Appendix J
Сар	39.81	As specified in Schedule 4 (2) of the 2020 DPP Determination
Target	31.2	As specified in Schedule 4 (2) of the 2020 DPP Determination
Planned SAIDI		
Assessed value	8.60	Supporting calculation provided in Appendix I
Сар	13.94	As specified in Schedule 4 (3) of the 2020 DPP Determination
Target	4.65	As specified in Schedule 4 (3) of the 2020 DPP Determination

<sup>&</sup>lt;sup>16</sup> Does not apply to the SAIDI planned quality differential component of this calculation, which is a whole number.



# **11 Appendix G: Opex incentive amount calculation**

# 11.1 Calculating the opex incentive amount

WELL has calculated the opex incentive amount using the methodology provided in clause 3.3.2 of the IMs. The opex incentive amount is made up of amounts carried forward into that disclosure year from a disclosure year in a preceding regulatory period and, where applicable, an adjustment to the opex incentive for that disclosure year.

Opex incentive amount calculation	Definition	Amount \$000	Reference to supporting calculation/information
Amount carried forward	All amounts carried forward into that disclosure year from a disclosure year in a preceding regulatory period	\$2,956	Supporting calculation provided in section 11.2
<i>plus</i> an adjustment to the opex incentive, where applicable	Where applicable under clause 3.3.4(1) of the IMs, an adjustment to the opex incentive for that disclosure year	\$0	An adjustment to the opex incentive is not required in the starting price year (first year of a regulatory period).
Opex incentive amount		\$2,956	







# 11.2 Amount carried forward

Amount carried forward calculation	Definition	Amount \$000	Reference to supporting calculation/ information
Amount carried forward for the year ended 31 March 2017	For a disclosure year which is not the first or last disclosure year of a regulatory period, 'amount carried forward' is calculated as: (forecast opext - actual opext) - (forecast opext-1 - actual opext-1) Where: t means the disclosure year in question, and t-1 means the disclosure preceding the disclosure year in question (31,950 - 30,075) - (30,899 - 29,622)	\$598	Calculation method provided in clause 3.3.3 (3) of the IMs Forecast and actual opex provided in section 11.3
Amount carried forward for the year ended 31 March 2018	The 'amount carried forward' for the last disclosure year of a regulatory period is nil.	\$0	Calculation method provided in clause 3.3.3 (4) of the IMs.
Amount carried forward for the year ended 31 March 2019	The 'amount carried forward' for the first disclosure year of a regulatory period, is calculated in accordance with the formula– forecast opext – actual opext Where: t means the disclosure year in question. 34,131 - 34,017	\$114	Calculation method provided in clause 3.3.3 (2) of the IMs. Forecast and actual opex provided in section 11.3
Amount carried forward for the year ended 31 March 2020	For a disclosure year which is not the first or last disclosure year of a regulatory period, 'amount carried forward' is calculated as: (forecast opext - actual opext) - (forecast opext-1 - actual opext-1) Where: t means the disclosure year in question, and t-1 means the disclosure preceding the disclosure year in question (35,184 - 32,826) - (34,131 - 34,017)	\$2,245	Calculation method provided in clause 3.3.3 (3) of the IMs. Forecast and actual opex provided in section 11.3
Amount carried forward for the year ended 31 March 2021	The 'amount carried forward' for the last disclosure year of a regulatory period is nil.	\$0	As specified in clause 3.3.3 (4) of the IMs.
Amount carried forward		\$2,956	

The amount carried forward is calculated as per clause 3.3.3 of the IMs.



# 11.3 Forecast and actual opex

	31 March 2016	31 March 2017	31 March 2018	31 March 2019	31 March 2020	Reference to supporting
	\$000	\$000	\$000	\$000	\$000	calculation/information
Forecast opex						
DDP2 allowance	\$30,899	\$31,950	\$32,914			As per 2015 DPP Determination
plus CPP allowance				\$34,131	\$35,184	As per 2018 CPP Determination
Forecast opex	\$30,899	\$31,950	\$32,914	\$34,131	\$35,184	
Actual opex						
Operating costs	\$29,622	\$30,075	\$33,311	\$34,017	\$32,190	As per Schedule 6b of Wellington Electricity's Information Disclosures for the relevant year
<i>plus</i> lease payments					\$635	As per the definition under GAAP
Actual opex	\$29,622	\$30,075	\$33,311	\$34,017	\$32,826	





# **12 Appendix H: Capex incentive amount calculation**

WELL has calculated the capex incentive amount using the methodology provided in clause 3.3.10 of the IMs. The capex incentive amount is made up of a capex washup amount and a retention adjustment.

## **12.1** Calculating the capex incentive amount

WELL has calculated the planned SAIFI assessed value using the methodology provided in Schedule 3.1 (3) of 2020 DPP Determination. The cost of debt which applied in the DPP3 regulatory period was 2.92% as per the 2019 DPP3 determination. Specifically, the SAIFI assessed value is calculated as:

Calculation	Definition	Amount \$000	Reference to supporting calculation/information
capex wash-up amount	All amounts carried forward into that disclosure year from a disclosure year in a preceding regulatory period	(1,963)	Supporting calculation provided in section 12.2
<i>plus</i> retention adjustment	where applicable under clause 3.3.4(1) of the IMs, an adjustment to the opex incentive for that disclosure year	2,369	Supporting calculation provided in section 12.3
Total capex incentive amount	Calculated in accordance with the formula outlined in Section 3.3.10 (2) of the IMs $\left(\frac{(capex \ wash-up + retention \ adjustment)}{l-1}\right) \times (1+r)^{y+0.5}$ where- / is the number of disclosure years in the DPP regulatory period; r is the cost of debt applying to the DPP or CPP in question; and y is the number of disclosure years preceding the disclosure year in question in the DPP regulatory period; and = $\left(\frac{-1,963+2,369}{5-1}\right) \times (1+2.92\%)^{h}(1+0.5)$	106	





# 12.2 Calculating the Capex wash-up

The capex wash-up calculation is outlined in clause 3.3.11 of the IMs. The WACC applying for the DDP2 regulatory period used to present value (PV) the difference is 7.19%, as per the 2015 DPP2 Determination.

Calculation	Definition	DPP2 regulatory period \$000	Reference to supporting calculation/information
1 April 2015 PV of differences in the series of building blocks allowable revenue before tax based on the forecast assets commissioned	As per 2018 CPP financial model as published in PV 1 April 2015 terms.	433,266	As prescribed in clause 3.3.11 (1)(b) and (c) of the IMs.
1 April 2015 PV of differences in the series of building blocks allowable revenue before tax based on the actual assets commissioned	As per 2018 CPP financial model updated for actual commissioned assets in PV 1 April 2015 terms.	431,879	As prescribed in clause 3.3.11 (1)(a) of the IMs.
1 April 2015 PV of differences in the series of building blocks allowable revenue before tax		(1,387)	As prescribed in clause 3.3.11 (1) of the IMs.
Capex wash-up (PV 1 April 2020)		(1,963)	The 1 April 2020 present value of the capex wash-up amount is calculated as (\$1,387) x (1+7.19%) <sup>5</sup>





# **12.3** Calculating the retention adjustment

The retention adjustment calculation is outlined in clause 3.3.12 of the IMs. The WACC applying for the DDP2 regulatory period used to present value the PV difference is 7.19% and the retention factor applied to the PV of differences in assets commissioned is 15%, as per the 2015 DPP2 Determination.

commissioned	1,334	4,735	4,026	2,580	3,117		
PV of differences in assets	4.00.4	4 705	4 000	0 500	0.447		
PV of value of commissioned assets	35,921	31,488	37,434	41,273	40,734		Calculated based on the DPP2 WACC of 7.19%
Value of commissioned assets	26,282	24,695	31,469	37,191	39,344		
less right-of-use-assets					-3,978		As per the definition under GAAP
Actual / revised forecast assets commissioned	26,282	24,695	31,469	37,191	43,322		As per Schedule 4 of Wellington Electricity's Information Disclosures for the relevant year
Value of commissioned assets	5						
PV of forecast value of commissioned assets	37,255	36,223	41,460	43,854	43,851		Calculated based on the DPP2 WACC of 7.19%
Forecast value of commissioned assets	27,257	28,408	34,853	39,516	42,355		
plus CPP allowance				39,516	42,355		As per 2018 CPP Determination
DDP2 allowance	27,257	28,408	34,853				As per 2015 DPP Determination
Forecast value of commission	ed assets						
	\$000	\$000	\$000	\$000	\$000	\$000	
	31 March 2016	31 March 2017	31 March 2018	31 March 2019	31 March 2020	DPP2 regulatory period	Reference to supporting calculation/information







# 13 Appendix I: Planned SAIDI and SAIFI assessed value calculation

WELL has calculated the planned SAIDI and SAIFI assessed values using the methodology provided in Schedule 3.1 of the 2020 DPP Determination for the second assessment period. In this section, WELL has also provided information necessary to demonstrate whether WELL has complied with clause 9.2.

# 13.1 Calculating the planned SAIDI assessed value

WELL has calculated the SAIDI assessed value using the methodology provided in Schedule 3.1 (2) of the 2020 DPP Determination. Specifically, the planned SAIDI assessed value is calculated as:

SAIDIplanned, assess Calculation	Amount	Reference to supporting calculation/information
SAIDIB	7.90	Refer Section 13.3
plus SAIDI <sub>№</sub> /2	0.70	Refer Section 13.3
SAIDI <sub>planned,assess</sub>	8.60	

# 13.2 Calculating the planned SAIFI assessed value

WELL has calculated the planned SAIFI assessed value using the methodology provided in schedule 3.1 (3) of 2020 DPP Determination. Specifically, the SAIFI assessed value is calculated as:

Calculation	Definition	Amount	Reference to supporting calculation/information
Planned interruptions (Class B)	Total number of planned customers interruption (Class B)	10,911	Method of data collection and validation described in section 4.1
<i>divided by</i> Average number of customers	From the Gentrack billing system. A report is run monthly, and an average is calculated for the regulatory year.	171,955	Provided by Appendix K
SAIFIplanned,assess		0.0635	



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100



# 13.3 Calculating SAIDIB and SAIDIN

Calculation Components	Definition	Amount	Reference to supporting calculation/information
SAIDIB			
Class B interruptions that are not notified interruptions	Total customer interruption minutes accrued for each interruption	1,351,986	Method of data collection and validation described in section 4.1
<i>and</i> Class B notified interruptions falling outside the Notified Interruption Window	Total customer interruption minutes accrued for each interruption outside the notified interruption window	6,039	Method of data collection and validation described in section 4.1
Total Class B non- notified interruption minutes		1,358,025	
<i>divided by</i> Average number of customers	From the Gentrack billing system. A report is run monthly, and an average is calculated for the regulatory year.	171,955	Provided in Appendix K
SAIDIB		7.90	
SAIDIN			
Class B notified interruptions falling inside the Notified Interruption Window	Total customer interruption minutes accrued for each interruption inside the notified window	240,565	Method of data collection and validation described in section 4.1
<i>and</i> Class B intended interruptions cancelled without notice	Total customer interruption minutes accrued for each interruption cancelled without notice	0	Method of data collection and validation described in section 4.2
and Class B intended interruptions cancelled with notice	Total customer interruption minutes accrued for each interruption cancelled with notice	0	Method of data collection and validation described in section 4.1
Total notified interruption minutes		240,565	
<i>divided by</i> Average number of customers	From the Gentrack billing system. A report is run monthly, and an average is calculated for the regulatory year.	171,955	Provided in Appendix K
SAIDIN		1.40	



# 14 Appendix J: Unplanned SAIDI and SAIFI assessed value calculation

WELL has calculated the unplanned SAIDI and SAIFI assessed values using the methodology provided in Schedule 3.2 of the 2020 DPP Determination for the second assessment period. In this section, WELL has also provided information necessary to demonstrate whether WELL has complied with clause 9.8.

# 14.1 Calculating the unplanned SAIDI assessed value

WELL has calculated the unplanned SAIDI assessed value using the methodology provided in Schedule 3.2 (2) of the 2020 DPP Determination. Specifically, the unplanned SAIDI assessed value is calculated as:

SAIDI <sub>unplanned,assess</sub> calculation	Definition	Amount	Reference to supporting calculation/information
Unplanned customer interruption minutes (Class C)	The sum of the total duration in minutes accumulated for each ICP for each unplanned interruption.	5,336,396	Method of data collection and validation described in section 4.1
<i>divided by</i> Total number of ICPs	From the Gentrack billing system. A report is run monthly, and an average is calculated for the regulatory year.	171,955	Provided in Appendix K
Unplanned SAIDI value	(Total unplanned customer interruption minutes / Total number of ICPs).	31.03	As specified in clause 4.2 of the 2020 DPP Determination
<i>less</i> major event boundary value adjustment	Within an unplanned SAIDI major event, any 30-minute period where the unplanned interruption SAIDI value is greater than 1/48th of the SAIDI unplanned boundary value (2.16), this period equals 1/48th of the SAIDI unplanned boundary value.	5.71	There were two SAIDI major events in the 2021/22 year. Refer to Section 14.3 for details.
SAIDI <sub>unplanned,assess</sub>		25.32	

# 14.2 Calculating the unplanned SAIFI assessed value

WELL has calculated the unplanned SAIFI assessed value using the methodology provided in Schedule 3.2 (3) of the 2020 DPP Determination. Specifically, the unplanned SAIFI assessed value is calculated as:



SAIFI <sub>unplanned,assess</sub> calculation	Definition	Amount	Reference to supporting calculation/information
Unplanned customer interruption minutes (Class C)	The total number of unplanned customers interruptions for each unplanned interruption.	70,217	Method of data collection and validation described in section 4.1
<i>divided by</i> Total number of ICPs	From the Gentrack billing system. A report is run monthly, and an average is calculated for the regulatory year.	171,955	Provided in Appendix K
Unplanned SAIFI value	(Total number of unplanned customer interruptions / Total number of ICPs).	0.4083	As specified in clause 4.2 of the 2020 DPP Determination
<i>less</i> major event boundary value adjustment	Within an unplanned SAIFI major event, any 30-minute period where the unplanned interruption SAIFI value is greater than 1/48th of the SAIFI unplanned boundary value (0.0313), this period equals 1/48th of the SAIFI unplanned boundary value.	0.0301	There was one SAIFI major event in the 2021/22 year. Refer to Section 14.3 for details.
SAIFIunplanned,assess		0.3783	

# 14.3 SAIDI and SAIFI major events

A SAIDI/SAIFI major event is defined in clause 4.2 of the 2020 DDP 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.

WELL had two SAIDI and one SAIFI major events during the second assessment period. In accordance with the Commission's final decision in the Determination's reasons paper<sup>17</sup>, major events can last longer than 24-hours if the major event criteria is met. As all events lasted longer than 24-hours, WELL has defined these events as 'extended major events'.

The SAIDI extended major events covered a 32-hour period from 8<sup>th</sup> August 2021 to 10<sup>th</sup> August 2021 and a 47.5-hour period from 12<sup>th</sup> February 2022 to 14<sup>th</sup> February 2022.

The SAIFI extended major event covered a 44-hour period from 12<sup>th</sup> February 2022 to 14<sup>th</sup> February 2022.

The tables below include details relating to the extended major SAIDI and SAIFI events in accordance with clause 11.6 (g) and (h) of the 2020 DPP Determination.

<sup>&</sup>lt;sup>17</sup> Section K69-K72 p391 - <u>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</u>







SAIDI major event - sto	SAIDI major event - storm					
Cause of the SAIDI major event	On 9th August 2021 there was a severe storm in the Wellington region, with sustained wind gusts for 8 hours between 130k/h to 160k/h recorded at Mount Kaukau. The storm caused multiple instances of tree debris flying into the 11kV lines as well as other damage to network equipment. The strong winds also hindered repair times, as repair works were only carried out when safe to do so in the challenging weather conditions.					
WELL's response	WELL reports on all unplanned interruptions which occur on the network. Interruptions where the SAIDI value exceeds 0.45 are investigated, and new controls are considered. As part of this SAIDI major event there were three interruptions with a SAIDI value greater than 0.45 for which detailed reports were provided. The investigation findings, including any lessons learnt and recommended new controls, were provided as part of the fortnightly Network Reliability meeting following the event.					
Prevention and future improvements	Installation of additional line fault indicators to reduce fault location timeframes, and installation of conductor covers to reduce the effect of incidental contact by windborne debris.					
Start date and time	End date and time	SAIDI value before any replacement	Replaced SAIDI value	Location	Equipment involved	
				MEL4	Conductor – due to vegetation	
				HAY2822	Air break switch – due to lightening	
				WAI12	Conductor – due to vegetation	
				TAW11	Conductor – due to vegetation	
08/08/2021 06:00 pm	10/08/2021 02:00 am	2.51	0.29	BRO3	Conductor – due to vegetation	
				TRE8	Conductor – due to vegetation	
				PLI11	Transformer – due to vegetation	
			HAY2702	Circuit breaker – due to system overload when HAY2822 was backfed		







SAIDI major event - storm						
Cause of the SAIDI major event	On 13th February 2022 there was a severe storm in the Wellington region, with sustained wind gusts for 19 hours between 100k/h to 150k/h recorded at Mount Kaukau. The interruptions occurred during a 12-hour period where wind gusts exceeded 148km/h and 175mm of rain fell over the wider Wellington region. The storm caused multiple instances of tree debris flying into the 11kV lines, landslip, as well as other damage to network equipment. The strong winds also hindered repair times, as repair works were only carried out when safe to do so in the challenging weather conditions.					
WELL's response	WELL reports on all unplanned interruptions which occur on the network. Interruptions where the SAIDI value exceeds 0.45 are investigated, and new controls are considered. As part of this SAIDI major event there were two interruptions with a SAIDI value greater than 0.45 for which detailed reports were provided. The investigation findings, including any lessons learnt and recommended new controls, were provided as part of the fortnightly Network Reliability meeting following the event.					
Prevention and future improvements	Installation of additional line fault indicators to reduce fault location timeframes, and installation of conductor covers to reduce the effect of incidental contact by windborne debris.					
Start date and time	End date and time	SAIDI value before any replacement	Replaced SAIDI value	Location	Equipment involved	
				PLI12	Poles and conductor – due to landslide	
				PLI8	Conductor – no fault found suspected line clash	
				TAW3	Jumper – due to vegetation	
				NGA7	Conductor – due to vegetation	
				TAW13	Conductor – no fault found suspected line clash	
12/02/2022 10:30 am	14/02/2022 10:00 am	3.89	0.39	EVA2	Conductor – due to vegetation	
12/02/2022 10.30 am	14/02/2022 10.00 am	3.69	0.59	JOH10	Conductor – due to vegetation	
				BRO11	Conductor – due to vegetation	
				PLI8	Conductor – no fault found suspected line clash	
				BRO5	Conductor – due to vegetation	
				KAR3	Conductor – due to vegetation	
		l [	BRO5	Conductor – due to vegetation		







		PLI8	Conductor – no fault found suspected line clash
		KAR3	Conductor – due to vegetation
		BRO8	Conductor – due to vegetation
		KAR3	Conductor – due to vegetation
		WAI7	Fuses – no fault found

SAIFI major event - storm						
Cause of the SAIFI major event	See details of the 12th c	See details of the 12th of February 2022 to 14th February 2022 SAIDI major event above.				
WELL's response	WELL reports on all unplanned interruptions which occur on the network. Interruptions where the SAIFI value exceeds 0.02 are investigated, and new controls are considered. As part of this SAIFI major event there were no interruptions with a SAIFI value greater than 0.02. As part of the SAIDI major event day above, two interruptions were investigated further. The investigation findings, including any lessons learnt and recommended new controls, were provided as part of the fortnightly Network Reliability meeting following the event.					
Prevention and future improvements	See details of the 12th of February 2022 to 14th February 2022 SAIDI major event above.					
Start date and time	End date and time	SAIFI value before any replacement	Replaced SAIFI value	Location	Equipment involved	
12/02/2022 01:30 pm	14/02/2022 09.30 am	0.03514	0.00508	See SAIDI major event above	See SAIDI major event above	







# **15 Appendix K: Average customer number calculation**

Month	ICP numbers
Apr-21	171,221
May-21	171,436
Jun-21	171,661
Jul-21	171,766
Aug-21	171,759
Sep-21	171,843
Oct-21	171,959
Nov-21	172,186
Dec-21	172,381
Jan-21	172,258
Feb-22	172,448
Mar-22	172,542
Average	171,955

The monthly number of customers is provided by the Gentrack billing system.



