



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

**Wellington Electricity Lines Limited**

**Annual Compliance Statement**

**07 June 2013**

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## 1. Introduction

Clause 11.1(a) of the *Electricity Distribution Services Default Price-Quality Path Determination 2010 (2010 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 2010 DPP Determination for the relevant assessment period:

- The price path as per clause 8 of the 2010 DPP Determination ; and
- The quality standards as per clause 9 of the 2010 DPP Determination.

This statement is Wellington Electricity Lines Limited (**WELL**) Annual Compliance Statement (**the Statement**) for the third Assessment Period ended 31 March 2013.

Attachment 1 of this Statement provides the Auditor's report relating to this Statement as required by clause 11.2 of the 2010 DPP Determination. WELL confirms that the form of the Auditor's report is consistent with the form specified in Schedule 4 of the 2010 DPP Determination.

Attachment 2 of this Statement contains the Director's certificate signed by one director of WELL, as required by clause 11.1(c) of the 2010 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 5 of the 2010 DPP Determination.

### 1.1. Compliance with 2010 DPP Determination's price – quality requirements

This Statement is made in accordance with the requirements of clause 11.1 of the 2010 DPP Determination.

In respect of the Assessment Period ended on the Assessment Date 31 March 2013, WELL confirms it has complied with the price path in clause 8 and the SAIFI quality standard in clause 9. WELL confirms it has not complied with the SAIDI quality standard in clause 9 and this has contributed to the non compliance under the annual reliability assessments for the current and prior year assessment periods.

The remainder of this Statement includes:

- Sufficient information to support the statement above, including:
  - o Information relating to the amount of allowable notional revenue, the amount of notional revenue, prices, quantities, units of measurement associated with all numeric data, and other relevant data, information, and calculations;
  - o Information relating to Pass-Through Costs, including both the forecast amounts and the actual amounts for the Assessment Period, and information relevant to the variance between the forecast and actual amounts;
  - o Information relating to any price restructures as referred to in clause 8.6 of the 2010 DPP Determination and information of the kind set out in clause 11.1(b) paragraphs (i) and (ii) of the 2010 DPP Determination that demonstrates:

- If clause 8.6(a) applies, whether or not the restructuring has of itself increased the allowable notional revenue above that which would have applied if the restructuring had not occurred, using both the previous and restructured Prices and Quantities;
  - If clause 8.6(b) applies, whether or not the restructuring has of itself increased the revenue above that which would have applied if the restructuring had not occurred, using both the previous and restructured Prices and Quantities, and reasoning why it is not practicable for WELL to demonstrate the effects of the restructuring on allowable notional revenue; and
  - If clause 8.7 applies, why it is not practicable to demonstrate the effects of the restructuring on allowable notional revenue or revenue.
- o Assessed Values and Reliability Limits for the Assessment Period, relevant SAIDI and SAIFI statistics and calculations (including those in Schedule 3), the annual reliability assessments for the two immediately preceding extant Assessment Periods, and other relevant data and information;
  - o A description of policies and procedures which WELL has used to record the SAIDI and SAIFI statistics for the Assessment Period;
  - o If System Fixed Assets were transferred from Transpower, SAIDI and SAIFI statistics and calculations (including those in Schedule 3) for the Assessment Period in which the transfer was completed that demonstrate whether or not the transfer increased the Assessed Values;
  - o If an alternative approach is used to demonstrate compliance as referred to in clause 10.3, an explanation as to why that alternative approach was needed; and
  - o The date on which the statement was prepared.

## **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 2010 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.

## 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 2013. Under clause 11 of the 2010 DPP Determination WELL is required 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 at Attachment 3 that reflect the price multiplied by the appropriate quantity for each pricing category; and
- 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.

### 2.1. Price path compliance as at 31 March 2013

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 under the CPI-X price path for the Assessment Period.

As demonstrated by Table 1 below, Notional Revenue (NR<sub>2013</sub>) is less than Allowable Notional Revenue (R<sub>2013</sub>) by an amount of \$966,512. WELL has therefore complied with the price path calculated in accordance with clause 8.4 of the 2010 DPP Determination for the disclosure year ended 31 March 2013.

Determination Requirement	Actual notional revenue divided by allowable notional revenue at the assessment date	Is not to exceed	One
Notice expression	$\frac{NR_{2013}}{R_{2013}}$	≤	1
WELL Result	$\frac{102,516,658}{103,483,170} = 0.9907$	≤	1

Table 1: Price path compliance

The summary calculation of  $NR_{2013}$  is provided in Table 2 below.

WELL's Actual Notional revenue, $NR_{2013} = \sum P_{i,2013} Q_{i,2011} - K_{2013}$	
Calculation Components	Amount (\$)
$\sum P_{i,2013} Q_{i,2011}$ – the sum of the $i^{th}$ prices during any part of the Pricing Period 1 April 2012 to 31 March 2013 multiplied by the corresponding base quantities for the Pricing Period 1 April 2010 to 31 March 2011	162,604,847
$K_{2013}$ – the sum of all Pass-Through Costs for the Pricing Period 1 April 2012 to 31 March 2013	60,088,189
<b>Total Actual Notional Revenue as at 31 March 2013</b>	<b>102,516,658</b>

Table 2: WELL's Actual Notional Revenue  $NR_{2013}$

WELL's Allowable Notional Revenue, $R_{2013} = (\sum P_{i,2012} Q_{i,2011} - K_{2012})(R_{2012} - NR_{2012})(1 + \Delta CPI_{2013})(1 - X)$	
Calculation Components	Amount (\$)
$P_{i,2012}$ – is the $i^{th}$ starting Price as specified in Schedule 1 for the Pricing Period 1 April 2011 to 31 March 2012	
$Q_{i,2011}$ – is the Quantity corresponding to the $i^{th}$ Price for the Pricing Period 1 April 2010 to 31 March 2011	151,775,356
$K_{2012}$ – is the sum of all Pass-Through Costs during the Pricing Period 1 April 2011 to 31 March 2012 (consistent with prior year audited amount)	<u>50,738,792</u>
	101,036,564
$R_{2012}$ – Is the allowable notional revenue during the assessment period t-1	103,161,576
$NR_{2012}$ – Is the notional revenue during the assessment period t-1	<u>103,278,333</u>
$R_{2012} - NR_{2012}$ = Difference between the $R_{t-1}$ and $NR_{t-1}$	(116,757)
$\Delta CPI_{2013}$ – is the derived change in the CPI to be applied during the First Assessment Period, being equal to: $\Delta CPI_{2012} = \frac{CPI_{Dec,2010} + CPI_{Mar,2011} + CPI_{Jun,2011} + CPI_{Sep,2011}}{CPI_{Dec,2009} + CPI_{Mar,2010} + CPI_{Jun,2010} + CPI_{Sep,2010}} - 1$	(4,602/4,488)-1 = 2.54%
Where $CPI_{j,y}$ is the consumer price index stipulated in the "All Groups Index SE9A" as published by Statistics New Zealand for the month $j$ in the calendar year $y$	
$X$ – is the rate of change for WELL	0.00%
<b>Total Allowable Notional Revenue as at 31 March 2013</b>	<b>103,483,170</b>

Table 3: WELL's Allowable Notional Revenue  $R_{2013}$

## 2.2. Pass-Through Costs

Table 4 below provides the break down of Pass-Through Costs incurred by WELL during the Assessment Period.

Description	Year to 31 March 2013 (\$000) Actual	Year to 31 March 2013 (\$000) Forecast	Variance (\$000)
Transmission Charges	57,460	57,712	(252)
Council Rates	2,075	2,170	(95)
Electricity Authority Levies	372	413	(41)
Commerce Commission Levies	181	177	4
<b>Total</b>	<b>60,088</b>	<b>60,472</b>	<b>(384)</b>

Table 4: Comparison of WELL's actual and forecast Pass-Through Costs

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

- The actual transmission pass-through costs: these reflect the total charges paid by WELL to Transpower for the year ended 31 March 2013. These charges are determined in accordance with the Transmission Pricing Methodology (**TPM**) set out in the *Electricity Industry Participation Code 2010*;
- The actual council rate costs: these are the total cost of council rates charged to WELL by local authorities for the year ended 31 March 2013;
- The Electricity Authority's (**EA**) Levies: these costs 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* for the year ended 31 March 2013; and
- Commerce Commission Levies: these costs 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 2013.

## 2.3. Price restructures

WELL confirms that it has not restructured its prices that applied during the Assessment Period ended on the Assessment Date 31 March 2013.

### 3. Quality Standards

#### 3.1. Quality standards assessment as at 31 March 2013

This section of the Statement provides information on WELL’s compliance with the quality standards under clause 9 of the 2010 DPP Determination for the Assessment Period ended 31 March 2013.

#### 3.2. Assessed Values and Reliability Limits

Clause 9.1 of the 2010 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 2010 DPP Determination; or
- Has complied with the annual reliability assessments for the two immediately preceding extant assessment periods.

Table 5 below shows that for the current Assessment Period WELL exceeded the reliability assessment for SAIDI, however complied with SAIFI as outlined in clause 9.1 of the 2010 DPP Determination.

Requirement	Assessment	Limit	Result	Variance
SAIDI	43.290	40.744	1.063	(2.546)
SAIFI	0.573	0.602	0.952	0.029

Table 5: WELL’s reliability performance for the current Assessment Period

Further detailed calculations in relation to the assessment in Table 5 are provided at Attachment 4 of this Statement.

None of the outages qualify as major event days and therefore cannot be excluded from the final SAIDI and SAIFI results. However the Wellington region was subject to a major weather event on 8 September 2012 where wind speeds in excess of 140 kilometres per hour significantly affected the network and triggered the declaration of a major event response for WELL. The total SAIDI and SAIFI for this period was 7.841 minutes (19.25% of the SAIDI limit for the year) and 0.048 (8% of the SAIFI limit for the year), respectively.

As disclosed in Attachment 4 of this Statement, WELL understands it has exceeded the SAIDI quality thresholds requirements for two out of the last three years. This constitutes a breach of the SAIDI quality thresholds under the Commerce Act 1986.

A separate explanation paper has been prepared and will be supplied to the Commerce Commission under separate cover.



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

Clause 11.1(v) of the 2010 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 ENMAC SCADA system. This system provides information about major devices operating on the network (e.g. circuit breaker status) and can remotely control the device (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 ENMAC system. Although these devices are operated in the field manually, their status (e.g. open or closed) is updated in ENMAC by the network controller at the time of manual field operation. In particular, the ENMAC SCADA system records:

- All planned and unplanned outages of 11 kV and greater;
- All unplanned outages less than one minute in duration (including successful auto-reclose events), however, the SAIDI and SAIFI details are not counted; and
- Outages using manual logs, ENMAC and manual data entered in the Reliability Report Sheet.

ENMAC includes a database that stores the outage information, as well as being a live SCADA system. The recording of outage information underwent a process of manual validation by the Network 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:

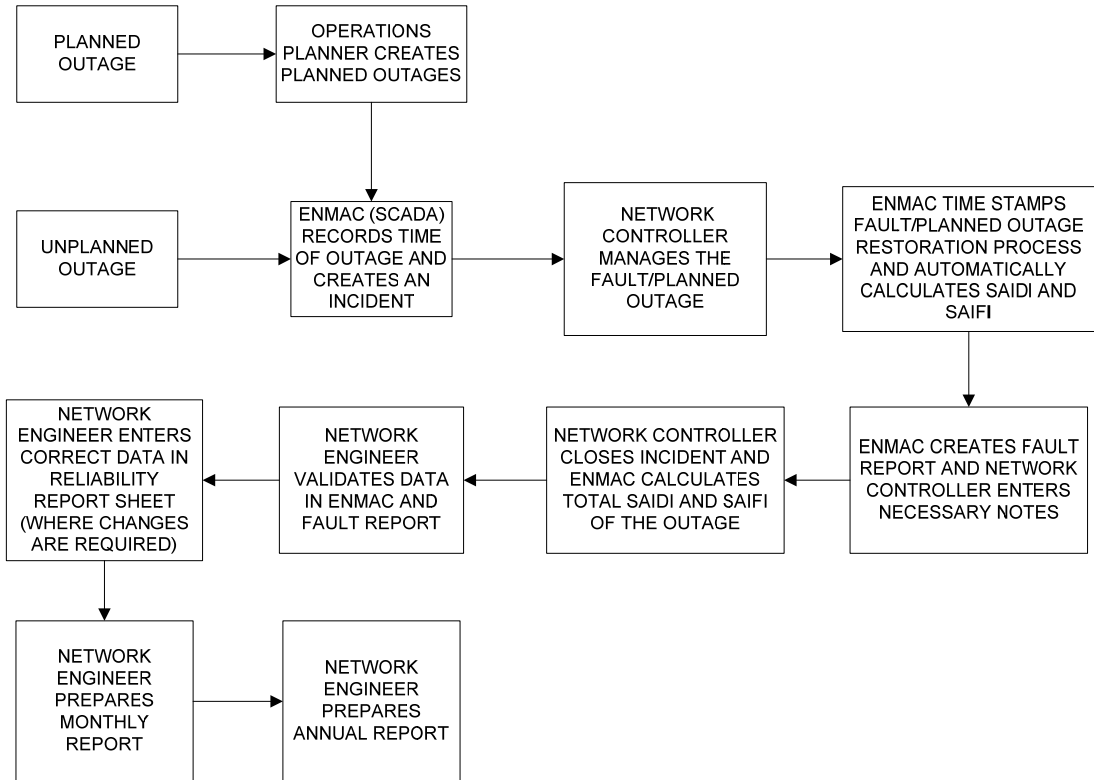


Figure 1: Summary of process for capturing network outage information

### 3.3.1 Process for outage data capture

For unplanned outages, the initial indication is provided by the ENMAC SCADA system and the fault is time stamped, along with subsequent switching operations. Where the outage relates to a non-SCADA 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 completed on the ENMAC SCADA system (as a system mimic) and are time stamped. 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 ENMAC system automatically creates an incident when a telemetered device is opened due to a fault. The fault is automatically recorded by the ENMAC system to keep details of the switching procedure which includes the time of switching operations. The total number of customers is included in ENMAC's database and ENMAC computes the SAIDI and SAIFI statistics automatically.

After an outage is resolved, an outage report is generated by ENMAC which the Network Engineer validates with the notes of the Network Controllers. The information that is validated is as follows:

- 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 ENMAC is reviewed for accuracy, particularly for non-SCADA 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 ENMAC system is updated (e.g. field device manually operated at 3.10pm, ENMAC 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 ENMAC timestamp.

The Network Engineer confirms this by reviewing the ENMAC reports (generated automatically from the system) with a manual log kept by the Network Controller to ensure the times are correctly recorded in ENMAC, and where necessary make corrections.

Once confirmed as accurate, the final ENMAC individual event reports are compiled into a Reliability Master Spreadsheet which is used for the monthly reporting of SAIDI and SAIFI indices and also for the reporting of yearly performance.

For planned outages, the proposed switching operations are entered into ENMAC by the Outage Planner prior to the event. During the event ENMAC 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. Whether the planned events result in an outage or not is validated by the Network Engineer by confirming with the Network Control Room who refer to the job specific documents, before it is entered in the reliability report sheet as an outage.

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

# Attachment 1: Auditor's Report



## AUDITOR'S REPORT ON ANNUAL COMPLIANCE STATEMENT

To the Directors of Wellington Electricity Lines Limited (WELL).

We have audited the attached Annual Compliance Statement on pages 5 to 11 and 14 to 17, which is an Annual Compliance Statement in respect of the default price-quality path prepared by WELL for the period of 1 April 2012 to 31 March 2013 (the assessment period) and dated 7 June 2013 for the purposes of clause 11 of the Electricity Distribution Default Price-Quality Path Determination 2010 (the Determination).

In relation to the price path set out in clause 8 of the Determination, our audit included an examination, on a test basis, of evidence relevant to the amounts and disclosures contained on pages 5 to 7 and 14 of the Annual Compliance Statement.

In relation to the SAIDI and SAIFI statistics for the Reference Period and the Assessment Period ended on 31 March 2013, including the calculation of the Reliability Limits and the Assessed Values, which are relevant to the quality standards set out in clause 9 of the Determination, our audit included examination, on a test basis, of evidence relevant to the amounts and disclosures contained on pages 8 to 11 and 15 to 17 of the Annual Compliance Statement.

Our audit also included an assessment of the significant estimates and judgments, if any, made by WELL in the preparation of the Annual Compliance Statement and an assessment of whether the basis of preparation has been adequately disclosed.

### Directors' Responsibilities

The Directors of WELL are responsible for the preparation of the Annual Compliance Statement in accordance with the Determination and for such internal control as the Directors determine is necessary to enable the preparation of an Annual Compliance Statement that is free from material misstatement, whether due to fraud or error.

### Auditor's Responsibilities

Our responsibility is to express an opinion on the Annual Compliance Statement based on our audit. We conducted our audit in accordance with International Standards on Auditing, International Standards on Auditing (New Zealand) and Standard on Assurance Engagements 3100: *Compliance Engagements*. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the Annual Compliance Statement is free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the Annual Compliance Statement. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the Annual Compliance Statement, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity'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 entity's internal control. An audit 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.

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

We have no relationship with or interests in WELL, other than in our capacity as auditor (including other regulatory audit services) and the provision of taxation advice.

### Opinion

In our opinion, the Annual Compliance Statement of Wellington Electricity Lines Limited for the Assessment Period ended on 31 March 2013, has been prepared, in all material respects, in accordance with the Determination.

### Limitations and Use of this Independent Assurance Report

This independent assurance report has been prepared solely for the Directors of WELL and the Commissioners of the New Zealand Commerce Commission in accordance with the Determination. We disclaim any assumption of responsibility for any reliance on this report to any persons or users other than the Directors of WELL and the Commissioners, or for any purpose other than that for which it was prepared.

Because of the inherent limitations in evidence gathering procedures, it is possible that fraud, error or non-compliance may occur and not be detected. As the procedures performed for this engagement are not performed continuously throughout the assessment period and the procedures performed in respect of WELL's compliance with the Determination are undertaken on a test basis, our engagement cannot be relied on to detect all instances where WELL may not have complied with the Determination. Our opinion has been formed on the above basis.

Our audit was completed on 7 June 2013 and our opinion is expressed as at that date.

Chartered Accountants  
Wellington, New Zealand

This audit report relates to the Annual Compliance Statement in respect of the default price-quality path prepared by Wellington Electricity Lines Limited for the period 1 April 2012 to 31 March 2013 included on Wellington Electricity Lines Limited's website. Wellington Electricity Lines Limited's Board of Directors is responsible for the maintenance and integrity of Wellington Electricity Lines Limited's website. We have not been engaged to report on the integrity of Wellington Electricity Lines Limited'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 audit 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 the 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 audited Annual Compliance Statement and related audit report dated 7 June 2013 to confirm the information included in the audited Annual Compliance Statement presented on this website.

## Attachment 2: Director's certificate

### DIRECTORS' CERTIFICATE ON ANNUAL COMPLIANCE STATEMENT

I, Richard C. Pearson, being a 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 2010* are true and accurate



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Director

7 June 2013

### Attachment 3: Summary Notional Revenue

- For each tariff 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 2011.
- 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

Charge Type	2011 Tariff Code	Base Quantity (2010/11)	Base Q Unit	2011/12 Price	2012/13 Price	Price Unit	Notional Revenue 2011/12	Notional Revenue 2012/13
Fixed	G001-FIXD	365	ICPs	0.0332	0.0357	\$/day/fitting	12	13
Variable	G001-24UC	21,173,459	ICPs	0.1282	0.1379	\$/kWh	2,714,437	2,919,820
Fixed	G002-FIXD	14,301,653	ICPs	0.0332	0.0357	\$/day/fitting	474,815	510,569
Variable	G002-24UC	2,199	ICPs	0.1282	0.1379	\$/kWh	282	303
Fixed	G100-FIXD	8,237,072	ICPs	0.1500	0.1500	\$/day	1,235,561	1,235,561
Variable	G100-24UC	159,835,092	ICPs	0.0932	0.1003	\$/kWh	14,896,631	16,031,460
Variable	G100-NITE	3,616,899	ICPs	0.0158	0.0170	\$/kWh	57,147	61,487
Fixed	G101-FIXD	3,033,589	ICPs	0.1500	0.1500	\$/day	455,038	455,038
Variable	G101-24UC	48,889,465	ICPs	0.0932	0.1003	\$/kWh	4,556,498	4,903,613
Variable	G101-CTRL	20,471,645	ICPs	0.0437	0.0470	\$/kWh	894,611	962,167
Variable	G101-NITE	730,034	ICPs	0.0158	0.0170	\$/kWh	11,535	12,411
Fixed	G102-FIXD	42,202,281	ICPs	0.1500	0.1500	\$/day	6,330,342	6,330,342
Variable	G102-AICO	857,433,246	ICPs	0.0732	0.0787	\$/kWh	62,764,114	67,479,996
Variable	G102-NITE	17,728,607	ICPs	0.0158	0.0170	\$/kWh	280,112	301,386
Fixed	G103-FIXD	182,391	ICPs	0.1500	0.1500	\$/day	27,359	27,359
Variable	G103-24UC	6,586,619	ICPs	0.0942	0.1013	\$/kWh	620,460	667,225
Fixed	G104-FIXD	-	ICPs	0	0.1500	\$/day	-	-
Variable	G104-24UC	-	ICPs	0	0.1003	\$/kWh	-	-
Variable	G104-NITE	-	ICPs	0	0.0170	\$/kWh	-	-
Fixed	G105-FIXD	-	ICPs	0	0.1500	\$/day	-	-
Variable	G105-24UC	-	ICPs	0	0.1003	\$/kWh	-	-
Variable	G105-CTRL	-	ICPs	0	0.0470	\$/kWh	-	-
Variable	G105-NITE	-	ICPs	0	0.0170	\$/kWh	-	-
Fixed	G106-FIXD	-	ICPs	0	0.1500	\$/day	-	-
Variable	G106-AICO	-	ICPs	0	0.0787	\$/kWh	-	-
Variable	G106-NITE	-	ICPs	0	0.0170	\$/kWh	-	-
Fixed	G107-FIXD	-	ICPs	0	0.1500	\$/day	-	-
Variable	G107-24UC	-	ICPs	0	0.1013	\$/kWh	-	-
Fixed	G108-FIXD	-	ICPs	0	0.1500	\$/day	-	-
Variable	G108-24UC	-	ICPs	0	0.1003	\$/kWh	-	-
Variable	G108-CTRL	-	ICPs	0	0.0470	\$/kWh	-	-
Variable	G108-NITE	-	ICPs	0	0.0170	\$/kWh	-	-
Fixed	G109-FIXD	-	ICPs	0	0.1500	\$/day	-	-
Variable	G109-24UC	-	ICPs	0	0.1003	\$/kWh	-	-
Variable	G109-CTRL	-	ICPs	0	0.0470	\$/kWh	-	-
Variable	G109-NITE	-	ICPs	0	0.0170	\$/kWh	-	-
Fixed	GV02-FIXD	1,722,690	ICPs	0.4710	0.5067	\$/day	811,387	872,887
Variable	GV02-24UC	43,752,122	ICPs	0.0541	0.0582	\$/kWh	2,366,990	2,546,374
Variable	GV07-FIXD	3,971,107	ICPs	1.1651	1.2534	\$/day	4,626,737	4,977,386
Variable	GV07-24UC	383,143,684	ICPs	0.0376	0.0405	\$/kWh	14,406,203	15,517,319
Fixed	GV14-FIXD	128,330	ICPs	6.6016	7.1021	\$/day	847,183	911,412
Variable	GV14-24UC	61,415,945	ICPs	0.0444	0.0478	\$/kWh	2,726,868	2,935,682
Fixed	GV30-FIXD	76,230	ICPs	9.4039	10.1169	\$/day	716,859	771,211
Variable	GV30-24UC	66,394,291	ICPs	0.0184	0.0198	\$/kWh	1,221,655	1,314,607
Fixed	GV99-FIXD	113,433	ICPs	23.7126	25.5105	\$/day	2,689,791	2,893,733
Variable	GV99-24UC	211,889,804	ICPs	0.0082	0.0088	\$/kWh	1,737,496	1,864,630
Variable	GV99-DAMD	666,454	ICPs	7.3008	7.8543	\$/kVA/month	4,865,647	5,234,530
Fixed	GX02-FIXD	-	ICPs	0.4284	0.4609	\$/day	-	-
Variable	GX02-24UC	-	ICPs	0.0493	0.0530	\$/kWh	-	-
Fixed	GX07-FIXD	577	ICPs	1.0592	1.1395	\$/day	611	657
Variable	GX07-24UC	48,956	ICPs	0.0342	0.0368	\$/kWh	1,674	1,802
Fixed	GX14-FIXD	5,161	ICPs	6.0014	6.4564	\$/day	30,973	33,321
Variable	GX14-24UC	2,322,101	ICPs	0.0404	0.0435	\$/kWh	93,813	101,011
Fixed	GX30-FIXD	28,709	ICPs	8.5489	9.1971	\$/day	245,430	264,040
Variable	GX30-24UC	44,695,940	ICPs	0.0167	0.0180	\$/kWh	746,422	804,527
Fixed	GX99-FIXD	80,654	ICPs	18.4454	19.8439	\$/day	1,487,695	1,600,490
Variable	GX99-24UC	309,222,725	ICPs	0.0065	0.0070	\$/kWh	2,009,948	2,164,559
Variable	GX99-CAPY	57,447,107	ICPs	0.0154	0.0166	\$/kVA/day	884,685	953,622
Variable	GX99-DAMD	903,701	ICPs	5.9841	6.4378	\$/kVA/month	5,407,837	5,817,846
Fixed	GC60-FIXD	180	ICPs	0.0410	0.0441	\$/day	7	8
Variable	GC60-24UC	91,284,357	ICPs	0.0012	0.0013	\$/kWh	109,541	118,670
Variable	GC60-CAPY	18,654,542	ICPs	0.0265	0.0285	\$/kVA/day	494,345	531,654
Variable	GC60-DOPC	250,657	ICPs	10.5886	11.3914	\$/kWh/month	2,654,107	2,855,334
Variable	GC60-PWRF	19,125	ICPs	7.8332	8.4271	\$/kVA/month	149,810	161,168
Fixed	GU60-FIXD	31	ICPs	0.0410	0.0441	\$/day	1	1
Variable	GU60-24UC	79,446,475	ICPs	0.0012	0.0013	\$/kWh	95,336	103,280
Variable	GU60-CAPY	14,211,275	ICPs	0.0265	0.0285	\$/kVA/day	376,599	405,021
Variable	GU60-DOPC	187,841	ICPs	11.0252	11.8611	\$/kWh/month	2,070,985	2,228,001
Variable	GU60-PWRF	16,082	ICPs	7.8332	8.4271	\$/kVA/month	125,974	135,525
Fixed	GR60-FIXD	-	ICPs	0.0410	0.0441	\$/day	-	-
Variable	GR60-24UC	2,547,174	ICPs	0.0012	0.0013	\$/kWh	3,057	3,311
Variable	GR60-CAPY	1,434,450	ICPs	0.0265	0.0285	\$/kVA/day	38,013	40,882
Variable	GR60-DOPC	14,906	ICPs	13.2863	14.2937	\$/kWh/month	198,046	213,062
Variable	GR60-PWRF	235	ICPs	7.8332	8.4271	\$/kVA/month	1,841	1,980
<b>Standard Charges Total (\$)</b>							<b>149,562,519</b>	<b>160,278,296</b>
<b>Non Standard Charges Total (\$)</b>							<b>2,212,836</b>	<b>2,326,552</b>
<b>Notional Revenue Total (\$)</b>							<b>151,775,356</b>	<b>162,604,847</b>

## Attachment 4: Annual reliability assessment for extant Assessment Periods

The tables below show the reliability assessments for the first three Assessment Periods:

### First Assessment Period (2011)

Requirement	Assessment	Limit	Result	Variance
SAIDI	34.738	40.744	0.853	6.006
SAIFI	0.536	0.602	0.890	0.066

### Second Assessment Period (2012)

Requirement	Assessment	Limit	Result	Variance
SAIDI	45.858	40.744	1.126	(5.114)
SAIFI	0.715	0.602	1.188	(0.113)

### Third Assessment Period (2013)

Requirement	Assessment	Limit	Result	Variance
SAIDI	43.290	40.744	1.063	(2.546)
SAIFI	0.573	0.602	0.952	0.029

## Attachment 5: Calculation of SAIDI and SAIFI

WELL's SAIDI Boundary Value, $B_{SAIDI} = e^{(\alpha_{SAIDI} + 2.5\beta_{SAIDI})}$	
Calculation Components	Amount
$\alpha_{SAIDI}$	-2.979
$\beta_{SAIDI}$	5.254
<b>Total SAIDI Boundary Value as at 31 March 2013</b>	<b>9.724</b>

WELL's SAIFI Boundary Value, $B_{SAIFI} = e^{(\alpha_{SAIFI} + 2.5\beta_{SAIFI})}$	
Calculation Components	Amount
$\alpha_{SAIFI}$	-7.333
$\beta_{SAIFI}$	5.893
<b>Total SAIFI Boundary Value as at 31 March 2013</b>	<b>0.237</b>

WELL's SAIDI Reliability Limit, $SAIDI_{LIMIT} = \mu_{SAIDI} + \sigma_{SAIDI}$	
Calculation Components	Amount
$\mu_{SAIDI}$	33.897
$\sigma_{SAIDI}$	6.847
<b>Total SAIDI Reliability Limit as at 31 March 2013</b>	<b>40.744</b>

WELL's SAIFI Reliability Limit, $SAIFI_{LIMIT} = \mu_{SAIFI} + \sigma_{SAIFI}$	
Calculation Components	Amount
$\mu_{SAIFI}$	0.517
$\sigma_{SAIFI}$	0.085
<b>Total SAIFI Reliability Limit as at 31 March 2013</b>	<b>0.602</b>

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.



## Attachment 6: Customer numbers for SAIDI and SAIFI

Year	Total Customers	Customers Impacted	Customer Minutes Lost
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

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.