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## **Default Price-Quality Path Compliance**

**Wellington Electricity Lines Limited**

**Annual Compliance Statement**

**8 June 2018**

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## 1. Introduction

Clause 11.2(a) of the *Electricity Distribution Services Default Price-Quality Path Determination 2015 (2015 DPP Determination)* requires that all non-exempt electricity distribution businesses (**EDB's**) provide a written statement that confirms whether or not they have complied with the following aspects of the 2015 DPP Determination for the relevant assessment period:

- The price path as per clause 8 of the 2015 DPP Determination; and
- The quality standards as per clause 9 of the 2015 DPP Determination.

This statement is Wellington Electricity Lines Limited (**WELL**) Annual Compliance Statement (**the Statement**) for the third assessment period ended 31 March 2018.

Attachment 1 of this Statement provides the Auditor's report relating to this Statement as required by clause 11.3(b) of the 2015 DPP Determination. WELL confirms that the form of the Auditor's report is consistent with the form specified in Schedule 7 of the 2015 DPP Determination.

Attachment 2 of this Statement contains the Director's certificate signed by one director of WELL, as required by clause 11.3(a) of the 2015 DPP Determination. This certificate certifies that the information contained in this Statement is true and accurate. The attached Directors certificate is in the form required by Schedule 6 of the 2015 DPP Determination.

### 1.1. Compliance with 2015 DPP Determination's price – quality requirements

This Statement is made in accordance with the requirements of clause 11.1 of the 2015 DPP Determination and includes our compliance with the price path in clause 8 and the quality standards in clause 9.

In respect of the Assessment Period ended on the Assessment Date 31 March 2018, WELL confirms it has complied with the price path in clause 8. WELL confirms it has exceeded the quality path in clause 9, refer to section 3 for further information.

This Statement includes information relating to:

#### Price path compliance

- o the amount of Allowable Notional Revenue, the amount of Notional Revenue, distribution prices, quantities, units of measurement associated with all numeric data, and other relevant data, information, and calculations;
- o the Price and the proportions of that Price that are Pass-through Prices and the portion of that price that are Distribution Prices;
- o The methodology used to calculate Distribution Prices and Pass-through Prices, along with information clearly identifying the portion of Pass-through Prices attributed to –
  - a) Pass-through Costs and Recoverable Costs for the Assessment Period in question, and
  - b) Any under or over-recovery of Pass-through Costs and Recoverable Costs from a prior Assessment Period, as reflected by the Pass-through Balance;
- o the Pass-through Balance, Pass-through Prices, and Quantities for the Assessment Period and the preceding Assessment Period, along with the units of measurement associated with all numeric data, and other relevant data information, and calculations;
- o The amount of Pass-through Costs and Recoverable Costs included in the calculation of the Pass-through Balance for the Assessment period, and supporting data, information, and calculations used to determine those amounts;
- o evidence of the amount of charge relating to any new investment contract entered into the Assessment Period consistent with clause 3.1.3(1)(c) of the *Electricity Distribution Services Input Methodologies Determination 2012 (IM determination)*, which need not be publicly disclosed under 11.1(c);

- o The amount of any Pass-through Costs and Recoverable Costs (actual or forecast) used to set Pass-through Costs and Recoverable Costs;
- o An explanation as to the cause, or likely cause, of any differences between the amounts of Pass-through or Recoverable Costs used to set Prices and actual amounts of those Pass-through or Recoverable Costs; and
- o A reconciliation between the Pass-through Balance for the Assessment period with the Pass-through Balance for the preceding Assessment Period.

#### Quality standards compliance

- o SAIDI and SAIFI Assessed Values, Limits, Unplanned Boundary Values, Caps, Collars and the Targets for the Assessment period and any supporting calculations (including those in Schedule 4A of the 2015 DPP Determination and annual reliability assessments for the two previous Assessment Periods; and
- o A description of policies and procedures which WELL has used for capturing and recording Interruptions and for calculating SAIDI and SAIFI Assessed Values for the Assessment Period.

## **1.2. Disclaimer**

The information contained in the Statement has been prepared for the express purpose of complying with the requirements of clause 11 of the 2015 DPP Determination. The Statement has not been prepared for any other purpose. WELL expressly disclaims any liability to any other party who may rely on the Statement for any other purpose.

Representations in this 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. These discrepancies do not affect the overall compliance calculations which have been based on the more detailed information.

## 2. Price Path Compliance

This section of the Statement provides information on WELL’s compliance with the price path for the Assessment Period ended 31 March 2018. Clauses 11.1(a) and 11.4 of the 2015 DPP Determination require WELL to:

- Provide a written statement that states whether or not the Non-Exempt EDB has complied with the price path in clause 8; and
- Provide sufficient information to support the compliance or non-compliance.

WELL notes that Tables contained in this Section of the Statement are aggregates of the detail provided in Attachment 3, Attachment 4 and Attachment 6. The table under Attachment 3 and 4 reflects the appropriate distribution price multiplied by the appropriate quantity for each distribution pricing category and the table under Attachment 6 reflects the Pass-through price multiplied by the appropriate quantity for each Pass-through pricing category.

### 2.1. Price path compliance as at 31 March 2018

In order to demonstrate compliance with the price path, WELL is required to demonstrate that its Notional Revenue for the Assessment Period has not exceeded the Allowable Notional Revenue for the Assessment Period.

As demonstrated by Table 1 below, Notional Revenue (NR<sub>2018</sub>) is less than Allowable Notional Revenue (ANR<sub>2018</sub>) by an amount of \$29,810. WELL has therefore complied with the price path calculated in accordance with clause 8.3 of the 2015 DPP Determination for the disclosure year ended 31 March 2018.

Determination Requirement	Notional revenue (NR) should not exceed the Allowable Notional Revenue (ANR)
Compliance Formula	$NR \leq ANR$
WELL Result	95,671,678 ≤ 95,701,488

**Table 1: Price path compliance**

The summary calculation of NR<sub>2018</sub> is provided in

<b>WELL's Notional Revenue, <math>NR_t = \sum DP_{i,t} Q_{i,t-2}</math></b>	
<b>Calculation Components</b>	<b>Amount (\$)</b>
$DP_{i,2017}$ – is the $i^{th}$ Distribution Price during any part of the Assessment Period 1 April 2017 to 31 March 2018	95,671,678
$Q_{i,2016}$ – is the Quantity corresponding to the $i^{th}$ Distribution Price for Pricing Period 1 April 2015 to 31 March 2016	
<b>Total Notional Revenue for assessment period ending 31 March 2018</b>	<b>95,671,678</b>

**Table 2: WELL's Notional Revenue NR<sub>2018</sub>**

<b>WELL's Allowable Notional Revenue, <math>ANR_t = ( \sum_i DP_{i,t-1} Q_{i,t-2} + ( ANR_{t-1} - NR_{t-1} ) ) ( 1 + \Delta CPI_t ) ( 1 - X )</math></b>	
<b>Calculation Components</b>	<b>Amount (\$)</b>
$DP_{i,2017}$ – is the $i^{th}$ Distribution Price during any part of the Assessment Period 1 April 2016 to 31 March 2017	95,172,206
$Q_{i,2016}$ – is the Quantity corresponding to the $i^{th}$ Distribution Price for Pricing Period 1 April 2015 to 31 March 2016	
$( ANR_{t-1} - NR_{t-1} )$ – is the difference between Allowable Notional Revenue and Notional Revenue for the Assessment Period 1 April 2016 to 31 March 2017	212,309
$( 1 + \Delta CPI_t )$ – is the derived change in the CPI to be applied during the Assessment Period t, being equal to:  $\frac{CPI_{Dec,t-3} + CPI_{Mar,t-2} + CPI_{Jun,t-2} + CPI_{Sep,t-2}}{CPI_{Dec,t-4} + CPI_{Mar,t-3} + CPI_{Jun,t-3} + CPI_{Sep,t-3}} - 1$ CPI <sub>q, t</sub> is the CPI for the quarter q of year t	1.0033
$( 1 - X )$ – is the annual rate of change applicable to WELL	0
<b>Total Allowable Notional Revenue for assessment period ending 31 March 2018</b>	<b>95,701,488</b>

**Table 3: WELL's Allowable Notional Revenue ANR<sub>2018</sub>**

## 2.2. Pass-through and Recoverable Costs

Clause 11.4(j) requires WELL to provide differences between the amounts of Pass-through or Recoverable Costs used to set Prices and the actual amounts of those Pass-through Costs and Recoverable Costs. Table 4 below provides the breakdown of forecast and actual Pass-Through and Recoverable Costs incurred by WELL during the Assessment Period.

Description	Year to 31 March 2018 \$000 Actual	Year to 31 March 2018 \$000 Forecast	Variance \$000
<b>Pass-through Costs</b>			
Council rates	2,900	2,969	-69
Commerce Act levies	222	315	-93
Industry levies	495	589	-94
<b>Total Pass-through Costs</b>	<b>3,617</b>	<b>3,873</b>	<b>-256</b>
<b>Recoverable Costs</b>			
Electricity lines service charge payable to Transpower	67,004	67,012	-8
Transpower new investment contract charges	1,188	1,383	-195
Distribution generation allowance	1,913	1,912	1
Capex wash-up adjustment	460	460	0
Quality incentive adjustment	630	630	0
<b>Total Recoverable Costs</b>	<b>71,195</b>	<b>71,397</b>	<b>-202</b>
<b>Total Pass-through and Recoverable Costs</b>	<b>74,812</b>	<b>75,270</b>	<b>-458</b>

**Table 4: Comparison of WELL's actual and forecast Pass-through and Recoverable Costs**

The overall variance between WELL's actual and forecast Pass-through and Recoverable Costs for the current Assessment Period is due to the minor "business as usual" variability, in relation to:

- Council rates: are the total cost of council rates charged to WELL by local authorities for the year ended 31 March 2018;
- Commerce Act Levies: are charged to WELL by the Ministry of Business Innovation and Employment under the *Commerce (Levy on Suppliers of Regulated Goods and Services) Regulations 2009* for the year ended 31 March 2018;
- Industry levies: include all applicable components (Common Quality, Registry and Consumer, Transmission, Other Activities and MACQS Reform invoice lines) charged to WELL by the Electricity Authority under the *Electricity Industry (Levy of Industry Participants) Regulations 2010* and levies charged by Utilities Disputes Ltd for the complaint resolution process for the year ended 31 March 2018.
- Electricity lines service charge and new investment charges: reflect the total charges paid by WELL to Transpower for the year ended 31 March 2018. These charges are determined in accordance with the Transmission Pricing Methodology set out in the *Electricity Industry Participation Code 2010*;

- Distribution generation allowance: are payments made to generators connected to the distribution system that cause transmission charges to be avoided.

### 2.3. Pass-through Balance

In each assessment period, WELL must calculate a Pass-through Balance in accordance with the formula -

$$PTB_t = \sum_i PTP_{i,t} Q_{i,t} - K_t - V_t + PTB_{t-1}(1 + r)$$

The summary calculation of  $PTB_{2018}$  is provided in Table 5.

$PTB_{2018} = \sum_i PTP_{i,2018} Q_{i,2018} - K_{2018} - V_{2018} + PTB_{2017}(1 + r)$	
Calculation Components	Amount (\$000)
$\sum_i PTP_{i,2018} Q_{i,2018}$ - the sum of the $i^{th}$ Pass-through Price during any part of the Assessment period 1 April 2017 to 31 March 2018 multiplied by the corresponding base quantities for the pricing period 1 April 2017 to 31 March 2018	77,389
$K_{2018}$ - the sum of all Pass-through Costs for pricing period 1 April 2017 to 31 March 2018	3,617
$V_{2018}$ - the sum of all Recoverable Costs for pricing period 1 April 2017 to 31 March 2018	71,195
$PTB_{2017}$ - the Pass-Through Balance for the assessment period 1 April 2016 to 31 March 2017	6,497
$PTB_{2017} r$ - the Pass-Through Balance for the assessment period 1 April 2016 to 31 March 2017 multiplied the cost of debt (6.09%)	396
<b>Pass-through Balance for period ending 31 March 2018</b>	<b>9,470</b>

**Table 5: WELL's Pass-through Balance  $PTB_{2018}$**

WELL has a cumulative over-recovery of Pass-through Costs of \$9.5m as at 31 March 2018. This includes the balance that was recognised in the 2016/17 year, and additional over-recovery during 2017/18 due to higher than expected volumes and differences between WELL's actual and forecast Pass-through and Recoverable Costs. WELL intends to pass back over-recovery of the Pass-through balance to consumers through prices in future years.



## **2.4. Price setting for 2017/18**

As a regulated electricity distributor, WELL is governed by the Commerce Act 1986 and is therefore subjected to a “default price-quality path” set by the Commerce Commission. In 2014 the Commerce Commission reset the default price-quality path applying for the period from 1 April 2015 to 31 March 2020.

WELL network line prices contain distribution and Pass-through Prices. Pass-through Prices comprise approximately 5 percent Pass-through Costs and 95 percent Recoverable Costs. These prices are included in Attachment 5.

Prices for all consumers are set in accordance with the DPP Determination 2015, which allows WELL to increase the distribution component of its prices by CPI inflation and the recovery of pass-through and recoverable costs. Further information on the methodology used to calculate WELL’s distribution and Pass-through Prices is set out in WELL’s 2017/18 Pricing Methodology Disclosure document section 7. This document is on WELL’s website - <https://welectricity.co.nz/disclosures/pricing/2018-pricing/>

## **2.5. Price restructures**

WELL confirms that it has not restructured its prices that applied during the Assessment Period that ended on the Assessment Date 31 March 2018.

## **2.6. Transactions involving non-exempt EDBs**

WELL confirms that there have been no transactions resulting in:

- an amalgamation or merger; and
- consumers being supplied by a different EDB.

## **2.7. Transmission assets**

WELL has not received a transfer of transmission assets from Transpower that became System Fixed Assets, or transferred System Fixed Assets to Transpower in the Assessment Period.

## **2.8. New investment contracts**

WELL has not entered into any new investment contracts during the Assessment Period that ended on the Assessment Date 31 March 2018.

### 3. Quality Standards

#### 3.1. Quality standards assessment as at 31 March 2018

This section of the Statement provides information on WELL's compliance with the quality standards under clause 9 of the 2015 DPP Determination for the Assessment Period ended 31 March 2018.

#### 3.2. Assessed Values and Reliability Limits

Clause 9.1 of the 2015 DPP Determination requires WELL to demonstrate that for the Assessment Period it:

- Complies with the annual reliability assessment specified in clause 9.2 of the 2015 DPP Determination; or
- Has complied with the annual reliability assessments in each of the two preceding assessment periods.

Table 6 below shows that for the current Assessment Period despite the best efforts and endeavours WELL has exceeded the reliability limits for SAIDI and SAIFI as outlined in clause 9.2 of the 2015 DPP Determination.

Requirement	Assessment	Limit	Assessment/Limit	Variance	Result
SAIDI	52.856	40.63	1.301	12.226	>1
SAIFI	0.676	0.625	1.082	0.051	>1

**Table 6: WELL's reliability performance for the current Assessment Period**

Further detailed calculations in relation to the assessment in Table 6 are provided in Attachment 8 of this Statement.

WELL has not complied with the annual reliability assessments in the current and preceding assessment periods as outlined in clause 9.1(b) of the 2015 DPP Determination.

WELL is committed to providing customers with a reliable and secure electricity supply and has consistently demonstrated this commitment by undertaking reliability improvement initiatives to further progress the performance of the network. The primary drivers for performance in 2017/18 have been an increase in the contribution from planned outages, vehicle contacts, and 11kV cable faults. The performance of the overhead network has been better than average. This reflects the benefits from the actions implemented following the Strata review of 2015/16 as well as the plans put into place after last year's exceedance of targets which was driven by the overhead network.

The increase in SAIDI from planned outages in 2017/18 is being driven by the amount of planned work being completed with power off, due to the changes in the HSW Act 2015. WELL's view is that the reliability limits should be adjusted, as detailed in the Asset Management Plan 2018, to reflect the changes from the review of safe work practices and the material increase in planned outages that has resulted. The total SAIDI for planned outages for 2017/18 was 7.4 minutes compared to the 2004 to 2014 reference period which averaged 0.5 minutes.

Third party incidents contributed 22% or 10.659 minutes of the total SAIDI incurred in 2017/18. This is a significant increase compared to the average previous contributions of 3.81 minutes and the allowance in the target based on the reference period of 4.8 minutes. This has significantly increased

from the previous years. The primary contributor to third party incidents was car versus pole events. This increase in car versus pole events is following a similar trend to the National Road Toll which has also increased over the same time. The exact cause for these trends is unknown at this stage.

Underground equipment faults have shown an increase in 2017/18. The ultimate cause of the increase in cable faults cannot be proven at this stage, however it is possibly due to delayed damage caused by the November 2016 earthquake, progressing to failure during the wet winter. The earthquake may have caused damage to lead sheaths on PILC cables which would have resulted in moisture ingress during the excessively wet 2017 winter period ultimately leading to failures. A cable test condition monitoring programme is underway to address the increase in 11 kV cable faults and has been developed by focussing on high risk cable sections. The risk posed by a cable section is determined by asset health and criticality matrices.

A separate explanation paper will be prepared and supplied to the Commerce Commission under separate cover and in confidence to provide further analysis and steps being taken to return quality targets to expected levels.

WELL continues to provide up-to-date customer information on outage events and their restoration times through its website relating to the live reporting on restoration times when power outages occur. This has been enhanced by WELL's Smart Phone outage application (OutageCheck) that gives customers up to date progress reports on restoration and return to supply. The application has resulted in positive feedback from customers and a reduction in calls to the contact centre. Further work is planned for 2018 where enhancements to this outage application are expected to further improve its usability.

WELL also surveys those customers who have recently had an outage 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.

### **3.3. Policies and procedures used for recording SAIDI and SAIFI statistics**

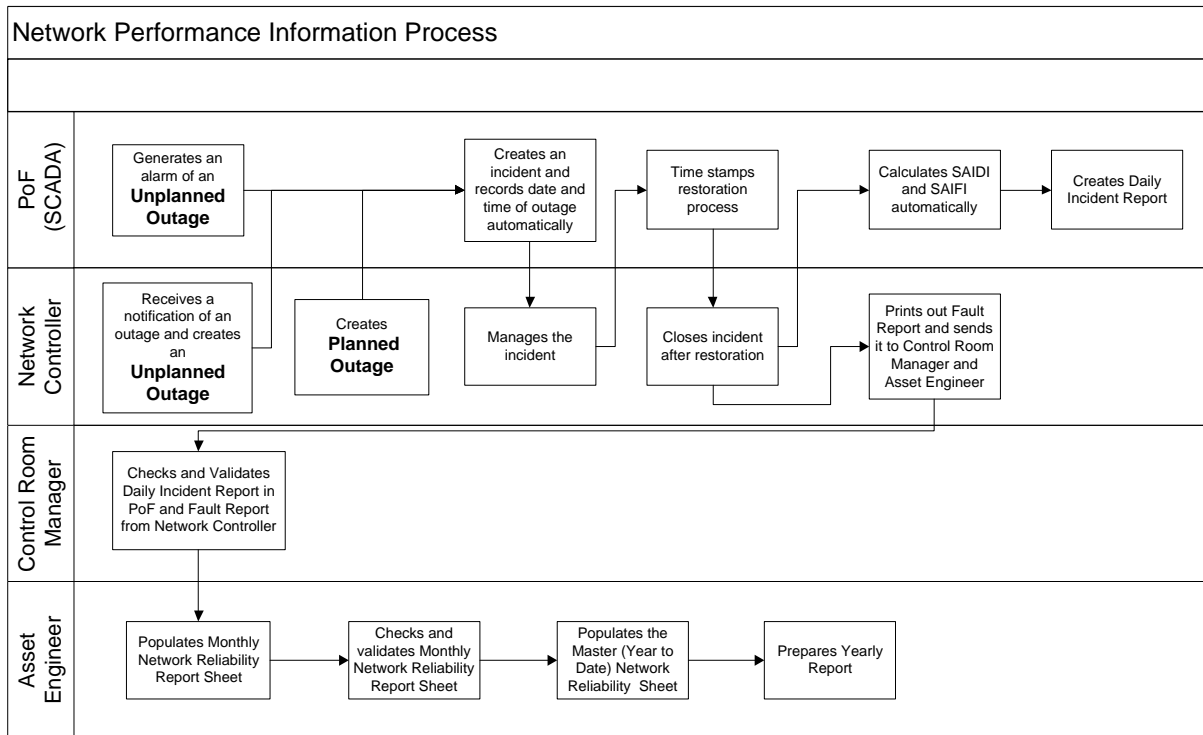
Clause 11.5(e) of the 2015 DPP Determination requires WELL to describe the policies and procedures which it has used to record the SAIDI and SAIFI statistics for the Assessment Period.

WELL submits that the primary control system used to record the SAIDI and SAIFI statistics for the Assessment Period is the Power On Fusion (PoF) SCADA system (the **system**). The system provides information about major devices operating on the network (e.g. circuit breaker status) and can normally be remotely controlled (e.g. open or close the circuit breaker). In addition, other devices on the network including fuses, manual switches and some circuit breakers are represented in the system. Although these devices are operated in the field manually, their status (e.g. open or closed) is updated in the system by the network controller at the time of manual field operation. In particular, the system records:

- All planned and unplanned outages of 11 kV and greater; and
- All unplanned outages less than one minute in duration (including successful auto-reclose events), however, the SAIDI and SAIFI details are not counted.

The system includes a database that stores the outage information, as well as being a live system. The recording of outage information undergoes a process of manual validation by the Control Room Manager and the Asset Engineer to ensure the correctness of the data before being entered in the Reliability Report Sheet.

The current procedure that is followed to capture network performance information for planned and unplanned outages is shown in Figure 1 below and described in section 3.3.1:



**Figure 1: Summary of process for capturing network outage information**

### 3.4. Process for outage data capture

For unplanned outages, the initial indication is provided by the system and the fault is time stamped, along with subsequent switching operations. Where the outage relates to a non-system indicating device, such as a drop-out fuse, the outage is recorded from the time the faultman confirms on site that it is an HV fault, then subsequent switching operations are manually recorded and time stamped in the system. Where the fault is notified by a customer reporting no power, and is then subsequently found to be an HV fault, the start time is taken from the time of the first phone call notification. In some cases, there is no means to confirm the time the fault actually occurred until it is notified to WELL or discovered in the field.

The system automatically creates an incident when a telemetered device is opened due to a fault. The fault is automatically recorded by the system to keep details of the switching procedure which includes the time of switching operations. The total number of customers is included in the system's database and the system calculates the SAIDI and SAIFI statistics automatically.

After an outage is resolved, an outage report is generated by the system with the notes of the Network Controllers on duty. The information is then validated for the following:

- Date outage started and ended;
- Time outage started and ended;
- Duration of outage;
- Number of customers impacted;
- Total customers minutes lost (based on switching operations);
- Total customer number (on network);
- SAIDI for outage;
- SAIFI for outage;
- Fault type; and
- Fault cause.

The data in the system is reviewed for accuracy, particularly for non-system controlled devices where the incident is generated by the Network Controller. There may be a short time delay between the action in the field occurring, and the time the system is updated (e.g. field device manually operated at 3.10pm, system updated at 3.12pm, but with an action entered timestamp of 3.10pm which was recorded in the manual switching log). Accuracy of this data is confirmed by the system timestamp.

The Control Room Manager confirms this by reviewing the system reports (generated automatically) with the fault report kept by the Network Controller to ensure the times are correctly recorded in the system, and where necessary make corrections.

Once confirmed as accurate, the Asset Engineer compiles the final system individual event reports into a Monthly Network Reliability Report which is used for the monthly reporting of SAIDI and SAIFI indices. The Asset Engineer enters the data into a Master (Year to Date) Reliability Spreadsheet and is used for the reporting of yearly performance.

For planned outages, 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. Some planned works appear as outages, however due to LV back feeds or the use of generators there is no loss of supply. Planned events are validated by the Control Room Manager and Network Controllers who refer to the job specific documents, to determine whether the outage is entered in the monthly reliability report sheet as an outage.

The records of planned and unplanned events occur automatically in the system. All data is provided directly from the system.

### **3.5. Major event days**

WELL confirms that there were 6 Major Event Days (MED) occurred during the Assessment Period, one day where both SAIDI and SAIFI were exceeded (i.e. two MED) and four days where only one measure was exceeded.

## **INDEPENDENT ASSURANCE REPORT TO THE DIRECTORS OF WELLINGTON ELECTRICITY LINES LIMITED AND THE COMMERCE COMMISSION**

### **Report on Wellington Electricity Lines Limited's Annual Compliance Statement**

We have conducted a reasonable assurance on Wellington Electricity Lines Limited's ('the Company') compliance with the Electricity Distribution Services Default Price-Quality Path Determination 2015 ('the Determination') in relation to the preparation of Sections 1, 2, and 3 and the related attachments 3 to 10 of the Company's Annual Compliance Statement ('the Annual Compliance Statement') for the period 1 April 2017 to 31 March 2018.

In our opinion, the Company has complied, in all material respects, with the Determination in relation to the Company's preparation of the Annual Compliance Statement for the period 1 April 2017 to 31 March 2018.

### **Basis for Opinion**

We conducted our engagement in accordance with Standard on Assurance Engagements 3100 (Revised): *Compliance Engagements* ('SAE 3100 (Revised)') issued by the New Zealand Auditing and Assurance Standards Board.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion.

### **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 preparation of the Annual Compliance Statement in accordance with the Determination.

### **Our Independence and Quality Control**

We have complied with the independence and other ethical requirements of the Professional and Ethical Standard 1 (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, taxation services and a temporary secondment to the Company to provide mechanical modelling services, we have no relationship with or interests in the Company. These services have not impaired our independence as auditor of the Company.

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 relation to the preparation of the Annual Compliance Statement. 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 relation to the preparation of the Annual Compliance Statement.

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

Our procedures include:

- Examining, on a test basis, evidence relevant to the amounts and disclosures contained on pages 5 to 13 and 18 to 27 of the Annual Compliance Statement in relation to the Price Path Compliance Information and Quality Path Compliance Information set out in Clauses 8 and 9 of the Determination respectively;
- Assessing significant estimates and judgements, if any, made by the Company in the preparation of the Annual Compliance Statement; and
- Assessing whether the basis of preparation of the Annual Compliance Statement has been adequately disclosed.

These procedures have been undertaken to form an opinion as to whether the Company has complied, in all material respects, with the Determination in relation to the preparation of the Annual Compliance Statement for the period 1 April 2017 to 31 March 2018.

## **Our Qualifications**

We are qualified as an auditor as defined in the Determination.

## **Inherent Limitations**

Because of the inherent limitations of an assurance engagement, together with the inherent limitations of any systems of internal control, there is unavoidable risk that fraud, error or non-compliance by the Company with the Determination in relation to the preparation of the Annual Compliance Statement may occur and not be detected, even though the engagement is properly planned and performed in accordance with SAE 3100 (Revised).

## **Use of Report**

This report is provided solely for your exclusive use and solely for the purpose of Schedule 7 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  
8 June 2018

**Attachment 2: Director’s certificate**

**We, Richard Pearson and Andrew Hunter, being directors of Wellington Electricity Lines Limited certify that, having made all reasonable enquiry, to the best of our 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 2015 are true and accurate.**



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Director *RICHARD PEARSON*

8 June 2018

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Director

8 June 2018

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 \$10,000 in the case of an individual or \$30,000 in the case of a body corporate.



## Attachment 2: Director's certificate (Cont'd)

### Form of Director's Certificate

We, Richard Pearson and Andrew Hunter, being directors of Wellington Electricity Lines Limited certify that, having made all reasonable enquiry, to the best of our 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 2015 are true and accurate.



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Director

8 June 2018

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Director

8 June 2018

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 \$10,000 in the case of an individual or \$30,000 in the case of a body corporate.

## Attachment 3: Summary Notional Revenue

- For each price element the base quantity (number of end consumers or annual energy of all consumers) was retrieved from the appropriate information systems for the year ended 31 March 2016.
- Prices applicable for the Assessment Period have been taken from WELL's published price schedules.
- Base quantities were multiplied by the price applicable to determine the Notional Revenue for the Assessment Period.

Pricing schedule	Units	Current code	Previous Code	Base Quantity (2015/16)	Distribution price 2017/18	Notional Revenue 2017/18
<b>Residential</b>						
Low user daily	\$/con/day	RLU-FIXD	G100-FIXD	7,393,186	0.1500	4,988,049
			G101-FIXD	2,062,390		
			G102-FIXD	23,704,808		
			G103-FIXD	93,277		
			G108-FIXD	-		
			Total	33,253,660		
Low user uncontrolled	\$/kWh	RLU-24UC	G100-24UC	101,321,746	0.0468	5,838,205
			G101-24UC	21,865,469		
			G103-24UC	1,560,761		
			G108-24UC	-		
			Total	124,747,976		
Low user all inclusive	\$/kWh	RLU-AICO	G102-AICO	343,321,748	0.0367	12,599,908
Low user controlled	\$/kWh	RLU-CTRL	G101-CTRL	10,454,907	0.0219	228,962
			G108-CTRL	-		
			Total	10,454,907		
Low user night boost	\$/kWh	RLU-NITE	G100-NITE	948,363	0.0080	36,707
			G101-NITE	557,935		
			G102-NITE	3,082,046		
			Total	4,588,344		
Low user electric vehicle night only	\$/kWh	RLU-EV/NITE	G108-NITE	-	0.0080	-
Low user electric vehicle demand	\$/kWh/month	RLU-EV/DMND	-	-	-	-
Standard user daily	\$/con/day	RSU-FIXD	G104-FIXD	4,306,909	1.1000	23,262,182
			G105-FIXD	2,112,318		
			G106-FIXD	14,543,265		
			G107-FIXD	184,947		
			G109-FIXD	-		
			Total	21,147,438		
Standard user uncontrolled	\$/kWh	RSU-24UC	G104-24UC	107,123,548	0.0316	4,865,235
			G105-24UC	40,041,185		
			G107-24UC	6,798,392		
			G109-24UC	-		
			Total	153,963,125		
Standard user all inclusive	\$/kWh	RSU-AICO	G106-AICO	400,636,410	0.0228	9,134,510
Standard user controlled	\$/kWh	RSU-CTRL	G105-CTRL	16,264,847	0.0107	174,034
			G109-CTRL	-		
			Total	16,264,847		
Standard user night boost	\$/kWh	RSU-NITE	G104-NITE	1,424,718	0.0071	53,379
			G105-NITE	894,184		
			G106-NITE	5,199,215		
			Total	7,518,118		
Standard user electric vehicle night only	\$/kWh	RSU-EV/NITE	G109-NITE	-	0.0071	-
Standard user electric vehicle demand	\$/kWh/month	RSU-EV/DMND	-	-	-	-
<b>General low voltage connection</b>						
General low voltage <=15kVA daily	\$/con/day	GLV15-FIXD	GV02-FIXD	1,818,300	0.6268	1,139,711
General low voltage <=15kVA uncontrolled	\$/kWh	GLV15-24UC	GV02-24UC	44,147,834	0.0207	913,860
General low voltage >15kVA and <=69kVA daily	\$/con/day	GLV69-FIXD	GV07-FIXD	3,571,619	1.5504	5,537,439
General low voltage >15kVA and <=69kVA uncontrolled	\$/kWh	GLV69-24UC	GV07-24UC	318,805,771	0.0143	4,558,923
General low voltage >69kVA and <=138kVA daily	\$/con/day	GLV138-FIXD	GV14-FIXD	145,600	8.7851	1,279,108
General low voltage >69kVA and <=138kVA uncontrolled	\$/kWh	GLV138-24UC	GV14-24UC	54,463,764	0.0170	925,884
General low voltage >138kVA and <=300kVA daily	\$/con/day	GLV300-FIXD	GV30-FIXD	110,018	12.5144	1,376,814
General low voltage >138kVA and <=300kVA uncontrolled	\$/kWh	GLV300-24UC	GV30-24UC	86,919,564	0.0070	608,437
General low voltage >300kVA and <=1500kVA daily	\$/con/day	GLV1500-FIXD	GV99-FIXD	91,790	31.5561	2,896,546
General low voltage >300kVA and <=1500kVA uncontrolled	\$/kWh	GLV1500-24UC	GV99-24UC	163,032,326	0.0031	505,400
General low voltage >300kVA and <=1500kVA demand	\$/kVA/month	GLV1500-DAMD	GV99-DAMD	513,472	2.7627	1,418,568
<b>General transformer connection</b>						
General transformer <=15kVA daily	\$/con/day	GTX15-FIXD	GX02-FIXD	173,688	0.5690	98,828
General transformer <=15kVA uncontrolled	\$/kWh	GTX15-24UC	GX02-24UC	-	0.0201	-
General transformer >15kVA and <=69kVA daily	\$/con/day	GTX69-FIXD	GX07-FIXD	5,983	1.4069	8,417
General transformer >15kVA and <=69kVA uncontrolled	\$/kWh	GTX69-24UC	GX07-24UC	542,200	0.0140	7,591
General transformer >69kVA and <=138kVA daily	\$/con/day	GTX138-FIXD	GX14-FIXD	5,688	7.9715	45,343
General transformer >69kVA and <=138kVA uncontrolled	\$/kWh	GTX138-24UC	GX14-24UC	2,264,254	0.0166	37,587
General transformer >138kVA and <=300kVA daily	\$/con/day	GTX300-FIXD	GX30-FIXD	31,988	11.3555	363,013
General transformer >138kVA and <=300kVA uncontrolled	\$/kWh	GTX300-24UC	GX30-24UC	47,534,104	0.0069	327,985
General transformer >300kVA and <=1500kVA daily	\$/con/day	GTX1500-FIXD	GX99-FIXD	86,165	24.5009	2,111,118
General transformer >300kVA and <=1500kVA uncontrolled	\$/kWh	GTX1500-24UC	GX99-24UC	341,678,515	0.0026	888,364
General transformer >300kVA and <=1500kVA capacity	\$/kVA/day	GTX1500-CAPY	GX99-CAPY	65,283,987	0.0063	411,289
General transformer >300kVA and <=1500kVA demand	\$/kVA/month	GTX1500-DAMD	GX99-DAMD	939,129	2.4243	2,276,730
General transformer >1500kVA connection daily	\$/con/day	GTX1501-FIXD	GC60-FIXD	6,522	0.0545	758
			GU60-FIXD	6,658		
			GR60-FIXD	732		
			Total	13,912		
General transformer >1500kVA connection uncontrolled	\$/kWh	GTX1501-24UC	GC60-24UC	82,317,842	0.0006	105,416
			GU60-24UC	92,367,819		
			GR60-24UC	1,007,767		
			Total	175,693,428		
General transformer >1500kVA connection capacity	\$/kVA/day	GTX1501-CAPY	GC60-CAPY	16,774,050	0.0119	396,650
			GU60-CAPY	15,129,907		
			GR60-CAPY	1,427,956		
			Total	33,331,912		
General transformer >1500kVA connection on-peak demand	\$/kWh/month	GTX1501-DOPC	GC60-DOPC	213,488	4.8536	2,081,019
			GU60-DOPC	208,581		
			GR60-DOPC	6,689		
			Total	428,758		
General transformer >1500kVA connection power factor	\$/kVA/month	GTX1501-PWRF	GC60-PWRF	17,501	3.5047	104,335
			GU60-PWRF	12,047		
			GR60-PWRF	222		
			Total	29,770		
<b>Unmetered</b>						
Non-street lighting daily	\$/fitting/day	G001-FIXD	G001-FIXD	1,242	0.0432	54
Non-street lighting uncontrolled	\$/kWh	G001-24UC	G001-24UC	3,825,870	0.0549	210,040
Street lighting daily	\$/fitting/day	G002-FIXD	G002-FIXD	16,910,833	0.1246	2,107,090
Street lighting uncontrolled	\$/kWh	G002-24UC	G002-24UC	20,930,733	-	-
<b>Distributed generation</b>						
Small scale distributed generation	\$/kWh	DGEN	-	-	-	-
<b>Standard Charges Total (\$)</b>						<b>93,923,486</b>
<b>Non Standard Charges Total (\$)</b>						<b>1,748,192</b>
<b>Notional Revenue Total (\$)</b>						<b>95,671,678</b>

## Attachment 4: Summary Allowable Notional Revenue

Pricing schedule	Units	Current code	Previous Code	Base Quantity (2015/16)	Distribution price 2016/17	Allowable Notional Revenue 2017/18
<b>Residential</b>						
Low user daily	\$/con/day	RLU-FIXD	G100-FIXD	7,393,186	0.1500	1,108,978
			G101-FIXD	2,062,390	0.1500	309,358
			G102-FIXD	23,704,808	0.1500	3,555,721
			G103-FIXD	93,277	0.1500	13,991
			G108-FIXD	-	0.1500	-
Low user uncontrolled	\$/kWh	RLU-24UC	G100-24UC	101,321,746	0.0464	4,701,329
			G101-24UC	21,865,469	0.0464	1,014,558
			G103-24UC	1,560,761	0.0464	72,419
			G108-24UC	-	0.0464	-
Low user all inclusive	\$/kWh	RLU-AICO	G102-AICO	343,321,748	0.0364	12,496,912
Low user controlled	\$/kWh	RLU-CTRL	G101-CTRL	10,454,907	0.0217	226,871
			G108-CTRL	-	0.0217	-
Low user night boost	\$/kWh	RLU-NITE	G100-NITE	948,363	0.0079	7,492
			G101-NITE	557,935	0.0079	4,408
			G102-NITE	3,082,046	0.0079	24,348
Low user electric vehicle night only	\$/kWh	RLU-EV/NITE	G108-NITE	-	0.0079	-
Low user electric vehicle demand	\$/kWh/month	RLU-EV/DMND	-	-	-	-
Standard user daily	\$/con/day	RSU-FIXD	G104-FIXD	4,306,909	1.1000	4,737,600
			G105-FIXD	2,112,318	1.1000	2,323,549
			G106-FIXD	14,543,265	1.1000	15,997,591
			G107-FIXD	184,947	1.1000	203,442
			G109-FIXD	-	1.1000	-
Standard user uncontrolled	\$/kWh	RSU-24UC	G104-24UC	107,123,548	0.0313	3,352,967
			G105-24UC	40,041,185	0.0313	1,253,289
			G107-24UC	6,798,392	0.0313	212,790
			G109-24UC	-	0.0313	-
Standard user all inclusive	\$/kWh	RSU-AICO	G106-AICO	400,636,410	0.0226	9,054,383
Standard user controlled	\$/kWh	RSU-CTRL	G105-CTRL	16,264,847	0.0106	172,407
			G109-CTRL	-	0.0106	-
Standard user night boost	\$/kWh	RSU-NITE	G104-NITE	1,424,718	0.0070	9,973
			G105-NITE	894,184	0.0070	6,259
			G106-NITE	5,199,215	0.0070	36,395
Standard user electric vehicle night only	\$/kWh	RSU-EV/NITE	G109-NITE	-	0.0070	-
Standard user electric vehicle demand	\$/kWh/month	RSU-EV/DMND	-	-	-	-
<b>General low voltage connection</b>						
General low voltage <=15kVA daily	\$/con/day	GLV15-FIXD	GV02-FIXD	1,818,300	0.6268	1,139,711
General low voltage <=15kVA uncontrolled	\$/kWh	GLV15-24UC	GV02-24UC	44,147,834	0.0205	905,031
General low voltage >15kVA and <=69kVA daily	\$/con/day	GLV69-FIXD	GV07-FIXD	3,571,619	1.5504	5,537,439
General low voltage >15kVA and <=69kVA uncontrolled	\$/kWh	GLV69-24UC	GV07-24UC	318,805,771	0.0142	4,527,042
General low voltage >69kVA and <=138kVA daily	\$/con/day	GLV138-FIXD	GV14-FIXD	145,600	8.7851	1,279,108
General low voltage >69kVA and <=138kVA uncontrolled	\$/kWh	GLV138-24UC	GV14-24UC	54,463,764	0.0168	914,991
General low voltage >138kVA and <=300kVA daily	\$/con/day	GLV300-FIXD	GV30-FIXD	110,018	12.5144	1,376,814
General low voltage >138kVA and <=300kVA uncontrolled	\$/kWh	GLV300-24UC	GV30-24UC	86,919,564	0.0069	599,745
General low voltage >300kVA and <=1500kVA daily	\$/con/day	GLV1500-FIXD	GV99-FIXD	91,790	31.5561	2,896,546
General low voltage >300kVA and <=1500kVA uncontrolled	\$/kWh	GLV1500-24UC	GV99-24UC	163,032,326	0.0031	505,400
General low voltage >300kVA and <=1500kVA demand	\$/kVA/month	GLV1500-DAMD	GV99-DAMD	513,472	2.7627	1,418,568
<b>General transformer connection</b>						
General transformer <=15kVA daily	\$/con/day	GTX15-FIXD	GX02-FIXD	173,688	0.5690	98,828
General transformer <=15kVA uncontrolled	\$/kWh	GTX15-24UC	GX02-24UC	-	0.0199	-
General transformer >15kVA and <=69kVA daily	\$/con/day	GTX69-FIXD	GX07-FIXD	5,983	1.4069	8,417
General transformer >15kVA and <=69kVA uncontrolled	\$/kWh	GTX69-24UC	GX07-24UC	542,200	0.0139	7,537
General transformer >69kVA and <=138kVA daily	\$/con/day	GTX138-FIXD	GX14-FIXD	5,688	7.9715	45,343
General transformer >69kVA and <=138kVA uncontrolled	\$/kWh	GTX138-24UC	GX14-24UC	2,264,254	0.0164	37,134
General transformer >138kVA and <=300kVA daily	\$/con/day	GTX300-FIXD	GX30-FIXD	31,968	11.3555	363,013
General transformer >138kVA and <=300kVA uncontrolled	\$/kWh	GTX300-24UC	GX30-24UC	47,534,104	0.0068	323,232
General transformer >300kVA and <=1500kVA daily	\$/con/day	GTX1500-FIXD	GX99-FIXD	86,165	24.5009	2,111,118
General transformer >300kVA and <=1500kVA uncontrolled	\$/kWh	GTX1500-24UC	GX99-24UC	341,678,515	0.0026	888,364
General transformer >300kVA and <=1500kVA capacity	\$/kVA/day	GTX1500-CAPY	GX99-CAPY	65,283,987	0.0063	411,289
General transformer >300kVA and <=1500kVA demand	\$/kVA/month	GTX1500-DAMD	GX99-DAMD	939,129	2.4243	2,276,730
General transformer >1500kVA connection daily	\$/con/day	GTX1501-FIXD	GC60-FIXD	6,522	0.0545	355
			GU60-FIXD	6,658	0.0545	363
			GR60-FIXD	732	0.0545	40
General transformer >1500kVA connection uncontrolled	\$/kWh	GTX1501-24UC	GC60-24UC	82,317,842	0.0006	49,391
			GU60-24UC	92,367,819	0.0006	55,421
			GR60-24UC	1,007,767	0.0006	605
General transformer >1500kVA connection capacity	\$/kVA/day	GTX1501-CAPY	GC60-CAPY	16,774,050	0.0119	199,611
			GU60-CAPY	15,129,907	0.0119	180,046
			GR60-CAPY	1,427,956	0.0119	16,993
General transformer >1500kVA connection on-peak demand	\$/kWh/month	GTX1501-DOPC	GC60-DOPC	213,488	4.8536	1,036,183
			GU60-DOPC	208,581	4.8536	1,012,368
			GR60-DOPC	6,689	4.8536	32,467
General transformer >1500kVA connection power factor	\$/kVA/month	GTX1501-PWRF	GC60-PWRF	17,501	3.5047	61,335
			GU60-PWRF	12,047	3.5047	42,220
			GR60-PWRF	222	3.5047	780
<b>Unmetered</b>						
Non-street lighting daily	\$/fitting/day	G001-FIXD	G001-FIXD	1,242	0.0432	54
Non-street lighting uncontrolled	\$/kWh	G001-24UC	G001-24UC	3,825,870	0.0544	208,127
Street lighting daily	\$/fitting/day	G002-FIXD	G002-FIXD	16,910,833	0.1162	1,965,039
Street lighting uncontrolled	\$/kWh	G002-24UC	G002-24UC	20,930,733	-	-
<b>Distributed generation</b>						
Small scale distributed generation	\$/kWh	DGEN				-
<b>Standard Charges Total (\$)</b>						<b>93,429,827</b>
<b>Non Standard Charges Total (\$)</b>						<b>1,742,379</b>
<b>Notional Revenue Total (\$)</b>						<b>95,172,206</b>

## Attachment 5: Wellington Line Charges Effective 1 April 2017

				effective 1 April 2017		
Code	Description	Units	Estimated number of consumers as at 31 January 2017	Distribution price	Transmission and pass through Price <sup>6</sup>	Delivery Price
<b>Residential</b>						
RLU-FIXD	Low user daily	\$/con/day	89,686	0.1500	0.0000	0.1500
RLU-24UC	Low user uncontrolled	\$/kWh		0.0468	0.0690	0.1158
RLU-AICO	Low user all inclusive	\$/kWh		0.0367	0.0562	0.0929
RLU-CTRL	Low user controlled	\$/kWh		0.0219	0.0339	0.0558
RLU-NITE	Low user night boost	\$/kWh		0.0080	0.0109	0.0189
RLU-EVNITE	Low user electric vehicle night only <sup>1</sup>	\$/kWh		0.0080	0.0109	0.0189
RLU-EVDMND	Low user electric vehicle demand <sup>2</sup>	\$/kW/month		0.0000	0.0000	0.0000
RSU-FIXD	Standard user daily	\$/con/day	59,808	1.1000	0.0000	1.1000
RSU-24UC	Standard user uncontrolled	\$/kWh		0.0316	0.0409	0.0725
RSU-AICO	Standard user all inclusive	\$/kWh		0.0228	0.0271	0.0499
RSU-CTRL	Standard user controlled	\$/kWh		0.0107	0.0115	0.0222
RSU-NITE	Standard user night boost	\$/kWh		0.0071	0.0102	0.0173
RSU-EVNITE	Standard user electric vehicle night only <sup>1</sup>	\$/kWh		0.0071	0.0102	0.0173
RSU-EVDMND	Standard user electric vehicle demand <sup>2</sup>	\$/kW/month		0.0000	0.0000	0.0000
<b>General low voltage connection</b>						
GLV15-FIXD	General low voltage <=15kVA daily	\$/con/day	5,032	0.6268	0.0000	0.6268
GLV15-24UC	General low voltage <=15kVA uncontrolled	\$/kWh		0.0207	0.0360	0.0567
GLV69-FIXD	General low voltage >15kVA and <=69kVA daily	\$/con/day	10,013	1.5504	0.0000	1.5504
GLV69-24UC	General low voltage >15kVA and <=69kVA uncontrolled	\$/kWh		0.0143	0.0250	0.0393
GLV138-FIXD	General low voltage >69kVA and <=138kVA daily	\$/con/day	385	8.7851	0.0000	8.7851
GLV138-24UC	General low voltage >69kVA and <=138kVA uncontrolled	\$/kWh		0.0170	0.0295	0.0465
GLV300-FIXD	General low voltage >138kVA and <=300kVA daily	\$/con/day	320	12.5144	0.0000	12.5144
GLV300-24UC	General low voltage >138kVA and <=300kVA uncontrolled	\$/kWh		0.0070	0.0123	0.0193
GLV1500-FIXD	General low voltage >300kVA and <=1500kVA daily	\$/con/day	240	31.5561	0.0000	31.5561
GLV1500-24UC	General low voltage >300kVA and <=1500kVA uncontrolled	\$/kWh		0.0031	0.0055	0.0086
GLV1500-DAVD	General low voltage >300kVA and <=1500kVA demand	\$/kVA/month		2.7627	4.8915	7.6542
<b>General transformer connection</b>						
GTX15-FIXD	General transformer <=15kVA daily	\$/con/day	1	0.5690	0.0000	0.5690
GTX15-24UC	General transformer <=15kVA uncontrolled	\$/kWh		0.0201	0.0328	0.0529
GTX69-FIXD	General transformer >15kVA and <=69kVA daily	\$/con/day	16	1.4069	0.0000	1.4069
GTX69-24UC	General transformer >15kVA and <=69kVA uncontrolled	\$/kWh		0.0140	0.0229	0.0369
GTX138-FIXD	General transformer >69kVA and <=138kVA daily	\$/con/day	17	7.9715	0.0000	7.9715
GTX138-24UC	General transformer >69kVA and <=138kVA uncontrolled	\$/kWh		0.0166	0.0269	0.0435
GTX300-FIXD	General transformer >138kVA and <=300kVA daily	\$/con/day	89	11.3555	0.0000	11.3555
GTX300-24UC	General transformer >138kVA and <=300kVA uncontrolled	\$/kWh		0.0069	0.0111	0.0180
GTX1500-FIXD	General transformer >300kVA and <=1500kVA daily	\$/con/day	188	24.5009	0.0000	24.5009
GTX1500-24UC	General transformer >300kVA and <=1500kVA uncontrolled	\$/kWh		0.0026	0.0044	0.0070
GTX1500-CAPY	General transformer >300kVA and <=1500kVA capacity	\$/kVA/day		0.0063	0.0104	0.0167
GTX1500-DAVD	General transformer >300kVA and <=1500kVA demand	\$/kVA/month		2.4243	4.0093	6.4336
GTX1501-FIXD	General transformer >1500kVA connection daily	\$/con/day	34	0.0545	0.0000	0.0545
GTX1501-24UC	General transformer >1500kVA connection uncontrolled	\$/kWh		0.0006	0.0009	0.0015
GTX1501-CAPY	General transformer >1500kVA connection capacity	\$/kVA/day		0.0119	0.0177	0.0296
GTX1501-DOPC	General transformer >1500kVA connection on-peak demand <sup>3</sup>	\$/kW/month		4.8536	7.2683	12.1219
GTX1501-PWRF	General transformer, >1500kVA connection, power factor <sup>4</sup>	\$/kVAr/month		3.5047	5.2483	8.7530
<b>Unmetered</b>						
G001-FIXD	Non-street lighting daily	\$/fitting/day	278	0.0432	0.0000	0.0432
G001-24UC	Non-street lighting uncontrolled	\$/kWh		0.0549	0.0854	0.1403
G002-FIXD	Street lighting daily	\$/fitting/day	336	0.1246	0.0938	0.2184
G002-24UC	Street lighting uncontrolled	\$/kWh		0.0000	0.0000	0.0000
<b>Distributed generation</b>						
*DGEN	Small scale distributed generation <sup>5</sup>	\$/kWh	n/a	0.0000	0.0000	0.0000

**Notes:**

- EV night rate applies from 9 p.m. to 7 a.m.
- Electric vehicle demand is measured between 5 p.m. and 9 p.m. during weekdays including public holidays.
- Charge is applicable to demand measured from 7.30 a.m. to 9.30 a.m. and 5.30 p.m. to 7.30 p.m. on weekdays including public holidays.
- Charge is applicable for power factor <0.95 from 7 a.m. to 8 p.m. on weekdays where the kVAr charge amount represents twice the largest difference between the recorded kVAr and one third of the recorded kWh in any one half-hour period.
- WE\* has various codes for small scale distributed generation volumes, being RLU-DGEN, RSU-DGEN, GLV15-DGEN, GLV69-DGEN, GLV138-DGEN, GLV300-DGEN, GLV1500-DGEN, GTX15-DGEN, GTX69-DGEN, GTX138-DGEN, GTX300-DGEN, GTX1500-DGEN and GTX1501-DGEN.
- Transmission charges makes up 91% of the Transmission and Other pass through Price. Other pass through charges recovered include costs such as Commerce Act Levies, Electricity Authority Levies, Council rates and other recoverable costs.

## Attachment 6: Summary Pass-through Revenue

- For each price element the base quantity (number of end consumers or annual energy of all consumers) was retrieved from the appropriate information systems for the year ended 31 March 2018.
- Prices applicable for the Assessment Period have been taken from WELL's published price schedules.
- Base quantities were multiplied by the price applicable to determine the Pass-through Revenue for the Assessment Period.

Pricing schedule	Units	Current code	Previous Code	Base Quantity (2017/18)	Pass through price 2017/18	Pass through revenue 2017/18
<b>Residential</b>						
Low user daily	\$/con/day	RLU-FIXD	G100-FIXD	33,259,614	-	-
Low user uncontrolled	\$/kWh	RLU-24UC	G100-24UC	264,407,545	0.0690	18,244,121
Low user all inclusive	\$/kWh	RLU-AICO	G102-AICO	199,272,963	0.0562	11,199,141
Low user controlled	\$/kWh	RLU-CTRL	G101-CTRL	21,021,091	0.0339	712,615
Low user night boost	\$/kWh	RLU-NITE	G100-NITE	2,724,299	0.0109	29,695
Low user electric vehicle night only	\$/kWh	RLU-EVNITE	G108-NITE	97,463	0.0109	1,062
Low user electric vehicle demand	\$/kW/month	RLU-EVDMND		-	-	-
Standard user daily	\$/con/day	RSU-FIXD	G104-FIXD	21,404,972	-	-
Standard user uncontrolled	\$/kWh	RSU-24UC	G104-24UC	292,733,548	0.0409	11,972,802
Standard user all inclusive	\$/kWh	RSU-AICO	G106-AICO	249,790,340	0.0271	6,769,318
Standard user controlled	\$/kWh	RSU-CTRL	G105-CTRL	30,621,152	0.0115	352,143
Standard user night boost	\$/kWh	RSU-NITE	G104-NITE	5,125,200	0.0102	52,277
Standard user electric vehicle night only	\$/kWh	RSU-EVNITE	G109-NITE	60,885	0.0102	621
Standard user electric vehicle demand	\$/kW/month	RSU-EVDMND		-	-	-
<b>General low voltage connection</b>						
General low voltage <=15kVA daily	\$/con/day	GLV15-FIXD	GV02-FIXD	1,854,357	-	-
General low voltage <=15kVA uncontrolled	\$/kWh	GLV15-24UC	GV02-24UC	45,387,399	0.0360	1,633,946
General low voltage >15kVA and <=69kVA daily	\$/con/day	GLV69-FIXD	GV07-FIXD	3,647,969	-	-
General low voltage >15kVA and <=69kVA uncontrolled	\$/kWh	GLV69-24UC	GV07-24UC	304,634,217	0.0250	7,615,855
General low voltage >69kVA and <=138kVA daily	\$/con/day	GLV138-FIXD	GV14-FIXD	139,641	-	-
General low voltage >69kVA and <=138kVA uncontrolled	\$/kWh	GLV138-24UC	GV14-24UC	49,574,602	0.0295	1,462,451
General low voltage >138kVA and <=300kVA daily	\$/con/day	GLV300-FIXD	GV30-FIXD	125,135	-	-
General low voltage >138kVA and <=300kVA uncontrolled	\$/kWh	GLV300-24UC	GV30-24UC	98,237,614	0.0123	1,208,323
General low voltage >300kVA and <=1500kVA daily	\$/con/day	GLV1500-FIXD	GV99-FIXD	84,338	-	-
General low voltage >300kVA and <=1500kVA uncontrolled	\$/kWh	GLV1500-24UC	GV99-24UC	137,540,069	0.0055	756,470
General low voltage >300kVA and <=1500kVA demand	\$/kV A/month	GLV1500-DAMD	GV99-DAMD	452,577	4.8915	2,213,779
<b>General transformer connection</b>						
General transformer <=15kVA daily	\$/con/day	GTX15-FIXD	GX02-FIXD	571	-	-
General transformer <=15kVA uncontrolled	\$/kWh	GTX15-24UC	GX02-24UC	316	0.0328	10
General transformer >15kVA and <=69kVA daily	\$/con/day	GTX69-FIXD	GX07-FIXD	6,421	-	-
General transformer >15kVA and <=69kVA uncontrolled	\$/kWh	GTX69-24UC	GX07-24UC	562,542	0.0229	12,882
General transformer >69kVA and <=138kVA daily	\$/con/day	GTX138-FIXD	GX14-FIXD	5,844	-	-
General transformer >69kVA and <=138kVA uncontrolled	\$/kWh	GTX138-24UC	GX14-24UC	2,420,451	0.0269	65,110
General transformer >138kVA and <=300kVA daily	\$/con/day	GTX300-FIXD	GX30-FIXD	35,044	-	-
General transformer >138kVA and <=300kVA uncontrolled	\$/kWh	GTX300-24UC	GX30-24UC	47,951,471	0.0111	532,261
General transformer >300kVA and <=1500kVA daily	\$/con/day	GTX1500-FIXD	GX99-FIXD	95,047	-	-
General transformer >300kVA and <=1500kVA uncontrolled	\$/kWh	GTX1500-24UC	GX99-24UC	329,422,687	0.0044	1,449,460
General transformer >300kVA and <=1500kVA capacity	\$/kV A/day	GTX1500-CAPY	GX99-CAPY	77,350,539	0.0104	804,446
General transformer >300kVA and <=1500kVA demand	\$/kV A/month	GTX1500-DAMD	GX99-DAMD	977,188	4.0093	3,917,838
General transformer >1500kVA connection daily	\$/con/day	GTX1501-FIXD	GC60-FIXD	14,257	-	-
General transformer >1500kVA connection uncontrolled	\$/kWh	GTX1501-24UC	GC60-24UC	162,184,653	0.0009	145,966
General transformer >1500kVA connection capacity	\$/kV A/day	GTX1501-CAPY	GC60-CAPY	35,645,424	0.0177	630,924
General transformer >1500kVA connection on-peak demand	\$/kW/month	GTX1501-DOPC	GC60-DOPC	406,123	7.2683	2,951,825
General transformer >1500kVA connection power factor	\$/kV A/month	GTX1501-PWRF	GC60-PWRF	22,233	5.2483	116,685
<b>Unmetered</b>						
Non-street lighting daily	\$/fitting/day	G001-FIXD	G001-FIXD	589,437	-	-
Non-street lighting uncontrolled	\$/kWh	G001-24UC	G001-24UC	2,965,595	0.0854	253,262
Street lighting daily	\$/fitting/day	G002-FIXD	G002-FIXD	15,602,606	0.0938	1,463,524
Street lighting uncontrolled	\$/kWh	G002-24UC	G002-24UC	21,030,400	-	-
<b>Distributed generation</b>						
Small scale distributed generation	\$/kWh	DGEN			-	-
<b>Standard Charges Total (\$)</b>					<b>76,568,814</b>	
<b>Non Standard Charges Total (\$)</b>					<b>820,097</b>	
<b>Notional Revenue Total (\$)</b>					<b>77,388,912</b>	

- Prices and quantities applicable for the preceding Assessment Period are set out below:

Charge Type	2016 Tariff Code	2017 Tariff Code	Base Quantity (2016/17)	Base Q Unit	Pass through price (2016/17)	Pass through revenue (2016/17)
Fixed	G001-FIXD	G001-FIXD	232,139	ICPs	0.0000	-
Variable	G001-24UC	G001-24UC	3,092,266	kWh	0.0859	265,626
Fixed	G002-FIXD	G002-FIXD	15,678,645	ICPs	0.1022	1,602,358
Variable	G002-24UC	G002-24UC	21,388,115	kWh	0.0000	-
Fixed	G100-FIXD	RLU-FIXD	26,927,744	ICPs	0.0000	-
Variable	G100-24UC	RLU-24UC	201,411,825	kWh	0.0694	13,977,981
Variable	G100-NITE	RLU-NITE	4,666,865	kWh	0.0110	51,336
Fixed	G101-FIXD	RLU-FIXD	473,193	ICPs	0.0000	-
Variable	G101-24UC	RLU-24UC	3,043,088	kWh	0.0694	211,190
Variable	G101-CTRL	RLU-CTRL	16,623,736	kWh	0.0341	566,869
Variable	G101-NITE	RLU-NITE	160,290	kWh	0.0110	1,763
Fixed	G102-FIXD	RLU-FIXD	5,233,622	ICPs	0.0000	-
Variable	G102-AICO	RLU-AICO	244,709,834	kWh	0.0565	13,826,106
Variable	G102-NITE	RLU-NITE	911,133	kWh	0.0110	10,022
Fixed	G103-FIXD	RLU-FIXD	22,853	ICPs	0.0000	-
Variable	G103-24UC	RLU-24UC	292,383	kWh	0.0694	20,291
Fixed	G104-FIXD	RSU-FIXD	17,902,713	ICPs	0.0000	-
Variable	G104-24UC	RSU-24UC	230,490,915	kWh	0.0412	9,496,226
Variable	G104-NITE	RSU-NITE	7,171,996	kWh	0.0103	73,872
Fixed	G105-FIXD	RSU-FIXD	490,425	ICPs	0.0000	-
Variable	G105-24UC	RSU-24UC	6,032,638	kWh	0.0412	248,545
Variable	G105-CTRL	RSU-CTRL	26,077,682	kWh	0.0116	302,501
Variable	G105-NITE	RSU-NITE	270,507	kWh	0.0103	2,786
Fixed	G106-FIXD	RSU-FIXD	3,344,232	ICPs	0.0000	-
Variable	G106-AICO	RSU-AICO	291,182,222	kWh	0.0273	7,949,275
Variable	G106-NITE	RSU-NITE	1,478,298	kWh	0.0103	15,226
Fixed	G107-FIXD	RSU-FIXD	42,864	ICPs	0.0000	-
Variable	G107-24UC	RSU-24UC	1,310,202	kWh	0.0412	53,980
Fixed	G108-FIXD	RLU-FIXD	-	ICPs	0.0000	-
Variable	G108-24UC	RLU-24UC	-	kWh	0.0694	-
Variable	G108-CTRL	RLU-CTRL	-	kWh	0.0341	-
Variable	G108-NITE	RLU-NITE	-	kWh	0.0110	-
Fixed	G109-FIXD	RSU-FIXD	-	ICPs	0.0000	-
Variable	G109-24UC	RSU-24UC	-	kWh	0.0412	-
Variable	G109-CTRL	RSU-CTRL	-	kWh	0.0116	-
Variable	G109-NITE	RSU-NITE	-	kWh	0.0103	-
Fixed	GV02-FIXD	GLV15-FIXD	1,837,515	ICPs	0.0000	-
Variable	GV02-24UC	GLV15-24UC	47,411,491	kWh	0.0362	1,716,296
Fixed	GV07-FIXD	GLV69-FIXD	3,767,772	ICPs	0.0000	-
Variable	GV07-24UC	GLV69-24UC	319,105,742	kWh	0.0251	8,009,554
Fixed	GV14-FIXD	GLV138-FIXD	143,283	ICPs	0.0000	-
Variable	GV14-24UC	GLV138-24UC	54,838,236	kWh	0.0297	1,628,696
Fixed	GV30-FIXD	GLV300-FIXD	117,093	ICPs	0.0000	-
Variable	GV30-24UC	GLV300-24UC	92,575,039	kWh	0.0124	1,147,930
Fixed	GV99-FIXD	GLV1500-FIXD	88,751	ICPs	0.0000	-
Variable	GV99-24UC	GLV1500-24UC	156,963,925	kWh	0.0055	863,302
Variable	GV99-DAMD	GLV1500-DAMD	509,141	kVA	4.8915	2,490,461
Fixed	GX02-FIXD	GTX15-FIXD	91,471	ICPs	0.0000	-
Variable	GX02-24UC	GTX15-24UC	-	kWh	0.0330	-
Fixed	GX07-FIXD	GTX69-FIXD	5,532	ICPs	0.0000	-
Variable	GX07-24UC	GTX69-24UC	664,522	kWh	0.0230	15,284
Fixed	GX14-FIXD	GTX138-FIXD	6,093	ICPs	0.0000	-
Variable	GX14-24UC	GTX138-24UC	2,422,585	kWh	0.0271	65,652
Fixed	GX30-FIXD	GTX300-FIXD	32,697	ICPs	0.0000	-
Variable	GX30-24UC	GTX300-24UC	46,292,019	kWh	0.0112	518,471
Fixed	GX99-FIXD	GTX1500-FIXD	84,921	ICPs	0.0000	-
Variable	GX99-24UC	GTX1500-24UC	340,198,916	kWh	0.0044	1,496,875
Variable	GX99-CAPY	GTX1500-CAPY	67,511,682	kVA	0.0104	702,121
Variable	GX99-DAMD	GTX1500-DAMD	984,812	kVA	4.0093	3,948,407
Fixed	GC60-FIXD	GTX1501-FIXD	13,330	ICPs	0.0000	-
Variable	GC60-24UC	GTX1501-24UC	152,746,410	kWh	0.0009	137,472
Variable	GC60-CAPY	GTX1501-CAPY	32,962,214	kVA	0.0177	583,431
Variable	GC60-DOPC	GTX1501-DOPC	391,544	kW	7.2683	2,845,861
Variable	GC60-PWRF	GTX1501-PWRF	28,074	kVAr	5.2483	147,340
Fixed	GU60-FIXD	GTX1501-FIXD	219	ICPs	0.0000	-
Variable	GU60-24UC	GTX1501-24UC	23,830,809	kWh	0.0009	21,448
Variable	GU60-CAPY	GTX1501-CAPY	1,304,493	kVA	0.0177	23,090
Variable	GU60-DOPC	GTX1501-DOPC	7,138	kW	7.2683	51,882
Variable	GU60-PWRF	GTX1501-PWRF	652	kVAr	5.2483	3,420
Fixed	GR60-FIXD	GTX1501-FIXD	23	ICPs	0.0000	-
Variable	GR60-24UC	GTX1501-24UC	284,111	kWh	0.0009	256
Variable	GR60-CAPY	GTX1501-CAPY	114,736	kVA	0.0177	2,031
Variable	GR60-DOPC	GTX1501-DOPC	209	kW	7.2683	1,516
Variable	GR60-PWRF	GTX1501-PWRF	7	kVAr	5.2483	34
<b>Standard Charges Total (\$)</b>						<b>75,096,782</b>
<b>Non Standard Charges Total (\$)</b>						<b>764,102</b>
<b>Pass through Revenue Total (\$)</b>						<b>75,860,884</b>

## Attachment 7: Annual reliability assessment for extant Assessment Periods

The tables below show the reliability assessments for the three Assessment periods of the current Regulatory Period (1 April 2015 to 31 March 2020).

### First Assessment Period (2015/16)

Requirement	Assessment	Limit	Assessment/Limit	Result
SAIDI	30.097	40.630	0.741	<1
SAIFI	0.525	0.625	0.840	<1

### Second Assessment Period (2016/17)

Requirement	Assessment	Limit	Assessment/Limit	Result
SAIDI	49.732	40.630	1.224	>1
SAIFI	0.711	0.625	1.138	>1

### Third Assessment Period (2017/18)

Requirement	Assessment	Limit	Assessment/Limit	Result
SAIDI	52.856	40.63	1.301	>1
SAIFI	0.676	0.625	1.082	>1

## Attachment 8: Calculation of SAIDI and SAIFI

WELL's SAIDI Target	
Calculation Components	Amount
$\mu_{SAIDI}$	35.436
<b>Total SAIDI Value as at 31 March 2018</b>	<b>35.436</b>

WELL's SAIFI Target	
Calculation Components	Amount
$\mu_{SAIFI}$	0.547
<b>Total SAIFI as at 31 March 2018</b>	<b>0.547</b>

WELL's SAIDI Boundary Value	
Calculation Components	Amount
<i>SAIDI</i>	2.103
<b>Total SAIDI Boundary Value as at 31 March 2018</b>	<b>2.103</b>

WELL's SAIFI Boundary Value	
Calculation Components	Amount
<i>SAIFI</i>	0.031
<b>Total SAIFI Boundary Value as at 31 March 2018</b>	<b>0.031</b>

WELL's SAIDI Reliability Cap (Limit), $SAIDI_{CAP} = \mu_{SAIDI} + \sigma_{SAIDI}$	
Calculation Components	Amount
$\mu_{SAIDI}$	35.436
$\sigma_{SAIDI}$	5.194
<b>Total SAIDI Reliability Cap as at 31 March 2018</b>	<b>40.630</b>

WELL's SAIFI Reliability Cap (Limit), $SAIFI_{CAP} = \mu_{SAIFI} + \sigma_{SAIFI}$	
Calculation Components	Amount
$\mu_{SAIFI}$	0.547
$\sigma_{SAIFI}$	0.078
<b>Total SAIFI Reliability Cap as at 31 March 2018</b>	<b>0.625</b>



## Attachment 8: Calculation of SAIDI and SAIFI (cont'd)

WELL's SAIDI Reliability Collar, $SAIDI_{COLLAR} = \mu_{SAIDI} - \sigma_{SAIDI}$	
Calculation Components	Amount
$\mu_{SAIDI}$	35.436
$\sigma_{SAIDI}$	5.194
<b>Total SAIDI Reliability Collar as at 31 March 2018</b>	<b>30.242</b>

WELL's SAIFI Reliability Collar, $SAIFI_{COLLAR} = \mu_{SAIFI} - \sigma_{SAIFI}$	
Calculation Components	Amount
$\mu_{SAIFI}$	0.547
$\sigma_{SAIFI}$	0.078
<b>Total SAIFI Reliability Collar as at 31 March 2018</b>	<b>0.468</b>

## Attachment 9: Calculation of Quality Penalties/Incentives

WELL's Quality Penalty $S_{TOTAL} = S_{SAIDI} + S_{SAIFI}$	
Calculation Components	Amount
$S_{SAIDI}$	(493,940)
$S_{SAIFI}$	(493,940)
<b>Total Quality Penalty as at 31 March 2018</b>	<b>(987,880)</b>

WELL's Quality Penalty $SSAIDI = SAIDI_{IR} \times (SAIDI_{target} - SAIDI_{assess})$	
Calculation Components	Amount
$SAIDI_{IR}$	95,091
$SAIDI_{target}$	35.436
$SAIDI_{assess}$	40.630
<b>Total SAIDI Quality Penalty as at 31 March 2018</b>	<b>(493,940)</b>

WELL's Quality Penalty $SSAIFI = SAIFI_{IR} \times (SAIFI_{target} - SAIFI_{assess})$	
Calculation Components	Amount
$SAIFI_{IR}$	6,308,301
$SAIFI_{target}$	0.547
$SAIFI_{assess}$	0.625
<b>Total SAIFI Quality Penalty as at 31 March 2018</b>	<b>(493,940)</b>

Note: The financial scheme is that the revenue at risk is limited to 1% of Maximum Allowable Revenue (MAR) in total with 0.5% on SAIDI and 0.5% on SAIFI. Therefore, the incentive/penalty for both SAIDI and SAIFI is capped at \$493,940.

**Attachment 10: Customer numbers for SAIDI and SAIFI**

<b>Year</b>	<b>Total Customers</b>	<b>Customers Impacted*</b>	<b>Customer Minutes Lost</b>
04/05	157,410	60,717	6,288,957
05/06	158,555	80,086	4,980,787
06/07	159,625	103,168	5,583,921
07/08	161,476	83,057	5,111,293
08/09	162,625	86,274	5,745,190
09/10	163,591	111,077	8,626,989
10/11	164,081	88,112	5,699,846
11/12	164,602	111,645	7,551,791
12/13	164,705	92,851	7,129,945
13/14	164,797	180,928**	31,437,753**
14/15	165,113	96,140	6,399,229
15/16	165,342	89,799	4,975,433
16/17	166,344	152,989**	21,698,831**
17/18	166,910	130,649	10,922,221

WELL purchased the Wellington network on 24 July 2008 from Vector. Vector maintained operational control until July 2009 for SAIDI and SAIFI. Necessary information for the period up to July 2009 was sourced from Vector.

\* The number represents the total number of customers affected by the outages. It may be that a customer was affected by an outage more than once.

\*\*These numbers are based on the total outages (including the outages during the Major Event Days) for the regulatory year.