



DEFAULT PRICE QUALITY PATH COMPLIANCE STATEMENT

FOR THE ASSESSMENT DATE 31 MARCH 2013

12 June 2013

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

Contents

1)	Summary of Compliance.....	3
2)	Compliance with the Price Path.....	4
3)	Compliance with Quality Standards	5
	Assessed Values and Reliability Limits	6
4)	Director Certification	7
5)	Auditor's Report.....	8
	Appendix A – Price Path Compliance Calculations.....	10
	Appendix B – Price and Quantity Schedules	13
	Appendix C – Pass Through Costs Comparison	16
	Appendix D – Quality Standard Compliance Calculations	17
	Appendix E – Prior Period Reliability Assessment	20
	Appendix F – Policies and Procedures for Recording SAIDI and SAIFI	21

1) Summary of Compliance

Alpine Energy Limited has complied with both the price path (clause 8) and quality standards (clause 9) of the *Commerce Act (Electricity Distribution Default Price-Quality Path) Determination 2010* (Determination) for the period ended 31 March 2013.

We are pleased to submit the following information in our *Default Price Quality Path Compliance Statement* pursuant to clause 11.1(a) of the Determination:

- price path under clauses 11.1(b)(i) and (ii)
 - the amount of allowable notional revenue and notional revenue
 - total pass-through costs and the amount of each component
 - prices and quantities
 - A comparison of actual and forecast figures for pass-through costs and explanatory notes of material variances
- quality standards under clauses 11.1(b)(iv) and (v)
 - assessed values and reliability limits
 - SAIDI and SAIFI statistics and calculations
 - two immediately preceding extant assessment periods (31 March 2011 and 2012)
 - a description of how SAIDI and SAIFI statistics were recorded
- director Certification under clause 11.1(c)
- auditor's report under clause 11.2.

2) Compliance with the Price Path

We complied with the price path at the assessment date, 31 March 2013, as specified by clause 8 of the Determination.

Clause 8.4 Compliance of the price path requires that:

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, such that:

$$\frac{NR_t}{R_t} \leq 1$$

Our compliance with price path is demonstrated at Table 1 and Table 2 below.

Table 1: Notional Revenue calculation

Test:	$\frac{NR_{2013}}{R_{2013}} \leq 1$	
NR ₂₀₁₂ :	\$	26,159,929
R ₂₀₁₂ :	\$	26,264,066
Result:	0.9960 < 1	
Result:	Price Path has not been breached	

Table 1 above shows that our notional revenue, derived using posted prices at 31 March 2013, was less than our allowable notional revenue.

Table 2: Maximum Notional Revenue calculation

Test:	$\frac{NR_{Max}}{R_{2013}} \leq 1$	
NR _{Max} :	\$	26,159,929
R ₂₀₁₂ :	\$	26,264,066
Result:	0.9960 < 1	
Result:	Price Path has not been breached	

Table 2 above shows that we did not exceed the allowable notional revenue at any time during the period.

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

3) Compliance with Quality Standards

We complied with the quality standards at the assessment date, 31 March 2013, as specified by clause 9.1 of the Determination.

Clause 9.1—Compliance with quality standards requires that:

A Non-exempt DEB must, in respect of each Assessment Period other than the First Assessment Period, either:

- (a) Comply with the annual reliability assessment specified in clause 9.2 for that Assessment Period: or*
- (b) Have complied with those annual reliability assessments for the two immediately preceding extant Assessment Periods.*

Our compliance with the quality standards, under clauses 9.1(a), is demonstrated at Table 3 below.

Table 3: Performance against the quality standards

	SAIDI	SAIFI	Compliance
Compliance with 9.1(a)	Within Limit	Within Limit	<i>Complies</i>
or			
Compliance with 9.1(b)			<i>Complies</i>
2012	Within Limit	Within Limit	<i>Complies</i>
2011	Exceeds Limit	Exceeds Limit	<i>Complies</i>
Clause 9.1 Result:	<i>Complies with Quality Standard</i>		

Table 3 above also shows that we have complied with clause 9.1(b) despite having exceeded the quality standards at the 31 March 2011 assessment date.¹

¹ The Determination applies the 'two out of three' rule to performance against the quality standard. The two out of three rules means that a electricity distribution business must exceed the SAIDI and/or SAIFI limit at two out of three years to be considered non-compliant with (to have breached) the quality standard. As the 31 March 2011 assessment period was the first assessment period the rule could not apply, as there were not at least two periods of performance, and as such exceeding the quality standards did not amount to non-compliance.

Assessed Values and Reliability Limits

Clause 9.2—Annual reliability assessment requires that:

A Non-exempt EDB's Assessed Values for an Assessment Period must not exceed its Reliability Limits for that Assessment Period, such that:

$$\frac{SAIDI_{ASSESS,t}}{SAIDI_{LIMIT}} \leq 1; \text{ and}$$

$$\frac{SAIFI_{ASSESS,t}}{SAIFI_{LIMIT}} \leq 1$$

Our compliance with the SAIDI and SAIFI limits is demonstrated at Table 4 and Table 5 below.

Table 4: Assessed SAIDI calculation

Test:	$\frac{SAIDI_{Assess\ 2013}}{SAIDI_{Limit}} \leq 1$	
SAIDI Assess 2013	148.2667	
SAIDI Limit	164.2206	
	0.9029	< 1
Clause 9.1(a) Result:	Within Limit	

Table 5: Assessed SAIFI calculation

Test:	$\frac{SAIFI_{Assess\ 2013}}{SAIFI_{Limit}} \leq 1$	
SAIFI Assess 2013	1.2979	
SAIFI Limit	1.6943	
	0.7661	< 1
Clause 9.1(a) Result:	Within Limit	

Supporting evidence is presented in Appendices D, E, and F.

4) Director Certification

I, Alister John France, being a director of Alpine Energy Limited certify that, having made all reasonable enquiry, to the best of my knowledge and belief, the attached Annual Compliance Statement of Alpine Energy Limited, and related information, prepared for the purposes of the *Commerce Act (Electricity Distribution Default Price-Quality Path) Determination 2010* are true and accurate.



12 June 2013

5) Auditor's Report

[Insert signed Auditor's Report]

Appendix A – Price Path Compliance Calculations

Table 6: Notional Revenue Calculation

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	38,947,423
K_{2013}	Transmission Charges for year ending 31 March 2013	12,063,915
	Avoided Transmission Charges for year ending 31 March 2013	489,079
	Rates for year ending 31 March 2013	55,469
	Electricity Commission Levies for year ending 31 March 2013	116,378
	Commerce Act Levies for year ending 31 March 2013 + 1/5 of Commerce Act Levies for year ending 31 March 2010	62,653
NR_{2013}	Notional Revenue for the year ending 31 March 2013	26,159,929

Table 7: Maximum Notional Revenue Calculation

Maximum Notional Revenue for the year ending March 2013		
Term	Description	Value \$
$P_{Max} * Q_{2011}$	Maximum Prices between 1 April 2012 and 31 March 2013 multiplied by 31 March 2011 Base Quantities	38,947,423
K_{2013}	Transmission Charges for year ending 31 March 2013	12,063,915
	Avoided Transmission Charges for year ending 31 March 2013	489,079
	Rates for year ending 31 March 2013	55,469
	Electricity Authority Levies for year ending 31 March 2013	116,378
	Commerce Act Levies for year ending 31 March 2013 + 1/5 of Commerce Act Levies for year ending 31 March 2010	62,653
NR_{Max}	Notional Revenue for the year ending 31 March 2013	26,159,929

Table 8: Allowable Notional Revenue Calculation

Allowable Notional Revenue 2013		
Term	Description	Value \$
$P_{2012} * Q_{2011}$	Maximum Prices between 1 April 2011 and 31 March 2012 multiplied by 31 March 2011 Base Quantities	35,387,871
K_{2012}	Transmission Charges for year ending 31 March 2012	9,666,747
	Avoided Transmission Charges for 2012	479,702
	Rates for year ending 31 March 2012	54,308
	Electricity Commission Levies for year ending 31 March 2012	106,305
	Commerce Act Levies for year ending 31 March 2012 + 1/5 of Commerce Act Levies for year ending 31 March 2010	43,255
$R_{2012} - NR_{2012}$	Revenue Differential for year ending 31 March 2012	73,677
X	X Factor	0
$(1 + \Delta CPI_{2013})$	Average change in Consumer Price Index	1.0459
R_{2013}	Allowable Notional Revenue under the CPI-X Price Path for the year ending 31 March 2013	26,264,066

Table 9: Change in CPI Calculation

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%		

Table 10: Revenue Differential 2012

Revenue Differential 2012		
Term	Description	Value \$
R_{2012}	Allowable Notional Revenue under the CPI-X Price Path for the year ending 31 March 2012	25,287,456
NR_{2012}	Notional Revenue for the year ending 31 March 2012	25,213,779
$R_{2012} - NR_{2012}$	Allowable Notional Revenue less Notional Revenue for the year ending 31 March 2012	73,677

Appendix B – Price and Quantity Schedules

Table 11: Prices and Quantities for Notional Revenue

2012/13 Pricing Schedule										2011 Quantities				Revenue - 2012 Prices			Revenue - 2013 Prices		
	Fixed per annum	Distribution		Demand per kW per annum	Transmission		RCPD per kW	Demand per kW per annum	Day kWh	Night kWh	RCPD kW	Demand kW	Number of ICPs	Distribution	Transmission	Total	Distribution	Transmission	Total
		Variable Day per kWh	Variable Night per kWh		Variable Day per kWh	Variable Night per kWh								Distribution	Transmission	Total	Distribution	Transmission	Total
LOWHCA	Low Charge	\$54.75	\$0.0591	\$0.0367	\$0.00	\$0.00	\$0.0183	\$0.0037	2,650,454	991,750			705	\$208,126	\$45,581	\$253,707	\$231,638	\$52,173	\$283,811
LOWLCA	Low Charge	\$54.75	\$0.0537	\$0.0313	\$0.00	\$0.00	\$0.0183	\$0.0037	18,816,343	7,040,724			5,005	\$1,389,632	\$323,592	\$1,713,224	\$1,504,836	\$370,390	\$1,875,226
LOWUHCA	Low Uncontrolled	\$54.75	\$0.0591	\$0.0367	\$0.00	\$0.00	\$0.0467	\$0.0321	0	0			0	\$0	\$0	\$0	\$0	\$0	\$0
LOWUHCA	Low Uncontrolled	\$54.75	\$0.0537	\$0.0313	\$0.00	\$0.00	\$0.0467	\$0.0321	22,557	8,440			6	\$1,666	\$1,160	\$2,826	\$1,804	\$1,324	\$3,128
O15	O15HCA	\$310.70	\$0.0307	\$0.0083	\$0.00	\$0.00	\$0.0183	\$0.0037	50,068,037	18,734,525			6,416	\$3,286,024	\$861,039	\$4,147,063	\$3,686,036	\$985,565	\$4,671,599
O15	O15LCA	\$261.51	\$0.0307	\$0.0083	\$0.00	\$0.00	\$0.0183	\$0.0037	115,113,389	43,073,281			16,289	\$7,478,932	\$1,979,649	\$9,458,580	\$8,051,126	\$2,265,946	\$10,417,172
O15	O15UHCA	\$310.70	\$0.0307	\$0.0083	\$0.00	\$255.62	\$0.0183	\$0.0037	24,335	9,106			28	\$8,378	\$6,697	\$15,075	\$9,522	\$7,636	\$17,159
O15	O15ULCA	\$261.51	\$0.0307	\$0.0083	\$0.00	\$255.62	\$0.0183	\$0.0037	2,213	828			37	\$9,027	\$8,335	\$17,362	\$9,751	\$9,502	\$19,252
360	360HCA	\$1,136.18	\$0.0307	\$0.0083	\$0.00	\$0.00	\$0.0183	\$0.0037	8,165,717	3,055,459			310	\$559,701	\$140,429	\$700,130	\$628,264	\$160,738	\$789,001
360	360LCA	\$972.05	\$0.0307	\$0.0083	\$0.00	\$0.00	\$0.0183	\$0.0037	14,698,290	5,499,826			558	\$953,553	\$252,772	\$1,206,325	\$1,039,290	\$289,328	\$1,328,618
360	360UHCA	\$1,136.18	\$0.0307	\$0.0083	\$0.00	\$255.62	\$0.0183	\$0.0037	131,705	49,282			5	\$9,027	\$3,386	\$12,414	\$10,133	\$3,871	\$14,004
360	360ULCA	\$972.05	\$0.0307	\$0.0083	\$0.00	\$255.62	\$0.0183	\$0.0037	105,364	39,425			4	\$6,836	\$2,709	\$9,544	\$7,750	\$3,097	\$10,641
ASSHCA	Assessed	\$103.41	\$0.0307	\$0.0083	\$0.00	\$0.00	\$0.0183	\$0.0037	80,256,361	30,030,432			1,008	\$3,218,534	\$3,563,468	\$6,782,002	\$3,572,926	\$4,068,528	\$7,641,454
ASSLCA	Assessed	\$88.30	\$0.0307	\$0.0083	\$0.00	\$0.00	\$0.0183	\$0.0037	21,151,592	7,914,531			311	\$938,128	\$1,306,632	\$2,244,760	\$1,026,763	\$1,491,437	\$2,518,200
TOU400HCA	TOU 400V	\$103.47	\$0.0118	\$0.0018	\$54.37	\$0.00	\$0.0030	\$0.0018	10,372,908	4,340,120			4,813	\$350,280	\$326,619	\$676,899	\$395,103	\$371,413	\$766,516
TOU400LCA	TOU 400V	\$89.02	\$0.0118	\$0.0018	\$46.78	\$0.00	\$0.0030	\$0.0018	61,314,492	27,618,821			22,857	\$1,698,682	\$1,594,873	\$3,293,556	\$1,851,644	\$1,812,619	\$3,664,263
TOU400UHCA	TOU 400V	\$89.02	\$0.0118	\$0.0018	\$40.78	\$0.00	\$0.0030	\$0.0018	14,830,448	5,402,406			6	\$371,193	\$393,137	\$764,330	\$417,340	\$446,007	\$864,007
TOU11HCA	TOU 11kV	\$103.47	\$0.0118	\$0.0018	\$40.78	\$0.00	\$0.0030	\$0.0018	12,736,325	5,563,430			4,268	\$284,177	\$301,930	\$586,108	\$310,380	\$343,057	\$653,437
TOU11LCA	TOU 11kV	\$89.02	\$0.0118	\$0.0018	\$35.08	\$0.00	\$0.0030	\$0.0018	8,164,869	3,076,578			2,808	\$135,332	\$198,950	\$334,282	\$141,016	\$236,081	\$367,097
TOU11UHCA	TOU 11kV	\$89.02	\$0.0118	\$0.0018	\$35.08	\$0.00	\$0.0030	\$0.0018	90,572,031	45,243,357			1	\$1,777,828	\$1,073,581	\$2,851,409	\$1,743,757	\$1,204,518	\$2,948,275
Individuality Priced	Customer 1	\$141,016			\$90.66	\$69.08			23,499,977	5,087,703			1	\$152,462	\$165,614	\$318,077	\$163,005	\$94,656	\$257,661
Customer 2		\$1,743,757			\$18.29	\$18.29			532,697,609	212,780,023			30,829	\$22,837,519	\$12,550,353	\$35,387,871	\$24,901,685	\$14,045,738	\$38,947,423
Customer 3		\$163,005			-\$45.33														

Table 12: Prices and Quantities for Maximum Notional Revenue

		2012/13 Pricing Schedule										2011 Quantities				Revenue - 2012 Prices			Revenue - 2013 Prices			
		Demand					Transmission					Day	Night	RCFD	Demand kW	Number of CIDs	Distribution	Transmission	Total	Distribution	Transmission	Total
		per kW per annum	per kWh	per kWh	per kWh	per kWh	per kW per annum	per kWh	per kWh	per kWh	per kWh											
LOWHCA	Low Charge	\$54.75	\$0.0591	\$0.0367	\$0.0000	\$0.0183	\$0.0037	2,650,454	991,750	705	\$208,126	\$45,581	\$253,707	\$231,638	\$54,173	\$283,811						
LOWMCA	Low Charge	\$54.75	\$0.0537	\$0.0313	\$0.0000	\$0.0183	\$0.0037	18,916,343	7,040,724	5,005	\$1,389,632	\$323,592	\$1,713,224	\$1,504,836	\$370,390	\$1,875,226						
LOWU1HCA	Low Uncontrolled	\$54.75	\$0.0537	\$0.0367	\$0.0000	\$0.0467	\$0.0321	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0						
LOWU2HCA	Low Uncontrolled	\$54.75	\$0.0537	\$0.0313	\$0.0000	\$0.0467	\$0.0321	22,557	8,440	6	\$1,666	\$1,160	\$2,826	\$1,804	\$1,324	\$3,128						
015HCA	015	\$310.70	\$0.0307	\$0.0083	\$0.0000	\$0.0183	\$0.0037	50,068,037	18,734,525	6,416	\$3,286,024	\$861,039	\$4,147,063	\$3,686,036	\$985,563	\$4,671,599						
015U1HCA	015 Uncontrolled	\$261.51	\$0.0307	\$0.0083	\$0.0000	\$0.0183	\$0.0037	115,113,389	43,073,281	16,289	\$7,478,932	\$1,979,649	\$9,458,580	\$8,151,226	\$2,265,946	\$10,417,172						
015U2HCA	015 Uncontrolled	\$310.70	\$0.0307	\$0.0083	\$0.0000	\$0.0183	\$0.0037	24,335	9,106	28	\$8,378	\$6,697	\$15,075	\$9,522	\$7,636	\$17,159						
360HCA	360	\$261.51	\$0.0307	\$0.0083	\$0.0000	\$0.0183	\$0.0037	2,213	828	37	\$9,027	\$8,335	\$17,362	\$19,252	\$17,362	\$36,614						
360U1HCA	360 Uncontrolled	\$1,136.18	\$0.0307	\$0.0083	\$0.0000	\$0.0183	\$0.0037	8,165,717	3,055,459	310	\$559,701	\$140,429	\$700,130	\$628,264	\$160,738	\$789,001						
360U2HCA	360 Uncontrolled	\$972.05	\$0.0307	\$0.0083	\$0.0000	\$0.0183	\$0.0037	14,698,290	5,499,826	558	\$953,553	\$252,772	\$1,206,325	\$1,039,290	\$269,338	\$1,328,618						
ASSHCA	Assessed	\$113.36	\$0.0307	\$0.0083	\$0.0000	\$0.0183	\$0.0037	131,705	49,282	5	\$9,027	\$3,386	\$12,414	\$10,133	\$3,871	\$14,004						
ASSU1HCA	Assessed	\$103.41	\$0.0307	\$0.0083	\$0.0000	\$0.0183	\$0.0037	105,364	39,425	4	\$6,836	\$2,709	\$9,544	\$7,450	\$3,097	\$10,547						
TOU400HCA	TOU 400V	\$88.30	\$0.0307	\$0.0083	\$0.0000	\$0.0183	\$0.0037	80,256,361	30,030,432	1,008	\$3,218,534	\$3,653,468	\$6,872,002	\$3,572,926	\$4,086,528	\$7,644,454						
TOU400LHCA	TOU 400V	\$103.47	\$0.0118	\$0.0018	\$0.0000	\$0.0183	\$0.0037	21,151,592	7,914,531	311	\$938,128	\$1,306,632	\$2,244,760	\$1,491,437	\$2,518,200	\$2,614,554						
TOU400LLHCA	TOU 400V	\$89.02	\$0.0118	\$0.0018	\$0.0000	\$0.0183	\$0.0037	10,372,198	4,340,120	4,813	\$350,280	\$326,619	\$676,899	\$395,103	\$371,413	\$766,516						
TOU11HCA	TOU 11kV	\$103.47	\$0.0118	\$0.0018	\$0.0000	\$0.0183	\$0.0037	61,124,492	21,618,821	22,857	\$1,698,682	\$1,593,873	\$3,293,556	\$1,813,644	\$1,813,644	\$3,664,263						
TOU11LLHCA	TOU 11kV	\$89.02	\$0.0118	\$0.0018	\$0.0000	\$0.0183	\$0.0037	14,830,648	5,402,406	6	\$371,193	\$393,137	\$764,330	\$417,140	\$446,867	\$864,007						
TOU11LLLHCA	TOU 11kV	\$89.02	\$0.0118	\$0.0018	\$0.0000	\$0.0183	\$0.0037	12,736,325	5,563,430	4,684	\$284,177	\$301,930	\$586,108	\$310,380	\$343,057	\$653,437						
Individual Priority	Customer 1	\$141,016			\$0.0030	\$0.0030		3,076,278	7,161	2,808	\$1,355,332	\$198,590	\$334,282	\$141,016	\$226,081	\$367,097						
	Customer 2	\$1,743,737			\$48,913			90,572,031	45,243,357	7,161	\$1,777,828	\$1,743,581	\$2,851,409	\$1,743,581	\$2,948,275	\$4,696,756						
	Customer 3	\$163,005			\$0.0030	\$0.0030		2,499,977	5,087,703	1,508	\$152,462	\$165,814	\$318,277	\$163,005	\$165,814	\$318,277						
								\$32,697,609	\$12,780,023	8,660	\$165,040	\$338,887	\$504,658	\$24,001,685	\$14,045,718	\$38,047,403						

Table 13: Prices and Quantities for Allowable Notional Revenue

		2011/12 Pricing Schedule										2011 Quantities					Revenue - 2012 Prices			Revenue - 2013 Prices					
		Distribution					Demand					Day	Night	RCPD	Demand kW	Number of	ICPs	Distribution	Transmission	Total	Distribution	Transmission	Total		
		Fixed	Variable Day	Variable Night	per kWh	per annum	Demand	per kW per annum	RCPD per kW	per kWh	per annum													per kW per annum	
LOW/HCA	Low Charge	\$54.75	\$0.0521	\$0.0317	\$0.0521	\$0.00	\$0.00	\$0.00	\$0.0160	\$0.0032	2,650,454	991,750	705	\$208,126	\$45,581	\$253,707	\$231,638	\$52,173	\$283,811			\$231,638	\$52,173	\$283,811	
LOW/LCA	Low Charge	\$54.75	\$0.0487	\$0.0283	\$0.0487	\$0.00	\$0.00	\$0.00	\$0.0160	\$0.0032	18,816,343	7,040,724	5,005	\$1,389,632	\$323,592	\$1,713,224	\$1,504,836	\$370,390	\$1,875,226	\$0	\$0	\$1,504,836	\$370,390	\$1,875,226	
LOW/UHCA	Low Uncontrolled	\$54.75	\$0.0521	\$0.0317	\$0.0521	\$0.00	\$0.00	\$0.00	\$0.0409	\$0.0281	0	0	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
LOW/UHCA	Low Uncontrolled	\$54.75	\$0.0487	\$0.0283	\$0.0487	\$0.00	\$0.00	\$0.00	\$0.0409	\$0.0281	22,557	8,440	6	\$1,666	\$323,592	\$1,713,224	\$1,504,836	\$370,390	\$1,875,226	\$0	\$0	\$1,504,836	\$370,390	\$1,875,226	
015/HCA	\$272.54	\$0.0279	\$0.0075	\$0.0075	\$0.0279	\$0.00	\$0.00	\$0.00	\$0.0160	\$0.0032	\$0,068,037	18,734,525	6,416	\$2,286,024	\$861,039	\$4,147,063	\$3,860,036	\$985,563	\$4,671,599			\$3,860,036	\$985,563	\$4,671,599	
015/HCA	\$243.14	\$0.0279	\$0.0075	\$0.0075	\$0.0279	\$0.00	\$0.00	\$0.00	\$0.0160	\$0.0032	\$15,113,389	43,073,281	16,289	\$7,478,932	\$1,979,649	\$9,458,580	\$8,151,226	\$2,265,946	\$10,417,172			\$8,151,226	\$2,265,946	\$10,417,172	
015/UHCA	\$272.54	\$0.0279	\$0.0075	\$0.0075	\$0.0279	\$0.00	\$0.00	\$0.00	\$0.0160	\$0.0032	24,335	9,106	28	\$8,378	\$36,697	\$15,075	\$9,522	\$7,636	\$17,159			\$9,522	\$7,636	\$17,159	
015/UHCA	\$242.14	\$0.0279	\$0.0075	\$0.0075	\$0.0279	\$0.00	\$0.00	\$0.00	\$0.0160	\$0.0032	828	328	37	\$2,123	\$465,717	\$3,055,459	\$3,335	\$9,502	\$17,159			\$3,335	\$9,502	\$17,159	
360/HCA	\$996.65	\$0.0279	\$0.0075	\$0.0075	\$0.0279	\$0.00	\$0.00	\$0.00	\$0.0160	\$0.0032	\$14,698,220	5,499,826	558	\$953,553	\$252,772	\$1,206,325	\$628,264	\$160,738	\$789,001			\$628,264	\$160,738	\$789,001	
360/HCA	\$900.04	\$0.0279	\$0.0075	\$0.0075	\$0.0279	\$0.00	\$0.00	\$0.00	\$0.0160	\$0.0032	131,705	49,282	5	\$9,027	\$3,386	\$12,414	\$1,039,290	\$289,328	\$1,328,618			\$1,039,290	\$289,328	\$1,328,618	
360/UHCA	\$900.04	\$0.0279	\$0.0075	\$0.0075	\$0.0279	\$0.00	\$0.00	\$0.00	\$0.0160	\$0.0032	39,425	39,425	4	\$6,836	\$2,709	\$9,544	\$1,039,290	\$289,328	\$1,328,618			\$1,039,290	\$289,328	\$1,328,618	
360/UHCA	Assessed	\$90.71	\$0.0279	\$0.0075	\$0.0279	\$0.00	\$0.00	\$0.00	\$0.0160	\$0.0032	\$80,256,361	30,030,432	1,008	\$3,218,534	\$3,563,468	\$6,782,002	\$7,450	\$5,097	\$10,547			\$7,450	\$5,097	\$10,547	
ASS/HCA	Assessed	\$81.76	\$0.0279	\$0.0075	\$0.0279	\$0.00	\$0.00	\$0.00	\$0.0160	\$0.0032	\$8,151,592	7,914,531	29,641	\$938,128	\$1,306,632	\$2,244,760	\$1,026,763	\$1,491,437	\$2,518,200			\$1,026,763	\$1,491,437	\$2,518,200	
TOL400/HCA	TOL 400V	\$90.76	\$0.0107	\$0.0016	\$0.0107	\$0.00	\$0.00	\$0.00	\$0.0027	\$0.0016	10,372,198	4,340,120	4,813	\$350,280	\$326,619	\$676,899	\$395,103	\$371,413	\$766,516			\$395,103	\$371,413	\$766,516	
TOL480/LCA	TOL 480V	\$82.43	\$0.0107	\$0.0016	\$0.0107	\$0.00	\$0.00	\$0.00	\$0.0027	\$0.0016	61,314,492	27,618,821	22,857	\$1,698,682	\$1,594,873	\$3,293,556	\$1,812,644	\$1,812,619	\$3,624,263			\$1,812,644	\$1,812,619	\$3,624,263	
TOL11K	TOL 11KV	\$90.76	\$0.0107	\$0.0016	\$0.0107	\$0.00	\$0.00	\$0.00	\$0.0027	\$0.0016	14,830,648	5,402,406	5,684	\$371,193	\$393,137	\$764,330	\$417,140	\$446,867	\$864,007			\$417,140	\$446,867	\$864,007	
TOL11HCA	TOL 11KV	\$82.43	\$0.0107	\$0.0016	\$0.0107	\$0.00	\$0.00	\$0.00	\$0.0027	\$0.0016	12,736,325	5,563,430	4,268	\$284,177	\$301,930	\$586,108	\$330,380	\$343,057	\$653,437			\$330,380	\$343,057	\$653,437	
Individuality Priced	Customer 1	\$135,332			\$0.0027	\$47,456	\$70.94	\$18.71	\$0.0027	\$0.0016	\$8,164,869	\$3,076,578	1	\$135,332	\$198,950	\$334,282	\$141,016	\$226,081	\$367,097			\$141,016	\$226,081	\$367,097	
	Customer 2	\$1,777,828				\$280,618	\$76.14	\$18.71			90,577,821	45,243,357	1	\$1,777,828	\$1,073,581	\$2,851,409	\$1,777,828	\$1,073,581	\$2,851,409			\$1,777,828	\$1,073,581	\$2,851,409	
	Customer 3	\$152,462					\$76.14				\$2,499,977	\$587,703	1	\$152,462	\$1,505,814	\$318,277	\$163,005	\$568,349	\$724,001			\$163,005	\$568,349	\$724,001	
											\$32,837,519	\$12,500,353	1	\$32,837,519	\$12,500,353	\$38,387,871	\$24,001,685	\$14,045,738	\$38,047,423			\$24,001,685	\$14,045,738	\$38,047,423	

Note: We have changed our method of calculating revenues for individual customers, i.e. Customer 1, 2, and 3 for the 31 March 2013 assessment period. In prior periods we have reported the actual revenues for individual customers set for that year rather than applying the PxQ calculation under the Determination. For the 31 March 2013 assessment period we have calculated transmission charges for individual customers using lagged quantities.

Appendix C – Pass Through Costs Comparison

Table 14: Pass Through Costs

Pass Through Costs for year ending March 2013				
K ₂₀₁₃	Actual (\$)	Forecast (\$)	Variance (\$)	Variance (%)
Transmission	12,063,915	11,718,976	344,938	2.9%
Avoided Transmission	489,079	463,884	25,195	5.2%
Rates	55,469	53,171	2,298	4.1%
Electricity Authority Levies	116,378	105,082	11,296	9.7%
Commerce Act Levies	62,653	50,386	12,267	19.6%
Total Pass Through Costs	12,787,494	12,391,499	395,995	3.1%

Explanatory notes:

1. The 5.2% variance between actual and forecast avoided transmission costs is predominately due to operating expenditure of \$12,727 occurring during the 31 March 2013 period.
2. The 9.7% variance between actual and forecast figures for Electricity Authority levies is attributable to forecast error². A growth rate of 2% was applied to the 2012 Electricity Authority levies to forecast 2013 levies, based on the average three year growth. The actual growth rate in levies for 2013 was approximately 10%.
3. The 19.6% variance between actual and forecast figures for Commerce Act Levies results from the inadequate forecast basis of last year's figure. There was a wash-up at the second quarter from the last assessment period, which dropped the total amount and further dropped the forecast figure for the current period.

² We used the term 'forecast error' to highlight that there was a material difference between our growth assumption and actual growth. It is not indicative of an error in logic or method having been made when we made the growth assumption of 2%.

Appendix D – Quality Standard Compliance Calculations

Reliability Data (Before Normalisation)

Table 15: SAIDI and SAIFI data

Year	SAIDI (Interruption Duration)			SAIFI (Interruption Frequency)		
	Class B	Class C	Total	Class B	Class C	Total
2005	10.86	58.07	68.93	0.08	0.91	0.99
2006	8.27	50.33	58.60	0.16	0.92	1.08
2007	69.98	1,043.95	1,113.93	0.28	1.59	1.87
2008	62.32	87.18	149.50	0.30	1.38	1.68
2009	82.81	118.13	200.94	0.36	1.33	1.69
	Reference Period Total SAIDI		1,591.90	Reference Period Total SAIFI		7.31
	Reference Period Average SAIDI		318.38	Reference Period Average SAIFI		1.46
2011	62.42	163.47	225.89	0.27	1.43	1.70
2012	54.30	107.30	161.60	0.25	1.01	1.26
2013	38.32	109.95	148.27	0.15	1.14	1.30

Reliability Limit Calculations

Table 16: SAIDI and SAIFI Boundary Values

SAIDI Boundary Calculations		
α_{SAIDI}	-1.1647	The average of the natural logarithm (ln) of each daily SAIDI Value in the non-zero data set
β_{SAIDI}	1.6490	The standard deviation of the natural logarithm (ln) of each daily SAIDI Value in the non-zero data set
$B_{SAIDI} = e^{(\alpha_{SAIDI} + 2.5 \cdot \beta_{SAIDI})}$	19.2556	SAIDI Boundary Value
SAIFI Boundary Calculations		
α_{SAIFI}	-6.1189	The average of the natural logarithm (ln) of each daily SAIFI Value in the non-zero data set
β_{SAIFI}	1.7889	The standard deviation of the natural logarithm (ln) of each daily SAIFI Value in the non-zero data set
$B_{SAIFI} = e^{(\alpha_{SAIFI} + 2.5 \cdot \beta_{SAIFI})}$	0.1927	SAIFI Boundary Value

Table 17: Event Days exceeding SAIDI Boundary Value within the Reference

<i>Event Days exceeding SAIDI Boundary Value within the Reference Dataset</i>				
Date	Pre-Normalised SAIDI	Pre-Normalised SAIFI	Normalised SAIDI	Normalised SAIFI
12-Jun-06	909.3428	0.3509	19.2556	0.1927
			-	-
			-	-
			-	-
			-	-
			-	-
			-	-
			-	-
			-	-
			-	-

Table 18: SAIDI and SAIFI Limits

<i>SAIDI Limit</i>		
μ_{SAIDI}	140.3620	The average annual SAIDI Value in the Normalised Reference Dataset
σ_{SAIDI}	23.8586	The standard deviation of daily SAIDI Values in the Normalised Reference Dataset multiplied by $\sqrt{365}$
$SAIDI_{Limit} = \mu_{SAIDI} + \sigma_{SAIDI}$	164.2206	SAIDI Limit Value

<i>SAIFI Limit</i>		
μ_{SAIFI}	1.4319	The average annual SAIFI Value in the Normalised Reference Dataset
σ_{SAIFI}	0.2624	The standard deviation of daily SAIFI Values in the Normalised Reference Dataset multiplied by $\sqrt{365}$
$SAIFI_{Limit} = \mu_{SAIFI} + \sigma_{SAIFI}$	1.6943	SAIFI Limit Value

Reliability Assessment Calculations

Table 19: Event Days exceeding SAIDI Boundary Value within 2013

<i>Event Days exceeding SAIDI Boundary Value within the 2013 Assessment Dataset</i>				
Date	Pre-Normalised SAIDI	Pre-Normalised SAIFI	Normalised SAIDI	Normalised SAIFI
			-	-
			-	-
			-	-
			-	-
			-	-
			-	-
			-	-
			-	-
			-	-
			-	-

Table 20: Assessed SAIDI and SAIFI value 2013

<i>Assessed SAIDI Value 2013</i>		
SAIDI ₂₀₁₃	148.2667	The sum of daily SAIDI Values in the 1 April 2012 - 31 March 2013 Normalised Assessment Dataset

<i>Assessed SAIFI Value 2013</i>		
SAIFI ₂₀₁₃	1.2979	The sum of daily SAIFI Values in the 1 April 2012 - 31 March 2013 Normalised Assessment Dataset

Appendix E – Prior Period Reliability Assessment

Table 21: Assessed Prior Period SAIDI and SAIFI value

Assessed SAIDI Value 2012		
SAIDI ₂₀₁₂	161.6607	The sum of daily SAIDI Values in the 1 April 2011 - 31 March 2012 Normalised Assessment Dataset
Assessed SAIFI Value 2012		
SAIFI ₂₀₁₂	1.2611	The sum of daily SAIFI Values in the 1 April 2011 - 31 March 2012 Normalised Assessment Dataset
Assessed SAIDI Value 2011		
SAIDI ₂₀₁₁	225.8863	The sum of daily SAIDI Values in the 1 April 2010 - 31 March 2011 Normalised Assessment Dataset
Assessed SAIFI Value 2011		
SAIFI ₂₀₁₁	1.7080	The sum of daily SAIFI Values in the 1 April 2010 - 31 March 2011 Normalised Assessment Dataset

Table 22: Assessed Prior Period SAIDI and SAIFI Compliance

SAIDI _{Assess 2012}	161.6607	SAIFI _{Assess 2012}	1.26
SAIDI _{Limit}	164.2206	SAIFI _{Limit}	1.69
0.9844	< 1	0.7443	< 1
<i>Within Limit</i>		<i>Within Limit</i>	
SAIDI _{Assess 2011}	225.8863	SAIFI _{Assess 2011}	1.71
SAIDI _{Limit}	164.2206	SAIFI _{Limit}	1.69
1.3755	> 1	1.0081	> 1
<i>Exceeds Limit</i>		<i>Exceeds Limit</i>	

Appendix F – Policies and Procedures for Recording SAIDI and SAIFI

We apply the following policies and procedures to record our SAIDI and SAIFI statistics:

- all planned and unplanned outages 3.3kV and above are recorded
- outages less than 1 minute duration are reported but do not affect SAIDI and SAIFI figures
- outages are recorded on an “Interruption to Supply” form by the Network Operator
- the ICP data base is interrogated for customer numbers in the outage area
- monthly reports are prepared for executive management and the board.

Figure 1 below, outlines our process for recording outages.

Figure 1: Process for recording outages



