

Nelson Electricity Limited

DEFAULT PRICE QUALITY PATH COMPLIANCE STATEMENT

FOR THE ASSESSMENT DATE 31 MARCH 2013

*Pursuant to the Electricity Distribution Services Default Price-Quality
Path Determination 2010*

12 June 2013

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1) Compliance with the Price Path (Clause 11.1(a))

Nelson Electricity Limited does comply with the price path at the assessment date, 31 March 2013, as specified in the *Electricity Distribution Services Default Price-Quality Path Determination 2010*.

Clause 8.4 - The notional revenue (NR_t) of a Non-exempt EDB at any time during the Assessment Period must not exceed the allowable notional revenue (R_t) for the Assessment Period.

Compliance is demonstrated in the following tables. The first table demonstrates that notional revenue derived using posted prices at the end of the Assessment Period is less than allowable notional revenue. The second table demonstrates that the maximum notional revenue during the Assessment Period does not exceed allowable notional revenue thus illustrating that at no time during the Assessment Period is the price path breached.

Test:	$\frac{NR_{2013}}{R_{2013}} \leq 1$	
NR ₂₀₁₃ :	\$	6,933,407
R ₂₀₁₃ :	\$	7,086,223
Result:	0.9784 < 1	
Result:	Price Path has not been breached	

Test:	$\frac{NR_{Max}}{R_{2013}} \leq 1$	
NR _{Max} :	\$	6,933,407
R ₂₀₁₃ :	\$	7,086,223
Result:	0.9784 < 1	
Result:	Price Path has not been breached	

Supporting evidence is presented in Appendices A, B and C.

2) Compliance with the Quality Standards (Clause 11.1(a))

Nelson Electricity Limited does comply with all requirements of the quality standards at the assessment date, 31 March 2013, as specified in the *Electricity Distribution Services Default Price-Quality Path Determination 2010*.

Clause 9.2 - A Non-exempt EDB's Assessed Values for an Assessment Period must not exceed its Reliability Limits for that Assessment Period.

Compliance is demonstrated in the following tables. The first table demonstrates compliance with the SAIDI Limit and the second table compliance with the SAIFI limit.

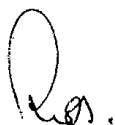
Test:	$\frac{SAIDI_{Assess\ 2013}}{SAIDI_{Limit}} \leq 1$
SAIDI _{Assess 2013}	43.610
SAIDI _{Limit}	71.536
Result:	0.6096 < 1
Result:	SAIDI Limit has not been breached

Test:	$\frac{SAIFI_{Assess\ 2013}}{SAIFI_{Limit}} \leq 1$
SAIFI _{Assess 2013}	0.562
SAIFI _{Limit}	1.126
Result:	0.4994 < 1
Result:	SAIFI Limit has not been breached

Supporting evidence is presented in Appendices D and E.

3) Director Certification (Clause 11.1(c))

I Paul Donald LeGros, being director of Nelson Electricity Limited certify that, having made all reasonable enquiry, to the best of my knowledge and belief, the attached Annual Compliance Statement of Nelson Electricity Limited, and related information, prepared for the purposes of the *Electricity Distribution Services Default Price-Quality Path Determination 2010* are true and accurate.



Paul Donald Le Gros

12 June 2013

4. Auditor's Report (Clause 11.2)



4. Auditor's Report (Clause 11.2)

INDEPENDENT AUDITOR'S REPORT

TO THE READERS OF THE ANNUAL COMPLIANCE STATEMENT OF NELSON ELECTRICITY LIMITED FOR THE ASSESSMENT PERIOD ENDED ON 31 MARCH 2013

The Auditor-General is the auditor of Nelson Electricity Limited (the company). The Auditor-General has appointed me, Michael Wilkes, using the staff and resources of Deloitte, to provide an opinion, on her behalf, on the company's Annual Compliance Statement for the assessment period ended on 31 March 2013 on pages 2 to 3 and 7 to 14 regarding compliance with the Electricity Distribution Default Price-Quality Path Determination 2010.

We have audited the Annual Compliance Statement in respect of the default price-quality path prepared by the company for the assessment period ended on 31 March 2013 and dated 12 June 2013 for the purposes of clause 11 of the Electricity Distribution Default Price-Quality Path Determination 2010 (the Determination).

Directors' Responsibilities

The Directors of the company 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 the International Standards on Auditing, International Standards on Auditing (New Zealand) and the External Reporting Board on Assurance Engagements 3100: *Compliance Engagements*. Those standards require that we comply with ethical and quality control requirements and plan and perform the audit to obtain reasonable assurance about whether the Annual Compliance Statement has been prepared in accordance with the Determination and 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.

In relation to the price path set out in clause 8 of the Determination, our audit included examination, on a test basis, of evidence relevant to the amounts and disclosures contained on pages 2 and 7 to 11 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 3 and 12 to 14 of the Annual Compliance Statement.

Deloitte.

Our audit also included assessment of the significant estimates and judgements, if any, made by the company in the preparation of the Annual Compliance Statement and whether adequate information has been disclosed in accordance with clause 11.1(b) of the Determination.

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

Limitations and Use of this Independent Auditor's Report

This independent auditor's report has been prepared solely for the Directors of Nelson Electricity Limited 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 Nelson Electricity Limited 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 the company's compliance with the Determination are undertaken on a test basis, our engagement cannot be relied on to detect all instances where the company may not have complied with the Determination. Our opinion has been formed on the above basis.

Independence

We have no relationship with, or interests in the company other than in our capacities as auditors of the Annual Financial Statements and auditors pursuant to the Electricity Distribution (Information Disclosure Requirements) 2008 on behalf of the Auditor-General.

Opinion

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

Our audit was completed on 12 June 2013 and our opinion is expressed as at that date.



Michael Wilkes
Deloitte
On behalf of the Auditor-General
Christchurch, New Zealand

Appendix A – Price Path Compliance Calculations (Clause 11.1(b)(i))

Notional Revenue for the year ending March 2013		
Term	Description	Value \$
$P_{2013} * Q_{2011}$	Prices at 31 March 2013 multiplied by 31 March 2011 Base Quantities	9,690,889
K_{2013}	Transmission Charges for year ending 31 March 2013	2,651,611
	Avoided Transmission Charges for year ending 31 March 2013	-
	Rates for year ending 31 March 2013	24,399
	Electricity Authority Levies for year ending 31 March 2013	71,078
	Commerce Act Levies for year ending 31 March 2013	10,395
NR_{2011}	Notional Revenue for the year ending 31 March 2013	6,933,407

Supported by P*Q schedules presented in Appendix B

Maximum Notional Revenue for the year ending March 2013		
Term	Description	Value \$
$P_{Max} * Q_{2010}$	Maximum Prices between 1 April 2012 and 31 March 2013 multiplied by 31 March	9,690,889
K_{2013}	Transmission Charges for year ending 31 March 2013	2,651,611
	Avoided Transmission Charges for year ending 31 March 2013	-
	Rates for year ending 31 March 2013	24,399
	Electricity Authority Levies for year ending 31 March 2013	71,078
	Commerce Act Levies for year ending 31 March 2013	10,395
NR_{Max}	Notional Revenue for the year ending 31 March 2013	6,933,407

Supported by P*Q schedules presented in Appendix B

Clause 8.5

Allowable Notional Revenue 2013		
Term	Description	Value \$
$P_{2012} * Q_{2011}$	Prices at 31 March 2012 multiplied by 31 March 2011 Base Quantities	9,043,197
K_{2012}	Transmission Charges for year ending 31 March 2012	2,413,506
	Avoided Transmission Charges for 2012	-
	Rates for year ending 31 March 2012	22,623
	Electricity Commission Levies for year ending 31 March 2012	24,080
	Commerce Act Levies for year ending 31 March 2012	9,675
$Rt-I-NRt-I$	Allowable notional revenue 2012 less the notional revenue 2012	201,926
X	X Factor	-
$(1 + \Delta CPI_{2012})$	Average change in Consumer Price Index	1.0459
R_{2012}	Allowable Notional Revenue under the CPI-X Price Path for the year ending 31 March 2012	7,086,223

Supported by P*Q schedules presented in Appendix B

ΔCPI_{2013}			
Numerator		Denominator	
$CPI_{Dec2010}$	1137	$CPI_{Dec2009}$	1093
$CPI_{Mar2011}$	1146	$CPI_{Mar2010}$	1097
$CPI_{Jun2011}$	1157	$CPI_{Jun2010}$	1099
$CPI_{Sep2011}$	1162	$CPI_{Sep2010}$	1111
Total	4602	Total	4400
ΔCPI_{2013}	4.59%		

Appendix B – Price and Quantity Schedules (Clause 11.1(b)(i))

Revenue Table using 31 March 2013 Prices and 2010/2011 Quantities

Number of Days:		365								
Tariff or Fee	Number of ICPs at 31/03/2011	kWh at 31/3/2011	kVA at 31/3/2011	Distribution Charges				Notional Distribution Revenue (\$)		Total Revenue (\$)
				Fixed			Variable (c/kWh)	Fixed	Variable	
				\$/day	c/kVA/day	Other				P ₂₀₁₃
Group 0										
Streetlights	1			261.00				95,265		95,265
Unmetered Fixed	27			0.05600				552		552
Unmetered Capacity			2.050		94.000			703		703
Builders Temp	15			0.56				3,066		3,066
BT-kWh		9,468					8.22	-	778	778
Group 1										
Fixed	1966		29,490		1.00			107,639		107,639
Anytime		5,789,910					8.22	-	475,931	475,931
Controlled		2,924,559					5.00	-	146,228	146,228
Nightrate		313,034					3.25	-	10,174	10,174
Group 2										
Fixed	6941		142,988		4.80			2,505,150		2,505,150
Anytime		59,121,957					5.15	-	3,044,781	3,044,781
Controlled		13,625,466					3.10	-	422,389	422,389
Nightrate		1,665,173					2.10	-	34,969	34,969
Time of Use										
Metered Installation Charge	94			1.10				37,741		37,741
Energy		46,545,318					1.70	-	791,270	791,270
Winter Demand			13,740		19.00			952,869		952,869
Capacity Supply Group 3	3			2.02				2,208		2,208
Capacity Supply Group 4	1			3.31				1,209		1,209
Capacity Supply Group 5	7			5.28				13,490		13,490
Capacity Supply Group 6	8			6.62				19,342		19,342
Capacity Supply Group 7	36			10.46				137,497		137,497
Capacity Supply Group 8	11			14.40				57,816		57,816
Capacity Supply Group 9	13			24.00				113,880		113,880
Capacity Supply Group 10	9			36.00				118,260		118,260
Capacity Supply Group 11	3			48.00				52,560		52,560
Capacity Supply Group 12	1			72.00				26,280		26,280
Capacity Supply Group 13	1			96.00				35,040		35,040
Capacity Supply Group 15	1			115.20				42,048		42,048
Power Factor			705			72.00		50,735		50,735
TOU Sealord										
Fixed	1					384,922		384,922		384,922
Power Factor			85			72.00		6,098		6,098
Σ P₂₀₁₃ Q₂₀₁₁										9,690,889

Revenue Table using 31 March 2012 Prices and 2010/2011 Quantities

Number of Days:		365									
Tariff or Fee	Number of ICPs at 31/03/2011	kWh at 31/3/2011	kVA at 31/3/2011	Distribution Charges			Variable (c/kWh)	Notional Distribution Revenue (\$)		Total Revenue (\$)	
				Fixed		Fixed		Variable			
				\$/day	c/kVA/day		Other		P ₂₀₁₂	Q ₂₀₁₁	
Group 0											
Streetlights	1			242.60				88,549		88,549	
Unmetered Fixed	27			0.05069				500		500	
Unmetered Capacity			2,050		87.123			652		652	
Builders Temp	15			0.52				2,847		2,847	
BT-kWh		9,468				7.60		-	720	720	
Group 1											
Fixed	1,966		29,490		1.00			107,639		107,639	
Anytime		5,789,910				7.60		-	440,033	440,033	
Controlled		2,924,559				4.60		-	134,530	134,530	
Nightrate		313,034				2.90		-	9,078	9,078	
Group 2											
Fixed	6,941		142,988		4.40			2,296,387		2,296,387	
Anytime		59,121,957				4.78		-	2,826,030	2,826,030	
Controlled		13,625,466				3.02		-	411,489	411,489	
Nightrate		1,665,173				2.09		-	34,802	34,802	
Time of Use											
Metered Installation Charge	94			1.10				37,741		37,741	
Energy		46,545,318				1.64		-	763,343	763,343	
Winter Demand			13,740		17.92			898,706		898,706	
Capacity Supply Group 3	3			1.85				2,026		2,026	
Capacity Supply Group 4	1			3.04				1,110		1,110	
Capacity Supply Group 5	7			4.84				12,366		12,366	
Capacity Supply Group 6	8			6.07				17,724		17,724	
Capacity Supply Group 7	36			9.59				126,013		126,013	
Capacity Supply Group 8	11			13.20				52,998		52,998	
Capacity Supply Group 9	13			22.00				104,390		104,390	
Capacity Supply Group 10	9			33.00				108,405		108,405	
Capacity Supply Group 11	3			44.00				48,180		48,180	
Capacity Supply Group 12	1			66.00				24,090		24,090	
Capacity Supply Group 13	1			88.00				32,120		32,120	
Capacity Supply Group 14	1			105.60				38,544		38,544	
Power Factor			705			66.17		46,629		46,629	
TOU Sealord											
Fixed	1					369,953		369,953		369,953	
Power Factor			85			66.17		5,605		5,605	
Σ P₂₀₁₂ Q₂₀₁₁										9,043,197	

Appendix C – Pass Through Costs (Clause 11.1(b)(ii))

Pass Through Costs for year ending March 2013				
K ₂₀₁₁	Actual (\$)	Forecast (\$)	Variance (\$)	Variance (%)
Transmission	2,651,611	2,648,940	2,671	.1%
Avoided Transmission	-		-	-
Rates	24,399	23,000	1,399	5.73%
Electricity Authority Levies	71,078	22,000	49,078	69.05%
Commerce Act Levies	10,395	18,000	(7,605)	(73.17)%
Total Pass Through Costs	2,757,482	2,711,940	45,542	1.65%

- * **Electricity Authority Levies** are in excess of forecast due to the Nelson Electricity transmission services provider invoicing Nelson Electricity the Electricity Authority related costs for the volume of electricity conveyed to the Nelson Electricity network. Nelson Electricity is also being invoiced levies as an Industry Participant for the same volumes.
- * **Commerce Act Levies** are less than the forecast due to an inaccurate forecast based on Commerce Act Levies for year ending 31 March 2011.

Appendix D – Quality Standard Compliance Calculations (Clause 11.1(b)(iv))

Reliability Data (Before Normalisation)

Year	SAIDI (Interruption Duration)			SAIFI (Interruption Frequency)		
	Class B	Class C	Total	Class B	Class C	Total
2005	12.03	38.63	50.66	0.09	0.75	0.84
2006	12.19	10.16	22.35	0.08	0.16	0.24
2007	9.29	16.46	25.75	0.06	0.21	0.27
2008	4.67	12.27	16.93	0.03	0.16	0.18
2009	28.63	87.18	115.81	0.21	1.68	1.90
	Reference Period Total SAIDI		231.51	Reference Period Total SAIFI		3.43
	Reference Period Average SAIDI		46.30	Reference Period Average SAIFI		0.69
2013	10.21	33.40	43.61	0.05	0.51	0.56

Reliability Limit Calculations

SAIDI Boundary Calculations		
α_{SAIDI}	-1.3132	The average of the natural logarithm (ln) of each daily SAIDI Value in the non-zero data set
β_{SAIDI}	2.0581	The standard deviation of the natural logarithm (ln) of each daily SAIDI Value in the non-zero data set
$B_{SAIDI} = e^{(\alpha_{SAIDI} + 2.5 * \beta_{SAIDI})}$	46.1580	SAIDI Boundary Value

SAIFI Boundary Calculations		
α_{SAIFI}	-6.0552	The average of the natural logarithm (ln) of each daily SAIFI Value in the non-zero data set
β_{SAIFI}	2.1813	The standard deviation of the natural logarithm (ln) of each daily SAIFI Value in the non-zero data set
$B_{SAIFI} = e^{(\alpha_{SAIFI} + 2.5 * \beta_{SAIFI})}$	0.5477	SAIFI Boundary Value

Event Days exceeding SAIDI Boundary Value within the Reference Dataset				
Date	Pre-Normalised SAIDI	Pre-Normalised SAIFI	Normalised SAIDI	Normalised SAIFI
			-	-
			-	-
			-	-
			-	-
			-	-
			-	-
			-	-
			-	-
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			-	-

SAIDI Limit

μ_{SAIDI}	46.3026	The average annual SAIDI Value in the Normalised Reference Dataset
σ_{SAIDI}	25.2338	The standard deviation of daily SAIDI Values in the Normalised Reference Dataset multiplied by $\sqrt{365}$
$SAIDI_{Limit} = \mu_{SAIDI} + \sigma_{SAIDI}$	71.5364	SAIDI Limit Value

SAIFI Limit

μ_{SAIFI}	0.6853	The average annual SAIFI Value in the Normalised Reference Dataset
σ_{SAIFI}	0.4404	The standard deviation of daily SAIFI Values in the Normalised Reference Dataset multiplied by $\sqrt{365}$
$SAIFI_{Limit} = \mu_{SAIFI} + \sigma_{SAIFI}$	1.1256	SAIFI Limit Value

Reliability Assessment Calculations

Event Days exceeding SAIDI Boundary Value within the Assessment Dataset

Date	Pre-Normalised SAIDI	Pre-Normalised SAIFI	Normalised SAIDI	Normalised SAIFI
			-	-
			-	-
			-	-
			-	-
			-	-
			-	-
			-	-

Assessed SAIDI Value

$SAIDI_{2013}$	43.61	The sum of daily SAIDI Values in the 1 April 2012 - 31 March 2013 Normalised Assessment Dataset
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Assessed SAIFI Value

$SAIFI_{2013}$	0.56	The sum of daily SAIFI Values in the 1 April 2012 - 31 March 2013 Normalised Assessment Dataset
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Appendix E – Policies and Procedures for Recording SAIDI and SAIFI (Clause 11.1(b)(v))

Nelson Electricity Limited follows the procedure “NEL Network System Outage Statistics” to record SAIDI and SAIFI statistics. The procedure covers the collection of customer numbers, the assessments required to assess the numbers of customers affected, the times outages occur and where the data is to be stored.

Wherever possible outage times are collected from an accurate electronic source, the SCADA being the preferred source, other sources are from phone records from the Nelson Electricity call centre, fault forms received from the Nelson Electricity fault contractor or referring to written switching instructions.

Calculations of customer minutes are prepared on the switching record for each individual outage based on switching times and ICP records. The customer minutes for each event are then added to the SAIDI/SAIFI Spreadsheet which summarises all events for the year and is used to calculate the annual SAIDI and SAIFI. The numbers of outages on the Nelson Electricity network are low compared to other Electricity Line Companies and so it is a relatively easy task to manage these data requirements. A hard copy summary of each outage is held on file.



NEL Network System Outage Statistics Procedure

Background:

Nelson Electricity has to collect and record accurate information regarding all transmission, sub-transmission and 11kV outages. The methods and information used has to be robust as the information is used in the disclosure of both SAIDI and SAIFI statistics as part of the Quality Threshold disclosure.

Purpose:

To ensure all information used in the outage statistic information is as accurate as possible. Evidence of outage times and consumer numbers must also be collected.

Scope:

Applies to all outages both planned and unplanned regarding transmission, sub-transmission and 11kV.

Procedure:

The Asset Manager is responsible for the collection, assessment and reporting of all network outage statistics. The information used in the assessments can be from many sources:

- ICP Database
- New Connections
- SCADA system
- Fault forms
- Call Care (fault call reports)
- Control room switching instructions

These sources of information are all valid and defensible sources of information.

ICP Database and New Connections:

The ICP Database and New Connections are updated as ICPs are added and removed from the network. The Business Systems Administrator ensures that these databases are maintained and accurate.

SCADA System:

The SCADA System installed in 2004 has a detailed reporting function. All reports are time stamped. This gives accurate timings of any 33kV or 11kV feeder outages and restoration times.

Fault Forms:

Fault forms provided by the NEL fault provider contain times of fault and restoration times recorded from the contractors who were working on the fault. This source of information is used if there are no other sources.

Call Care:

All fault calls are initially answered by the NEL answer phone service provided by Call Care. All calls are logged and time stamped and all faults reported to NEL the next day. This source of information is used as NEL receives calls as soon as an outage occurs.

Control Room Switching Instructions:

The switching instructions are a valuable source of information. This is used mainly for the restoration times especially when backfeeding areas in the restoration phase.

The Asset Manager uses all these sources to evaluate the outage statistics in the SAIDI Stats Spreadsheet.

Calculations of customer minutes are prepared on the switching record for each individual outage based on switching times and ICP records. The customer minutes for each event are then added to the SAIDI/SAIFI Spreadsheet which summarises all events for the year and is used to calculate the annual SAIDI and SAIFI. The numbers of outages on the Nelson Electricity network are low compared to other Electricity Line Companies and so it is a relatively easy task to manage these data requirements. A hard copy summary of each outage is held on file.

The Asset Manager reports to the General Manager all individual unplanned outage statistics and provides monthly summaries, which are used and reported to NEL Directors.

The outage statistics are also collected and accumulated for the year from 1 April – 31 March the following year. This accumulated result is used in all the information disclosures including the Quality Threshold disclosure.

The Business System Administrator audits the results to ensure process and results are accurate.

Outage Statistics Reporting Flow Chart

