

OtagoNet Joint Venture

DEFAULT PRICE QUALITY PATH COMPLIANCE STATEMENT

FOR THE ASSESSMENT DATE 31 MARCH 2012

*Pursuant to the Commerce Act (Electricity Distribution Default Price-
Quality Path) Determination 2010*

23 May 2012

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

OtagoNet Joint Venture does comply with the price path at the assessment date, 31 March 2012, as specified in the *Commerce Act (Electricity Distribution 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:	$\frac{NR_{2012}}{R_{2012}} \leq 1$
NR_{2012} :	\$ 22,729,184
R_{2012} :	\$ 22,828,605
Result:	0.9956 < 1
Result:	Price Path has not been breached

Test:	$\frac{NR_{Max}}{R_{2012}} \leq 1$
NR_{Max} :	\$ 22,729,184
R_{2012} :	\$ 22,828,605
Result:	0.9956 < 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))

OtagoNet Joint Venture does comply with all requirements of the quality standards at the assessment date, 31 March 2012, as specified in the *Commerce Act (Electricity Distribution 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:	$\frac{SAIDI_{Assess\ 2012}}{SAIDI_{Limit}} \leq 1$	
SAIDI _{Assess 2012}		276.2575
SAIDI _{Limit}		361.0754
Result:	0.7651	< 1
Result:	SAIDI Limit has not been exceeded	

Test:	$\frac{SAIFI_{Assess\ 2012}}{SAIFI_{Limit}} \leq 1$	
SAIFI _{Assess 2012}		2.3090
SAIFI _{Limit}		3.1197
Result:	0.7401	< 1
Result:	SAIFI Limit has not been exceeded	

Supporting evidence is presented in Appendices D and E.

Prior Period Reliability Assessment (9.1(b))

Clause 9.1.(b) requires: compliance with annual reliability assessments for the two immediately preceding extant Assessment Periods

SAIDI _{Assess} 2011	247.0840	SAIFI _{Assess} 2011	2.26
SAIDI _{Limit}	361.0750	SAIFI _{Limit}	3.12
0.6843	< 1	0.7231	< 1
	<i>Does not Exceed Limit</i>		<i>Does not Exceed Limit</i>

Compliance Summary

Clause 9.1 A Non-exempt EDB must, in respect of each Assessment Period, either:

(a) comply with the annual reliability assessment specified in clause 9.2; or

(b) have complied with those annual reliability assessments for the two immediately preceding extant Assessment Periods

	SAIDI	SAIFI	Compliance
Compliance with 9.1(a)	Does not Exceed Limit	Does not Exceed Limit	<i>Complies</i>
or			
Compliance with 9.1(b)	Does not Exceed Limit	Does not Exceed Limit	<i>Complies</i>
Clause 9.1 Result:	<i>Complies with Quality Standard</i>		

3) Director Certification (Clause 11.1(c))

We Neil Douglas Boniface and Kenneth John Forrest, being directors of companies which are parties to the OtagoNet Joint Venture certify that, having made all reasonable enquiry, to the best of our knowledge and belief, the attached Annual Compliance Statement of OtagoNet Joint Venture, and related information, prepared for the purposes of the *Commerce Act (Electricity Distribution Default Price-Quality Path) Determination 2010* are true and accurate.



Neil Douglas Boniface



Kenneth John Forrest

23 May 2012



Independent Auditors' Report **to the readers of the Annual Compliance Statement of OtagoNet Joint Venture for the assessment period ended on 31 March 2012**

The Auditor-General is the auditor of OtagoNet Joint Venture (the joint venture). The Auditor-General has appointed me, Robert Harris, using the staff and resources of PricewaterhouseCoopers, to provide an opinion, on her behalf, on OtagoNet Joint Venture's Annual Compliance Statement for the assessment period ended on 31 March 2012 on pages 2 to 4 and 8 to 23 regarding compliance with the Commerce Act (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 OtagoNet Joint Venture for the assessment period ended on 31 March 2012 and dated 23 May 2012 for the purposes of clause 11 of the Commerce Act (Electricity Distribution Default Price-Quality Path) Determination 2010 ("the Determination").

Directors' Responsibilities

The Directors of OtagoNet Joint Venture 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 New Zealand Institute of Chartered Accountants Standard on Assurance Engagements 3100: *Compliance Engagements*. This standard requires 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 8 to 19 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 2012, 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 20 to 23 of the Annual Compliance Statement.



Independent Auditors' Report **OtagoNet Joint Venture**

Our audit also included assessment of the significant estimates and judgments, if any, made by the joint venture 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 OtagoNet Joint Venture 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 OtagoNet Joint Venture 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 joint venture's compliance with the Determination are undertaken on a test basis, our engagement cannot be relied on to detect all instances where the joint venture 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 joint venture, other than the provision of other professional advisory services. We are not aware of any relationships between our firm and OtagoNet Joint Venture that, in our professional judgment, may reasonably be thought to impair our independence.

Opinion

In our opinion, the Annual Compliance Statement of OtagoNet Joint Venture for the Assessment Period ended on 31 March 2012, has been prepared, in all material respects, in accordance with the Determination.

Our audit was completed on 23 May 2012 and our opinion is expressed as at that date.

A handwritten signature in blue ink, appearing to read 'Robert Harris', is written over a light blue horizontal line.

Robert Harris
On behalf of the Auditor-General
Christchurch, New Zealand

PricewaterhouseCoopers

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

Clause 8.4

Notional Revenue for the year ending March 2012		
Term	Description	Value \$
$P_{2012} * Q_{2010}$	Prices at 31 March 2012 multiplied by 31 March 2010 Base Quantities	29,148,196
K_{2012}	Transmission Charges for year ending 31 March 2012	5,667,775
	Avoided Transmission Charges for year ending 31 March 2012	573,666
	Rates for year ending 31 March 2012	59,538
	Electricity Authority Levies for year ending 31 March 2012	58,383
	Commerce Act Levies for year ending 31 March 2012 + 1/5 of Commerce Act Levies for year ending 31 March 2010	59,650
NR_{2012}	Notional Revenue for the year ending 31 March 2012	22,729,184

Maximum Notional Revenue for the year ending March 2012		
Term	Description	Value \$
$P_{Max} * Q_{2010}$	Maximum Prices between 1 April 2011 and 31 March 2012 multiplied by 31 March 2010 Base Quantities	29,148,196
K_{2012}	Transmission Charges for year ending 31 March 2012	5,667,775
	Avoided Transmission Charges for year ending 31 March 2012	573,666
	Rates for year ending 31 March 2012	59,538
	Electricity Authority Levies for year ending 31 March 2012	58,383
	Commerce Act Levies for year ending 31 March 2012 + 1/5 of Commerce Act Levies for year ending 31 March 2010	59,650
NR_{Max}	Notional Revenue for the year ending 31 March 2012	22,729,184

Clause 8.5

Allowable Notional Revenue 2012		
Term	Description	Value \$
$P_{2011} * Q_{2010}$	Maximum Prices between 1 April 2010 and 31 March 2011 multiplied by 31 March 2010 Base Quantities	28,417,731
K_{2011}	Transmission Charges for year ending 31 March 2011	5,438,659
	Avoided Transmission Charges for 2011	569,480
	Rates for year ending 31 March 2011	51,327
	Electricity Commission Levies for year ending 31 March 2011	49,009
	Commerce Act Levies for year ending 31 March 2011 + 1/5 of Commerce Act Levies for year ending 31 March 2010	81,039
$R_{2011} - NR_{2011}$	Revenue Differential for year ending 31 March 2011	200,887
X	X Factor	0
$(1 + \Delta CPI_{2012})$	Average change in Consumer Price Index	1.0178
R_{2012}	Allowable Notional Revenue under the CPI-X Price Path for the year ending 31 March 2012	22,828,605

Supported by P*Q schedules presented in Appendix B

ΔCPI_{2012}			
Numerator		Denominator	
$CPI_{Dec2009}$	1093	$CPI_{Dec2008}$	1072
$CPI_{Mar2010}$	1097	$CPI_{Mar2009}$	1075
$CPI_{Jun2010}$	1099	$CPI_{Jun2009}$	1081
$CPI_{Sep2010}$	1111	$CPI_{Sep2009}$	1095
Total	4400	Total	4323
ΔCPI_{2012}	1.78%		

Revenue Differential 2011		
Term	Description	Value \$
R_{2011}	Allowable Notional Revenue under the CPI-X Price Path for the year ending 31 March 2011	22,170,487
NR_{2011}	Notional Revenue for the year ending 31 March 2011	21,969,600
$R_{2011} - NR_{2011}$	Allowable Notional Revenue less Notional Revenue for the year ending 31 March 2011	200,887

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

NR₃₀₁₂

Notional Revenue at Assessment Date (31 March 2012):

	Q = 31-03-10		P = 31-3-12		Rate	Total Fixed Charge
	Number	Average	kVA	Rate		
Domestic	9,391	10		\$ 50.96	\$ 4,785,654	
10% Fixed Charge Option Off Peak	1,186	1		\$ -	\$ -	
10% Fixed Charge Option Peak	616	1		\$ 0.068	\$ 15,289	
				Rate \$/kVA		
Commercial	3,462	16.50		\$ 84.94	\$ 4,852,028	
Unmetered	90	1		\$ 209.44	\$ 18,850	
				Watts		
Streetlights	9	256,600		0.392	\$ 100,587	
Total	14,754				\$ 9,772,407	

Variable Charges	Annual Day	Annual Night	Day	Night	Total Day	Total Night	Total
	kWHs	kWHs	\$/kWH	\$/kwh	\$	\$	Variable
Domestic, Commercial,							
Unmetered & Streetlights	102,953,942	39,797,389.20	\$ 0.11312	\$ 0.01310	\$ 11,646,150	\$ 521,346	
10% Fixed Charge Option	6,870,003	2,290,001.00	\$ 0.19110	\$ 0.02090	\$ 1,312,858	\$ 47,861	
Total Fixed & Variable					\$ 12,959,008	\$ 569,207	\$ 13,528,214
							\$ 23,300,621

	No ICPs	I	Annual MWh	14.59	\$/annum	\$ 7,704.24	\$/MWh	\$ 95.16	\$ 7,704.24	\$ 1,388.65	\$ 9,092.89
0001370610TG0A6	No ICPs	I	Annual MWh	14.59	\$/annum	\$ 7,704.24	\$/MWh	\$ 95.16	\$ 7,704.24	\$ 1,388.65	\$ 9,092.89
0001230785TG4F3	No ICPs	I	Annual MWh	146.02	\$/annum	\$ 5,313.28	\$/MWh	\$ 29.29	\$ 5,313.28	\$ 4,276.58	\$ 9,589.86
0001760205TGA1B	No ICPs	I	Annual MWh	83.17	\$/annum	\$ -	\$/MWh		\$ -	\$ -	\$ -
0001231172TGE88	No ICPs	I	Annual MWh	1,569.64	\$/annum	\$ 56,521.79	\$/MWh	\$ 33.19	\$ 56,521.79	\$52,097.24	\$108,619.03
0001731161TG636	No ICPs	I	Annual MWh	65.66	\$/annum	\$ 15,724.99	\$/MWh	\$ -	\$ 15,724.99	\$ -	\$ 15,724.99
0001731175TGE91	No ICPs	I	Annual MWh	98.11	\$/annum	\$ 11,998.40	\$/MWh	\$ -	\$ 11,998.40	\$ -	\$ 11,998.40
0001240297TG167	No ICPs	0	Annual MWh	-	\$/annum	\$ 12,783.63	\$/MWh	\$ 50.13	\$ -	\$ -	\$ -
0001230615TG210	No ICPs	I	Annual MWh	207.78	\$/annum	\$ 5,998.78	\$/MWh	\$ 26.90	\$ 5,998.78	\$ 5,590.33	\$ 11,589.11
0001940095TGC20	No ICPs	0	Annual MWh	-	\$/annum	\$ 28,428.64	\$/MWh	\$ 101.48	\$ -	\$ -	\$ -
Total Bulk & Generator											\$3,887,388.25

P2012*Q2010	\$29,148,196
K 2012	
Transmission (31 March 2012)	\$5,667,775
Avoided Transmission Charges (31 March 2012)	\$573,666
Rates (31 March 2012)	\$59,538
Electricity Authority Levies (31 March 2012)	\$58,383
CA Levies (31 March 2012)	\$59,650

NR_{max}

Maximum Notional Revenue at Assessment Date (31 March 2012):

As no prices have changed over the assessment period, Maximum Notional Revenue is the same as Notional Revenue at the Assessment Date (included in the NR 2012 table above).

R₂₀₁₂

Allowable Notional Revenue at Assessment Date (31 March 2012):

Fixed Charges	Q = 31-03-10		P = 31-3-11		Total Fixed Charge		
	Number	Average kVA	Average kVA	Rate \$/kVA			
Domestic	9,391		10	\$ 49.49	\$ 4,647,606		
				\$/day			
10% Fixed Charge Option Off Peak	1,186		1	\$ 0.000	\$0		
10% Fixed Charge Option Peak	616		1	\$ 0.068	\$ 15,289		
				Rate \$/kVA			
Commercial	3,462		16.50	\$ 82.49	\$ 4,712,076		
Unmetered	90		1	\$ 203.40	\$ 18,306		
				Watts			
Streetlights	9		256,600	\$0.381	\$ 97,765		
Total	14,754				\$9,491,042		
Variable Charges	Annual Day	Annual Night	Day	Night	Total Day	Total Night	Total
	kWHs	kWHs	\$/kWH	\$/kWH	\$	\$	Variable
Domestic, Commercial, Unmetered & Streetlights	102,953,942	39,797,389.20	0.10986	0.0127	\$ 11,310,520	\$ 505,427	
10% Fixed Charge Option	6,870,003	2,290,001.00	0.1855	0.0203	\$ 1,274,386	\$ 46,487	
Total Fixed & Variable					\$ 12,584,906	\$ 551,914	\$13,136,820
							\$22,627,861

Maximum Demand Customers						
Fixed Charges	Number	Total Capacity	Rate \$/kVA	Total	Total Fixed	Total Variable
		kVA				
	46	15050	\$ 40.10	\$ 603,505		
		Annual Maximum Demand	Rate \$/kVA			
	46	9246	\$ 33.93	\$313,716.78	\$ 917,222	
Variable Charges	kWh	\$/kWh	Total			
Summer Day	11,597,413	0.0351	\$ 407,069			
Winter Day	8,091,410	0.0670	\$ 542,124			
All Nights	7,174,608	0.0052	\$ 37,308		\$986,502	
Total Fixed & Variable					\$1,903,723	
Bulk & Generator	Total Annual					
	Line Charge					
Bulk Customers						
0001995995TGE58	\$ 1,877,905.53					
0001990133TG0E5	\$ 496,249.13					
0001990220TG58B	\$ 406,890.58					
Generator						
	\$ 299,491.92					
Half Hour Metered Individual	Units	Fixed	Units	Variable	Units	Total
0001700063TGC3B	No ICPs	1	\$/annum		\$/MWh	Total
			\$566,100.00		\$ -	\$566,100.00
0001090833TG6F1	No ICPs	1	\$/annum	24.32	\$/MWh	\$ 12,571.01
			\$ 9,964.50		\$ 107.16	\$ 9,964.50
						\$ 2,606.51
						\$ 9,964.50
						\$ -
						\$ 566,100.00
						\$ 12,571.01

0001230990TG51A	No ICPs	1	Annual MWh	845.48	\$/annum	\$ 28,484.60	\$/MWh	\$	36.52	\$ 28,484.60	\$30,877.07	\$ 59,361.67
1370610TGOA6	No ICPs	1	Annual MWh	14.59	\$/annum	\$ 8,895.05	\$/MWh	\$	93.65	\$ 8,895.05	\$ 1,366.63	\$ 10,261.68
0001230785TG4F3	No ICPs	1	Annual MWh	146.02	\$/annum	\$ 8,935.20	\$/MWh	\$	40.61	\$ 8,935.20	\$ 5,929.99	\$ 14,865.19
0001760205TGA1B	No ICPs	1	Annual MWh	83.17	\$/annum	\$	\$/MWh	\$	-	\$	\$	\$
0001231172TGE88	No ICPs	1	Annual MWh	1,569.64	\$/annum	\$ 51,851.90	\$/MWh	\$	31.93	\$ 51,851.90	\$50,118.67	\$101,970.57
0001731161TG536	No ICPs	1	Annual MWh	65.66	\$/annum	\$ 12,891.80	\$/MWh	\$	-	\$ 12,891.80	\$	\$ 12,891.80
0001731175TGE91	No ICPs	1	Annual MWh	98.11	\$/annum	\$ 16,096.50	\$/MWh	\$	-	\$ 16,096.50	\$	\$ 16,096.50
0001240297TG167	No ICPs	0	Annual MWh	-	\$/annum	\$ 12,785.95	\$/MWh	\$	50.14	\$	\$	\$
0001230615TG210	No ICPs	1	Annual MWh	207.78	\$/annum	\$ 5,664.80	\$/MWh	\$	28.04	\$ 5,664.80	\$ 5,826.18	\$ 11,490.98
0001940095TGC20	No ICPs	0	Annual MWh	-	\$/annum	\$ 40,255.85	\$/MWh	\$	50.32	\$	\$	\$
Total Bulk & Generator												\$ 3,886,146.55
P2011*Q2010												\$ 28,417,731
K 2011												
Transmission (31 March 2011)												\$ 5,438,659
Avoided Transmission Charges (31 March 2011)												\$ 569,480
Rates (31 March 2011)												\$ 51,327
Electricity Commission Levies (31 March 2011)												\$ 49,009
CA Levies (31 March 2011)												\$ 81,039
P₂₀₁₁Q₂₀₁₀ - K 2011												\$ 22,228,218

ΔCPI_{2012}		Numerator		Denominator	
		1093		CPI Dec 2008	1072
		1097		CPI Mar 2009	1075
		1099		CPI Jun 2009	1081
		1111		CPI Sep 2009	1095
		4400		Total	4323
				1.78%	
$R_{2011} - NR_{2011}$					\$ 200,887
$(1 + \Delta CPI_{2012})$	Average change in Consumer Price Index over 2012				1.0178
$(1-X)$	1-X Factor				1
R_{2012}	Allowable Notional Revenue under the CPI-X Price Path for the year ended 31 March 2012				\$ 22,828,605
NR_{2012} / R_{2012}	Expression must be less than or equal to 1 to avoid breaching 5(1)(a)				0.9956
$R_{2012} - NR_{2012}$	Value of Compliance or (Breach)				\$ 99,421

Revenue Differential 2011		
Term	Description	Value \$
R_{2011}	Allowable Notional Revenue under the CPI-X Price Path for the year ending 31 March 2011	22,170,487
NR_{2011}	Notional Revenue for the year ending 31 March 2011	21,969,600
$R_{2011} - NR_{2011}$	Allowable Notional Revenue less Notional Revenue for the year ending 31 March 2011	200,887

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

Pass Through Costs for year ending March 2012				
K ₂₀₁₁	Actual (\$)	Forecast (\$)	Variance (\$)	Variance (%)
Transmission	5,667,775	5,671,301	(3,525)	(0.1%)
Avoided Transmission	573,666	573,674	(8)	(0.0%)
Rates	59,538	52,986	6,552	11.0%
Electricity Authority Levies	58,383	54,000	4,383	7.5%
Commerce Act Levies	59,650	83,885	(24,235)	(40.6%)
Total Pass Through Costs	6,419,012	6,435,846	(16,834)	(0.3%)

Rates were above forecast due to higher than expected increases from the local councils. Commerce Act levies are down on budget due to a 40% decrease in the charges from the June 2011 quarter onwards.

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	76.41	98.00	174.41	0.45	1.27	1.73
2006	174.09	133.07	307.16	0.76	1.98	2.74
2007	293.42	176.82	470.24	1.31	2.21	3.53
2008	187.57	315.83	503.40	0.81	2.29	3.10
2009	163.62	106.70	270.32	0.72	2.09	2.81
	Reference Period Total SAIDI		1,725.75	Reference Period Total SAIFI		13.91
	Reference Period Average SAIDI		345.15	Reference Period Average SAIFI		2.78
2011	114.59	132.49	247.08	0.48	1.77	2.26
2012	99.87	220.91	320.78	0.46	1.90	2.37

Reliability Limit Calculations

SAIDI Boundary Calculations		
α_{SAIDI}	-0.6442	The average of the natural logarithm (ln) of each daily SAIDI Value in the non-zero data set
β_{SAIDI}	1.4527	The standard deviation of the natural logarithm (ln) of each daily SAIDI Value in the non-zero data set
$B_{SAIDI} = e^{(\alpha_{SAIDI} + 2.5 \cdot \beta_{SAIDI})}$	19.8376	SAIDI Boundary Value

SAIFI Boundary Calculations		
α_{SAIFI}	-5.5381	The average of the natural logarithm (ln) of each daily SAIFI Value in the non-zero data set
β_{SAIFI}	1.4201	The standard deviation of the natural logarithm (ln) of each daily SAIFI Value in the non-zero data set
$B_{SAIFI} = e^{(\alpha_{SAIFI} + 2.5 \cdot \beta_{SAIFI})}$	0.1370	SAIFI Boundary Value

Event Days exceeding SAIDI Boundary Value within the Reference Dataset

Date	Pre-Normalised SAIDI	Pre-Normalised SAIFI	Normalised SAIDI	Normalised SAIFI
29.06.05	21.0942	0.0736	19.8376	0.0736
04.04.06	32.7176	0.1715	19.8376	0.1370
26.04.06	28.0307	0.2249	19.8376	0.1370
02.09.06	28.7310	0.1124	19.8376	0.1124
23.06.07	22.7035	0.0406	19.8376	0.0406
23.10.07	78.0372	0.2305	19.8376	0.1370
21.11.07	48.4461	0.1583	19.8376	0.1370

SAIDI Limit

μ_{SAIDI}	320.9701
σ_{SAIDI}	40.1053

The average annual SAIDI Value in the Normalised Reference Dataset

The standard deviation of daily SAIDI Values in the Normalised Reference Dataset multiplied by $\sqrt{365}$

$SAIDI_{Limit} = \mu_{SAIDI} + \sigma_{SAIDI}$	361.0754
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SAIDI Limit Value

SAIFI Limit

μ_{SAIFI}	2.7349
σ_{SAIFI}	0.3848

The average annual SAIFI Value in the Normalised Reference Dataset

The standard deviation of daily SAIFI Values in the Normalised Reference Dataset multiplied by $\sqrt{365}$

$SAIFI_{Limit} = \mu_{SAIFI} + \sigma_{SAIFI}$	3.1197
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SAIFI Limit Value

Reliability Assessment Calculations

Event Days exceeding SAIDI Boundary Value within the 2012 Assessment Dataset

Date	Pre-Normalised SAIDI	Pre-Normalised SAIFI	Normalised SAIDI	Normalised SAIFI
12.05.11	23.5398	0.1526	19.8376	0.1370
17.05.11	56.0928	0.1152	19.8376	0.1152
25.10.11	24.3990	0.1815	19.8376	0.1370

Assessed SAIDI Value 2012

SAIDI ₂₀₁₂	276.2575	The sum of daily SAIDI Values in the 1 April 2011 - 31 March 2012 Normalised Assessment Dataset
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Assessed SAIFI Value 2012

SAIFI ₂₀₁₂	2.3090	The sum of daily SAIFI Values in the 1 April 2011 - 31 March 2012 Normalised Assessment Dataset
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Prior Period Assessed Values

Assessed SAIDI Value 2011

SAIDI ₂₀₁₁	247.0837	The sum of daily SAIDI Values in the 1 April 2010 - 31 March 2011 Normalised Assessment Dataset
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Assessed SAIFI Value 2011

SAIFI ₂₀₁₁	2.2559	The sum of daily SAIFI Values in the 1 April 2010 - 31 March 2011 Normalised Assessment Dataset
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Appendix E – Policies and Procedures for Recording SAIDI and SAIFI (Clause 11.1(b)(v))

OJV contracts PowerNet to manage its network via an Outsourcing Agreement.

PowerNet has a number of ISO 9002 procedures that govern the operational processes that surround the interruption, restoration and quality of supply to its customers. These procedures document the process by which managing, recording and reporting of outages is performed by PowerNet. This is carried out by following a series of flow charts, documents, forms and instructions contained within the following procedures:

PNM 65 – Planned Outages

PNM 69 – Network Faults, Defects and Supply Complaints

PNM 71 – Use of Operating Orders

Key items within these procedures that relate to the recording and reporting of SAIDI and SAIFI statistics include:

- Responsibilities for recording faults and outages at the system control operator level through to reviewing and reporting of faults and outages daily by management, weekly at operations meetings and monthly at board meetings.
- Methods by which notification of planned and unplanned outages are identified and captured from various sources such as customers, network equipment, contractors, Transpower, the public or emergency services.
- The use of Operating Orders for planned maintenance and unplanned fault restoration and how the information from these orders flow through to the Outage Reporting System in the form of duration of outages and number of customers affected.
- The recording of all faults and outages, however for the reporting of SAIDI and SAIFI only the inclusion of outages of a duration exceeding one minute or affecting more than three customers is recorded.
- The method of calculating SAIDI and SAIFI for outages which are progressively restored.
- The preparation, retention and archiving of supporting records and data.