



# **Default price quality path compliance statement**

For the assessment date 31 March 2014

30 May 2014

Pursuant to

Commerce Act (Electricity Distribution Default Price-Quality Path)  
Determination 2012

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# 1. Summary of Compliance

We complied with both the price path (clause 8) and quality standards (clause 9) of the *Commerce Act (Electricity Distribution Default Price-Quality Path) Determination 2012* (Determination) for the assessment date ended 31 March 2014.

We are pleased to submit the following information in our *Default Price Quality Path Compliance Statement* pursuant to clause 11.2(b) of the Determination:

- price path under clauses 11.3(a), (b), (c) and (d):
  - the amount of allowable notional revenue and notional revenue
  - prices and quantities
  - the amounts of pass-through costs
  - the amounts of recoverable costs
  - the variances between the forecast and actual amounts of pass-through and recoverable costs and explanatory notes of material variances.
- quality standards under clauses 11.3(h) and (i):
  - assessed values and reliability limits
  - SAIDI and SAIFI statistics and calculations
  - the annual reliability assessments for the two previous assessment periods
  - a description of how SAIDI and SAIFI statistics were recorded.
- restructuring of prices under clause 11.3(f) and (g)—a written statement of whether clause 8.5 and 8.6 apply.
- restructuring of transactions under clause 11.3(j) and (k)—a written statement of whether clause 10 applies.
- director certification under clause 11.3(m)
- auditor's report under clause 11.6.

In conjunction with this compliance statement we submitted, to the Commerce Commission in soft copy format, copies of our new investment contracts with Transpower New Zealand in accordance with clause 11.3(e)(ii).

## 2. Compliance with the Price Path

We have complied with the price path as specified by clause 8 of the Determination.

Clause 8.4 Compliance of the price path requires that:

*The notional revenue (NR<sub>t</sub>) of a Non-exempt EDB at any time during the Assessment Period must not exceed the allowable notional revenue (R<sub>t</sub>) 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**

$\frac{NR_{2014}}{R_{2014}} \leq 1$	
NR <sub>2014</sub> :	\$ 26,731,071
R <sub>2014</sub> :	\$ 27,753,025
Result:	0.9632 < 1
<i>Price Path has not been breached</i>	

Table 1 above shows that our notional revenue, derived using posted prices at 31 March 2014, was less than our allowable notional revenue.

**Table 2: Maximum Notional Revenue calculation**

$\frac{NR_{Max}}{R_{2014}} \leq 1$	
NR <sub>Max</sub> :	\$ 26,731,071
R <sub>2014</sub> :	\$ 27,753,025
Result:	0.9632 < 1
<i>Price Path has not been breached</i>	

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 the Quality Path

We complied with the quality as specified by clause 9.1(b) of the Determination.

Clause 9.1—Compliance with quality standards requires that:

*A Non-exempt DEB must, in respect of each 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 path, under clauses 9.1(a), is demonstrated at Table 3 below.

**Table 3: Performance against the quality standards**

	<b>SAIDI</b>	<b>SAIFI</b>	<b>Compliance</b>
Compliance with 9.1(a) or Compliance with 9.1(b)	SAIDI exceeds limit	SAIFI exceeds limit	<i>Does not Comply</i>
2013	SAIDI is within limit	SAIFI is within limit	<i>Complies</i>
2012	SAIDI is within limit	SAIFI is within limit	<i>Complies</i>
<b><i>Complies with Quality Standard</i></b>			

Table 3 above, shows that we have complied with clause 9.1(b) of the Determination as we were within the allowable SAIDI and SAIFI limits during the previous two reporting years (ie 31 March 2013 and 2012).<sup>1</sup>

<sup>1</sup> 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.

## 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:*

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

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

We have exceeded the allowable SAIDI and SAIFI limits. Our assessed SAIDI and SAIFI calculations are demonstrated at Table 4 and Table 5 below.

**Table 4: Assessed SAIDI calculation**

$\frac{SAIDI_{Assess\ 2014}}{SAIDI_{Limit}}$	$\leq 1$	
SAIDI <sub>Assess 2014</sub>	274.7657	
SAIDI <sub>Limit</sub>	164.2206	
Result:	1.6731	> 1
<i>SAIDI exceeds limit</i>		

**Table 5: Assessed SAIFI calculation**

$\frac{SAIFI_{Assess\ 2014}}{SAIFI_{Limit}}$	$\leq 1$	
SAIFI <sub>Assess 2014</sub>	1.9990	
SAIFI <sub>Limit</sub>	1.6937	
Result:	1.1803	> 1
<i>SAIFI exceeds limit</i>		

Supporting evidence is presented in Appendices D, E, F, and G. Appendix H includes photographs showing some of the impacts of the severe weather events.

## **4. Restructuring of Prices**

We did not restructure our prices that applied during the assessment period and therefore clauses 8.5 and 8.6 do not apply.



## 5. Transactions

We did not enter into transactions resulting in an amalgamation or merger nor did we enter into transactions resulting in consumers being supplied by a different EDB. Accordingly, clause 10 does not apply.

## 6. 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 *Electricity Distribution Services Default Price-Quality Path Determination 2012* are true and accurate.

A handwritten signature in black ink, appearing to read 'Alister John France', written over a horizontal line.

Alister John France  
30 May 2014

## 7. Auditor's Report



### **INDEPENDENT AUDITOR'S REPORT TO THE DIRECTORS OF ALPINE ENERGY LIMITED AND TO THE COMMERCE COMMISSION**

The Auditor-General is the auditor of Alpine Energy Limited Limited (the company). The Auditor-General has appointed me, Mark Bramley, using the staff and resources of PricewaterhouseCoopers, to provide an opinion, on her behalf, on whether the Annual Compliance Statement for the year ended on 31 March 2014 on pages 3 to 8 and 12 to 24 complies, in all material respects, with the Electricity Distribution Services Default Price-Quality Path Determination 2012 NZCC 35 (the Determination).

#### ***Directors' responsibilities for the Annual Compliance Statement***

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.

#### ***Auditor's responsibility for the Annual Compliance Statement***

Our responsibility is to express an opinion on whether the Annual Compliance Statement has been prepared, in all material respects, in accordance with the Determination.

#### ***Basis of opinion***

We conducted our engagement in accordance with the International Standard on Assurance Engagements (New Zealand) 3000: *Assurance Engagements Other Than Audits or Reviews of Historical Financial Information* issued by the External Reporting Board and the Standard on Assurance Engagements 3100: *Compliance Engagements* issued by the External Reporting Board.

These standards require that we comply with ethical requirements and plan and perform our audit to provide reasonable assurance (which is also referred to as 'audit' assurance) about whether the Annual Compliance Statement has been prepared in all material respects in accordance with the Determination.

An audit involves performing procedures to obtain 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 or non-compliance with the Determination. In making those risk assessments, the auditor considers internal control relevant to the company'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 company'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 4, 7, 8 and 12 to 17 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 2014, 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 5 to 6 and 18 to 24 of the Annual Compliance Statement.

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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.

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

***Use of this report***

This independent auditor's report has been prepared for the directors of the company and for the Commerce Commission for the purpose of providing those parties with independent audit assurance about whether the Annual Compliance Statement has been prepared, in all material respects, in accordance with the Determination. We disclaim any assumption of responsibility for any reliance on this report to any person other than the directors of the company or the Commerce Commission, or for any other purpose than that for which it was prepared.

***Scope and inherent limitations***

Because of the inherent limitations of an audit engagement, and the test basis of the procedures performed, it is possible that fraud, error or non-compliance may occur and not be detected.

We did not examine every transaction, adjustment or event underlying the Annual Compliance Statement nor do we guarantee complete accuracy of the Annual Compliance Statement. Also we did not evaluate the security and controls over the electronic publication of the Annual Compliance Statement.

The opinion expressed in this independent auditor's report has been formed on the above basis.

***Independence***

When carrying out the engagement we followed the independence requirements of the Auditor-General, which incorporate the independence requirements of the External Reporting Board. We also complied with the independent auditor requirements specified in the Determination.

The Auditor-General, and her employees, and PricewaterhouseCoopers and its partners and employees may deal with the company on normal terms within the ordinary course of trading activities of the company. Other than any dealings on normal terms within the ordinary course of business, this engagement, other regulatory compliance engagements and the annual audit of the company's financial statements, we have no relationship with or interests in the company.

***Opinion***

In our opinion, the Annual Compliance Statement of Alpine Energy Limited for the year ended on 31 March 2014, has been prepared, in all material respects, in accordance with the Determination.

Our audit was completed on 30 May 2014 and our opinion is expressed as at that date.

A handwritten signature in blue ink that reads 'Mark Bramley'.

Mark Bramley  
PricewaterhouseCoopers  
On behalf of the Auditor-General  
Dunedin, New Zealand

## Appendix A—Price Path Compliance Calculations

**Table 6: Notional Revenue Calculation**

Notional Revenue for the year ending March 2014		
Term	Description	Value \$
$P_{2014} * Q_{2012}$	Prices at 31 March 2014 multiplied by 31 March 2012 Quantities	39,684,149
$K_{2014}$	Rates for year ending 31 March 2014	58,545
	Electricity Commission Levies for year ending 31 March 2014	93,628
	Commerce Act Levies for year ending 31 March 2014 + 1/5 of Commerce Act Levies for year ending 31 March 2010	86,839
	Electricity and Gas Complaints Commission Levies for year ending 31 March 2014	12,021
$V_{2014}$	Transmission Charges for year ending 31 March 2014	12,298,414
	Transpower New Investment Contract charges for the year ending 31 March 2014	403,630
<b><math>NR_{2014}</math></b>	<b>Notional Revenue for the year ending 31 March 2014</b>	<b>26,731,071</b>

**Table 7: Maximum Notional Revenue Calculation**

Maximum Notional Revenue for the year ending March 2014		
Term	Description	Value \$
$P_{Max} * Q_{2012}$	Maximum Prices between 1 April 2013 and 31 March 2014 multiplied by 31 March 2012 Quantities	39,684,149
$K_{2014}$	Rates for year ending 31 March 2014	58,545
	Electricity Authority Levies for year ending 31 March 2014	93,628
	Commerce Act Levies for year ending 31 March 2014 + 1/5 of Commerce Act Levies for year ending 31 March 2010	86,839
	Electricity and Gas Complaints Commission Levies for year ending 31 March 2014	12,021
$V_{2014}$	Transmission Charges for year ending 31 March 2014	12,298,414
	Transpower New Investment Contract charges for the year ending 31 March 2014	403,630
<b><math>NR_{Max}</math></b>	<b>Notional Revenue for the year ending 31 March 2014</b>	<b>26,731,071</b>

**Table 8: Allowable Notional Revenue Calculation**

Allowable Notional Revenue 2014		
Term	Description	Value \$
$P_{2013} * Q_{2012}$	Maximum Prices between 1 April 2012 and 31 March 2013 multiplied by 31 March 2012 Quantities	37,120,102
$K_{2013}$	Rates for year ending 31 March 2013	55,316
	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
	Electricity and Gas Complaints Commission Levies for year ending 31 March 2013	15,322
$V_{2013}$	Transmission Charges for year ending 31 March 2013	11,646,591
	Transpower New Investment Contract charges for the year ending 31 March 2013	417,324
$R_{2013} - NR_{2013}$	Revenue Differential for year ending 31 March 2013	104,137
$X$	X Factor	-10%
$(1 + DCPI_{2014})$	Average change in Consumer Price Index	1.0128
$R_{2014}$	<b>Allowable Notional Revenue under the CPI-X Price Path for the year ending 31 March 2014</b>	<b>27,753,025</b>

**Table 9: Change in CPI Calculation**

DCPI <sub>2014</sub>			
Numerator		Denominator	
CPI <sub>Dec2011</sub>	1158	CPI <sub>Dec2010</sub>	1137
CPI <sub>Mar2012</sub>	1164	CPI <sub>Mar2011</sub>	1146
CPI <sub>Jun2012</sub>	1168	CPI <sub>Jun2011</sub>	1157
CPI <sub>Sep2012</sub>	1171	CPI <sub>Sep2011</sub>	1162
Total	4661	Total	4602
DCPI <sub>2014</sub>	1.28%		

**Table 10: Revenue Differential 2013**

Revenue Differential 2013		
Term	Description	Value \$
$R_{2013}$	Allowable Notional Revenue under the CPI-X Price Path for the year ending 31 March 2013	26,264,066
$NR_{2013}$	Notional Revenue for the year ending 31 March 2013	26,159,929
$R_{2013} - NR_{2013}$	Allowable Notional Revenue less Notional Revenue for the year ending 31 March 2013	104,137



## Appendix B—Price and Quantity Schedules

**Table 11: Prices and Quantities for Notional Revenue**

		2013/14 Pricing Schedule										2012 Quantities					Revenue - 2014 Prices		
		Distribution				Transmission			RCPD	Demand	Day	Night	RCPD	Demand	Number of	Distribution	Transmission	Total	
		Fixed	Variable Day	Variable Night	Demand per kW per annum	Fixed	Variable Day	Variable Night											per annum
LOWHCA	Low Charge	\$54.75	\$0.0636	\$0.0396	\$0.00	\$0.00	\$0.0196	\$0.0040		\$0.00	3,248,299	1,175,529			842	\$299,242	\$68,369	\$367,611	
LOWLCA	Low Charge	\$54.75	\$0.0578	\$0.0338	\$0.00	\$0.00	\$0.0196	\$0.0040		\$0.00	22,379,313	8,098,866			5,801	\$1,884,871	\$471,030	\$2,355,901	
LOWUHCA	Low Uncontrolled	\$54.75	\$0.0636	\$0.0396	\$0.00	\$0.00	\$0.0501	\$0.0345		\$0.00	0	0			0	\$0	\$0	\$0	
LOWULCA	Low Uncontrolled	\$54.75	\$0.0578	\$0.0338	\$0.00	\$0.00	\$0.0501	\$0.0345		\$0.00	38,578	13,961			10	\$3,249	\$2,414	\$5,664	
015HCA	015	\$332.89	\$0.0329	\$0.0089	\$0.00	\$0.00	\$0.0196	\$0.0040		\$0.00	41,267,272	14,934,243			6,313	\$3,592,143	\$868,576	\$4,460,718	
015LCA	015	\$280.19	\$0.0329	\$0.0089	\$0.00	\$0.00	\$0.0196	\$0.0040		\$0.00	94,879,205	34,335,904			15,560	\$7,786,872	\$1,996,976	\$9,783,848	
015UHCA	015 Uncontrolled	\$332.89	\$0.0329	\$0.0089	\$0.00	\$273.88	\$0.0196	\$0.0040		\$0.00	20,058	7,259			33	\$11,710	\$9,460	\$21,170	
015ULCA	015 Uncontrolled	\$280.19	\$0.0329	\$0.0089	\$0.00	\$273.88	\$0.0196	\$0.0040		\$0.00	1,824	660			37	\$10,433	\$10,172	\$20,605	
360HCA	360	\$1,217.33	\$0.0329	\$0.0089	\$0.00	\$0.00	\$0.0196	\$0.0040		\$0.00	5,477,939	1,982,415			327	\$595,935	\$115,297	\$711,232	
360LCA	360	\$1,041.47	\$0.0329	\$0.0089	\$0.00	\$0.00	\$0.0196	\$0.0040		\$0.00	13,501,779	4,886,169			569	\$1,080,292	\$284,180	\$1,364,471	
360UHCA	360 Uncontrolled	\$1,217.33	\$0.0329	\$0.0089	\$0.00	\$273.88	\$0.0196	\$0.0040		\$0.00	28,635	10,363			11	\$14,425	\$3,615	\$18,040	
360ULCA	360 Uncontrolled	\$1,041.47	\$0.0329	\$0.0089	\$0.00	\$273.88	\$0.0196	\$0.0040		\$0.00	32,106	11,619			5	\$6,367	\$2,045	\$8,412	
ASSHCA	Assessed	\$110.80	\$0.0329	\$0.0089	\$12.03	\$0.00	\$0.0196	\$0.0040		\$39.63	66,149,210	23,938,785		74,939	1,037	\$3,405,780	\$4,362,112	\$7,767,892	
ASSLCA	Assessed	\$94.61	\$0.0329	\$0.0089	\$10.27	\$0.00	\$0.0196	\$0.0040		\$38.86	17,433,647	6,309,075		32,541	329	\$995,041	\$1,631,479	\$2,626,520	
TOU400HCA	TOU 400V	\$110.86	\$0.0126	\$0.0019	\$58.25	\$0.00	\$0.0032	\$0.0019		\$74.01	9,949,715	4,098,978		5,030	30	\$429,478	\$411,897	\$841,375	
TOU400LCA	TOU 400V	\$95.38	\$0.0126	\$0.0019	\$50.12	\$0.00	\$0.0032	\$0.0019		\$74.01	60,773,546	27,441,120		22,604	103	\$1,960,621	\$1,919,536	\$3,880,157	
TOU11HCA	TOU 11kV	\$110.86	\$0.0126	\$0.0019	\$43.69	\$0.00	\$0.0032	\$0.0019		\$74.01	14,531,853	5,322,777		5,826	6	\$448,418	\$487,797	\$936,215	
TOU11LCA	TOU 11kV	\$95.38	\$0.0126	\$0.0019	\$37.59	\$0.00	\$0.0032	\$0.0019		\$74.01	12,337,522	5,328,217		4,371	4	\$330,264	\$373,101	\$703,365	
Individually Priced	Customer 1	\$140,339					\$0.0032	\$0.0019		\$74.01	7,168,692	2,729,594			2,808	\$140,339	\$235,946	\$376,285	
	Customer 2	\$1,791,646				\$46,535				\$20.47					2	\$1,791,646	\$1,573,996	\$3,365,642	
	Customer 3	\$163,005								-\$49.72					1	\$163,005	-\$93,979	\$69,026	
											<b>369,219,194</b>	<b>140,625,535</b>	<b>10,034</b>	<b>180,905</b>	<b>31,021</b>	<b>\$24,950,129</b>	<b>\$14,734,020</b>	<b>\$39,684,149</b>	

Alpine Energy Limited Default Price-quality Path Compliance Statement 2014

**Table 12: Prices and Quantities for Maximum Notional Revenue**

		2013/14 Pricing Schedule										2012 Quantities					Maximum - 2014 Prices		
		Fixed	Distribution		Demand	Fixed	Transmission		RCPD	Demand	Day	Night	RCPD	Demand	Number of	Distribution	Transmission	Total	
		per annum	Variable Day	Variable Night	per kWh	per kWh	per annum	Variable Day	Variable Night	per kWh	per kW	per kW per annum	kWh	kWh	kW	Demand kW	ICPs		
LOWHCA	Low Charge	\$54.75	\$0.0636	\$0.0396	\$0.00	\$0.00	\$0.0196	\$0.0040		\$0.00		3,248,299	1,175,529			842	\$299,242	\$68,369	\$367,611
LOWLCA	Low Charge	\$54.75	\$0.0578	\$0.0338	\$0.00	\$0.00	\$0.0196	\$0.0040		\$0.00		22,379,313	8,098,866			5,801	\$1,884,871	\$471,030	\$2,355,901
LOWUHCA	Low Uncontrolled	\$54.75	\$0.0636	\$0.0396	\$0.00	\$0.00	\$0.0501	\$0.0345		\$0.00		0	0			0	\$0	\$0	\$0
LOWULCA	Low Uncontrolled	\$54.75	\$0.0578	\$0.0338	\$0.00	\$0.00	\$0.0501	\$0.0345		\$0.00		38,578	13,961			10	\$3,249	\$2,414	\$5,664
015HCA	015	\$332.89	\$0.0329	\$0.0089	\$0.00	\$0.00	\$0.0196	\$0.0040		\$0.00		41,267,272	14,934,243			6,313	\$3,592,143	\$868,576	\$4,460,718
015LCA	015	\$280.19	\$0.0329	\$0.0089	\$0.00	\$0.00	\$0.0196	\$0.0040		\$0.00		94,879,205	34,335,904			15,560	\$7,786,872	\$1,996,976	\$9,783,848
015UHCA	015 Uncontrolled	\$332.89	\$0.0329	\$0.0089	\$0.00	\$273.88	\$0.0196	\$0.0040		\$0.00		20,058	7,259			33	\$11,710	\$9,460	\$21,170
015ULCA	015 Uncontrolled	\$280.19	\$0.0329	\$0.0089	\$0.00	\$273.88	\$0.0196	\$0.0040		\$0.00		1,824	660			37	\$10,433	\$10,172	\$20,605
360HCA	360	\$1,217.33	\$0.0329	\$0.0089	\$0.00	\$0.00	\$0.0196	\$0.0040		\$0.00		5,477,939	1,982,415			327	\$595,935	\$115,297	\$711,232
360LCA	360	\$1,041.47	\$0.0329	\$0.0089	\$0.00	\$0.00	\$0.0196	\$0.0040		\$0.00		13,501,779	4,886,169			569	\$1,080,292	\$284,180	\$1,364,471
360UHCA	360 Uncontrolled	\$1,217.33	\$0.0329	\$0.0089	\$0.00	\$273.88	\$0.0196	\$0.0040		\$0.00		28,635	10,363			11	\$14,425	\$3,615	\$18,040
360ULCA	360 Uncontrolled	\$1,041.47	\$0.0329	\$0.0089	\$0.00	\$273.88	\$0.0196	\$0.0040		\$0.00		32,106	11,619			5	\$6,367	\$2,045	\$8,412
ASSHCA	Assessed	\$110.80	\$0.0329	\$0.0089	\$12.03	\$0.00	\$0.0196	\$0.0040		\$39.63		66,149,210	23,938,785		74,939	1,037	\$3,405,780	\$4,362,112	\$7,767,892
ASSLCA	Assessed	\$94.61	\$0.0329	\$0.0089	\$10.27	\$0.00	\$0.0196	\$0.0040		\$38.86		17,433,647	6,309,075		32,541	329	\$995,041	\$1,631,479	\$2,626,520
TOU400HCA	TOU 400V	\$110.86	\$0.0126	\$0.0019	\$58.25	\$0.00	\$0.0032	\$0.0019		\$74.01		9,949,715	4,098,978		5,030	30	\$429,478	\$411,897	\$841,375
TOU400LCA	TOU 400V	\$95.38	\$0.0126	\$0.0019	\$50.12	\$0.00	\$0.0032	\$0.0019		\$74.01		60,773,546	27,441,120		22,604	103	\$1,960,621	\$1,919,536	\$3,880,157
TOU11HCA	TOU 11kV	\$110.86	\$0.0126	\$0.0019	\$43.69	\$0.00	\$0.0032	\$0.0019		\$74.01		14,531,853	5,322,777		5,826	6	\$448,418	\$487,797	\$936,215
TOU11LCA	TOU 11kV	\$95.38	\$0.0126	\$0.0019	\$37.59	\$0.00	\$0.0032	\$0.0019		\$74.01		12,337,522	5,328,217		4,371	4	\$330,264	\$373,101	\$703,365
Individually Priced	Customer 1	\$140,339					\$0.0032	\$0.0019		\$74.01		7,168,692	2,729,594		2,808	1	\$140,339	\$235,946	\$376,285
	Customer 2	\$1,791,646				\$46,535				\$99.44					8,144	2	\$1,791,646	\$1,573,996	\$3,365,642
	Customer 3	\$163,005								-\$49.72					1,890	1	\$163,005	-\$93,979	\$69,026
												<b>369,219,194</b>	<b>140,625,535</b>	<b>10,034</b>	<b>180,905</b>	<b>31,021</b>	<b>\$24,950,129</b>	<b>\$14,734,020</b>	<b>\$39,684,149</b>



Alpine Energy Limited Default Price-quality Path Compliance Statement 2014

**Table 13: Prices and Quantities for Allowable Notional Revenue**

		2012/13 Pricing Schedule									2012 Quantities					Revenue - 2013 Prices			
		Distribution				Transmission					Day	Night	RCPD	Demand	Number of	Distribution	Transmission	Total	
		Fixed	Variable Day	Variable Night	Demand	Fixed	Variable Day	Variable Night	Demand	per kWh per annum									kWh
		<i>per annum</i>	<i>per kWh</i>	<i>per kWh</i>	<i>per kW per annum</i>	<i>per annum</i>	<i>per kWh</i>	<i>per kWh</i>	<i>per kWh</i>	<i>RCPD per kW</i>									
LOWHCA	Low Charge	\$54.75	\$0.0591	\$0.0367	\$0.00	\$0.00	\$0.0183	\$0.0037		\$0.00	3,248,299	1,175,529			842	\$281,216	\$63,793	\$345,009	
LOWLCA	Low Charge	\$54.75	\$0.0537	\$0.0313	\$0.00	\$0.00	\$0.0183	\$0.0037		\$0.00	22,379,313	8,098,866			5,801	\$1,772,868	\$439,507	\$2,212,376	
LOWUHCA	Low Uncontrolled	\$54.75	\$0.0591	\$0.0367	\$0.00	\$0.00	\$0.0467	\$0.0321		\$0.00	0	0			0	\$0	\$0	\$0	
LOWULCA	Low Uncontrolled	\$54.75	\$0.0537	\$0.0313	\$0.00	\$0.00	\$0.0467	\$0.0321		\$0.00	38,578	13,961			10	\$3,056	\$2,250	\$5,306	
015HCA	015	\$310.70	\$0.0307	\$0.0083	\$0.00	\$0.00	\$0.0183	\$0.0037		\$0.00	41,267,272	14,934,243			6,313	\$3,352,309	\$810,448	\$4,162,756	
015LCA	015	\$261.51	\$0.0307	\$0.0083	\$0.00	\$0.00	\$0.0183	\$0.0037		\$0.00	94,879,205	34,335,904			15,560	\$7,266,875	\$1,863,332	\$9,130,207	
015UHCA	015 Uncontrolled	\$310.70	\$0.0307	\$0.0083	\$0.00	\$255.62	\$0.0183	\$0.0037		\$0.00	20,058	7,259			33	\$10,929	\$8,829	\$19,758	
015ULCA	015 Uncontrolled	\$261.51	\$0.0307	\$0.0083	\$0.00	\$255.62	\$0.0183	\$0.0037		\$0.00	1,824	660			37	\$9,737	\$9,494	\$19,231	
360HCA	360	\$1,136.18	\$0.0307	\$0.0083	\$0.00	\$0.00	\$0.0183	\$0.0037		\$0.00	5,477,939	1,982,415			327	\$556,158	\$107,581	\$663,739	
360LCA	360	\$972.05	\$0.0307	\$0.0083	\$0.00	\$0.00	\$0.0183	\$0.0037		\$0.00	13,501,779	4,886,169			569	\$1,008,156	\$265,161	\$1,273,318	
360UHCA	360 Uncontrolled	\$1,136.18	\$0.0307	\$0.0083	\$0.00	\$255.62	\$0.0183	\$0.0037		\$0.00	28,635	10,363			11	\$13,463	\$3,374	\$16,837	
360ULCA	360 Uncontrolled	\$972.05	\$0.0307	\$0.0083	\$0.00	\$255.62	\$0.0183	\$0.0037		\$0.00	32,106	11,619			5	\$5,942	\$1,909	\$7,851	
ASSHCA	Assessed	\$103.41	\$0.0307	\$0.0083	\$11.23	\$0.00	\$0.0183	\$0.0037		\$36.99	66,149,210	23,938,785		74,939	1,037	\$3,178,274	\$4,071,098	\$7,249,371	
ASSLCA	Assessed	\$88.30	\$0.0307	\$0.0083	\$9.59	\$0.00	\$0.0183	\$0.0037		\$36.27	17,433,647	6,309,075		32,541	329	\$928,697	\$1,522,641	\$2,451,339	
TOU400HCA	TOU 400V	\$103.47	\$0.0118	\$0.0018	\$54.37	\$0.00	\$0.0030	\$0.0018		\$69.08	9,949,715	4,098,978		5,030	30	\$401,370	\$384,700	\$786,070	
TOU400LCA	TOU 400V	\$89.02	\$0.0118	\$0.0018	\$46.78	\$0.00	\$0.0030	\$0.0018		\$69.08	60,773,546	27,441,120		22,604	103	\$1,833,106	\$1,793,199	\$3,626,305	
TOU11HCA	TOU 11kV	\$103.47	\$0.0118	\$0.0018	\$40.78	\$0.00	\$0.0030	\$0.0018		\$69.08	14,531,853	5,322,777		5,826	6	\$419,262	\$455,637	\$874,899	
TOU11LCA	TOU 11kV	\$89.02	\$0.0118	\$0.0018	\$35.08	\$0.00	\$0.0030	\$0.0018		\$69.08	12,337,522	5,328,217		4,371	4	\$308,864	\$348,552	\$657,416	
Individually Priced	Customer 1	\$141,016					\$0.0030	\$0.0018		\$69.08	7,168,692	2,729,594		2,808	1	\$141,016	\$220,396	\$361,412	
	Customer 2	\$1,743,757				\$48,913								8,144	2	\$1,743,757	\$1,435,821	\$3,179,578	
	Customer 3	\$163,005								\$90.66				1,890	1	\$163,005	-\$85,681	\$77,324	
											369,219,194	140,625,535		10,034	180,905	31,021	\$23,398,061	\$13,722,041	\$37,120,102

## Appendix C—Pass Through and Recoverable Costs Comparison

**Table 14: Pass Through and Recoverable Costs Variances**

Pass Through Costs and Recoverable Costs for year ending March 2014				
Category	Actual (\$)	Forecast (\$)	Variance (\$)	Variance (%)
Rates	58,545	63,589	(5,044)	(8.6%)
Electricity Authority Levies	93,628	113,068	(19,440)	(20.8%)
Commerce Act Levies	86,839	63,566	23,273	26.8%
EGCC Levies	12,021	17,555	(5,534)	(46.0%)
Transmission	12,298,414	12,292,285	6,129	0.0%
New investment charges	403,630	-	403,630	100.0%
<b>Pass Through Costs</b>	<b>12,953,078</b>	<b>12,550,063</b>	<b>403,015</b>	<b>3.1%</b>

*Explanatory notes:*

1. The -20.8% variance between actual and forecast Electricity Authority levies is predominately due to \$17,703 credit given back to us for 1 July 2011 to 30 June 2012. We have applied this credit to this assessment period.
2. The +26.8% variance between actual and forecast figures for Commerce Act Levies results from higher rate of increase than expected. The rate of increase was more than 50% compared to the previous period, while we only applied the New Zealand Treasury forecast rate of inflation for 2013 of 4% for forecasting purposes.
3. The -46% variance between actual and forecast figures for Electricity and Gas Complaints Commissioner (EGCC) levies is attributable to unforeseeable drop of levies. We forecasted the levies based on the rate of increase of 15%, which was the average rate of increase across previous years. The actual growth rate for 2014 was approximately -21.5%.
4. The 100% variance between actual and forecast figures for new investment charges is attributable to us not having included new investment charges in our 2014 forecast. We misunderstood that Transpower's November 2013 notification of transmission charges included new investment charges. We have corrected this assumption for the 2015 expenditure forecast.

# Appendix D—Quality Standard Compliance Calculations

## Reliability Data

**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		<b>1,591.90</b>	Reference Period Total SAIFI		<b>7.31</b>
	Reference Period Average SAIDI		<b>318.38</b>	Reference Period Average SAIFI		<b>1.46</b>
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
2014	33.99	824.41	858.40	0.15	2.05	2.20

**Table 16: Assessed SAIDI and SAIFI value 2014**

Year	SAIDI	SAIFI
2014	274.7657	1.9990

## Reliability Limits

**Table 17: SAIDI and SAIFI Boundary Values**

**SAIDI Boundary Calculations**

$a_{SAIDI}$	-1.1647	The average of the natural logarithm (ln) of each daily SAIDI Value in the non-zero data set
$b_{SAIDI}$	1.6490	The standard deviation of the natural logarithm (ln) of each daily SAIDI Value in the non-zero data set

$B_{SAIDI} = e^{(a_{SAIDI} + 2.5 * b_{SAIDI})}$	19.2546
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**SAIFI Boundary Calculations**

$a_{SAIFI}$	-6.1189	The average of the natural logarithm (ln) of each daily SAIFI Value in the non-zero data set
$b_{SAIFI}$	1.7889	The standard deviation of the natural logarithm (ln) of each daily SAIFI Value in the non-zero data set

$B_{SAIFI} = e^{(a_{SAIFI} + 2.5 * b_{SAIFI})}$	0.1927
---	--------

**Table 18: Event Days exceeding SAIDI Boundary Value within the Reference**  
**Event Days exceeding SAIDI Boundary Value within the Reference Dataset**

Date	Pre-Normalised SAIDI	Pre-Normalised SAIFI	Normalised SAIDI	Normalised SAIFI
12-Jun-06	909.3428	0.3509	19.2556	0.1927
			-	-
			-	-
			-	-
			-	-
			-	-
			-	-
			-	-
			-	-
			-	-

**Table 19: SAIDI and SAIFI Limits**

**SAIDI Limit**

$m_{SAIDI}$	140.3620	The average annual SAIDI Value in the Normalised Reference Dataset
$s_{SAIDI}$	23.8586	The standard deviation of daily SAIDI Values in the Normalised Reference Dataset multiplied by $\sqrt{365}$

$SAIDI_{Limit} = m_{SAIDI} + s_{SAIDI}$	164.2206
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**SAIFI Limit**

$m_{SAIFI}$	1.4319	The average annual SAIFI Value in the Normalised Reference Dataset
$s_{SAIFI}$	0.2624	The standard deviation of daily SAIFI Values in the Normalised Reference Dataset multiplied by $\sqrt{365}$

$SAIFI_{Limit} = m_{SAIFI} + s_{SAIFI}$	1.6943
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**Table 20: Event Days exceeding SAIDI Boundary Value within 2014**

Date	Pre-Normalised SAIDI	Pre-Normalised SAIFI	Normalised SAIDI	Normalised SAIFI
20-Jun-13	41.6138	0.0419	19.2556	0.0419
3-Jul-13	45.2720	0.0706	19.2556	0.0706
10-Sep-13	503.1391	0.3905	19.2556	0.1927
14-Oct-13	70.6250	0.1883	19.2556	0.1883
			-	-
			-	-
			-	-
			-	-
			-	-

## Appendix E—Severe Weather Events

During 2013, we experienced an unprecedented number of severe weather events on our network. Approximately 80% of the total 865 SAIDI minutes is attributable to severe weather events.

Severe weather events still account for approximately 40% of the total normalised SAIDI result. We have not seen severe weather events impact our network to this degree since the snow storms experienced in 2006.

The following sections provide a description of the severe weather events experienced during 2013.

### Flooding at 16—18 June 2013

Flooding contributed approximately 3 SAIDI minutes to total performance.

The flooding in North Otago's Waitaki Valley has been described as the worst seen in close to 40 years, and Waitaki District Mayor Alex Familton says the floodwater has “scoured rural roads”. The flooding resulted in the inundation of ground mount transformers, and damaged poles when riverbanks were cut out.

Figure 1 below shows the flooding affected area within our network.

**Figure 1: Flooding affected area within our network**





## Snow storm at 20 June 2013

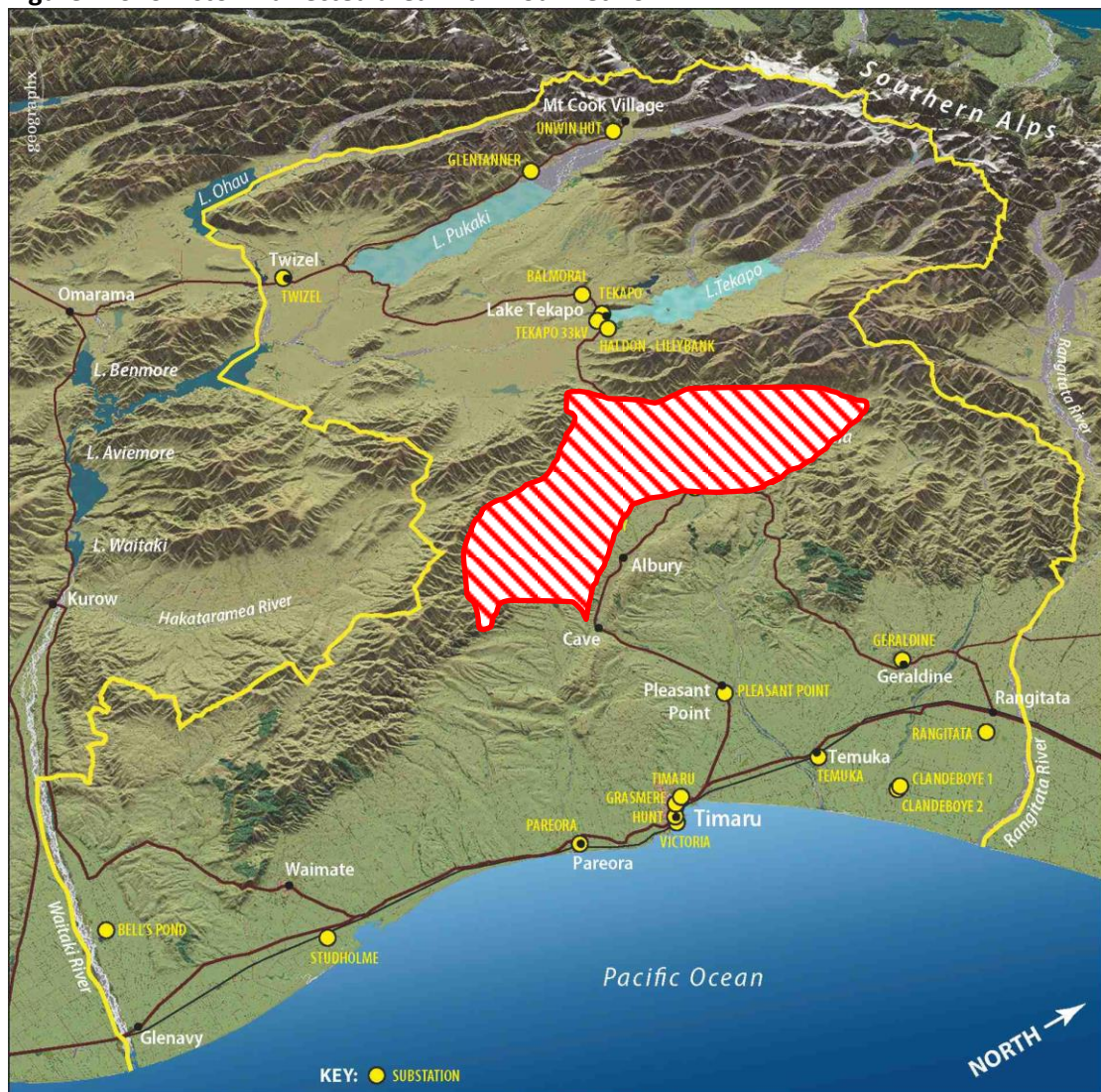
The snow storm contributed approximately 41 SAIDI minutes to total performance.

South Canterbury received its largest snowfalls in decades in a snow storm that cut power to thousands of people. The 2013 snow storm has become the worst snow storm since 2006 when the SAIDI minutes reached more than 900.

The township of Fairlie, Mackenzie District, was one of the worst affected, with more than 1,200 households without power. Most damage on our network was caused by snow loading on trees. The snow storm also caused us vehicle access problem as the snow in some areas was up to 1.5 meters deep prolong to the outages. Unlike in 2006 helicopters were unable to be used due to the on-going extreme weather conditions.

Figure 2 below shows the snow storm affected area.

**Figure 2: Snow storm affected area within our network**





## Wind storms at 3 July, 10 September, and 14 October 2013

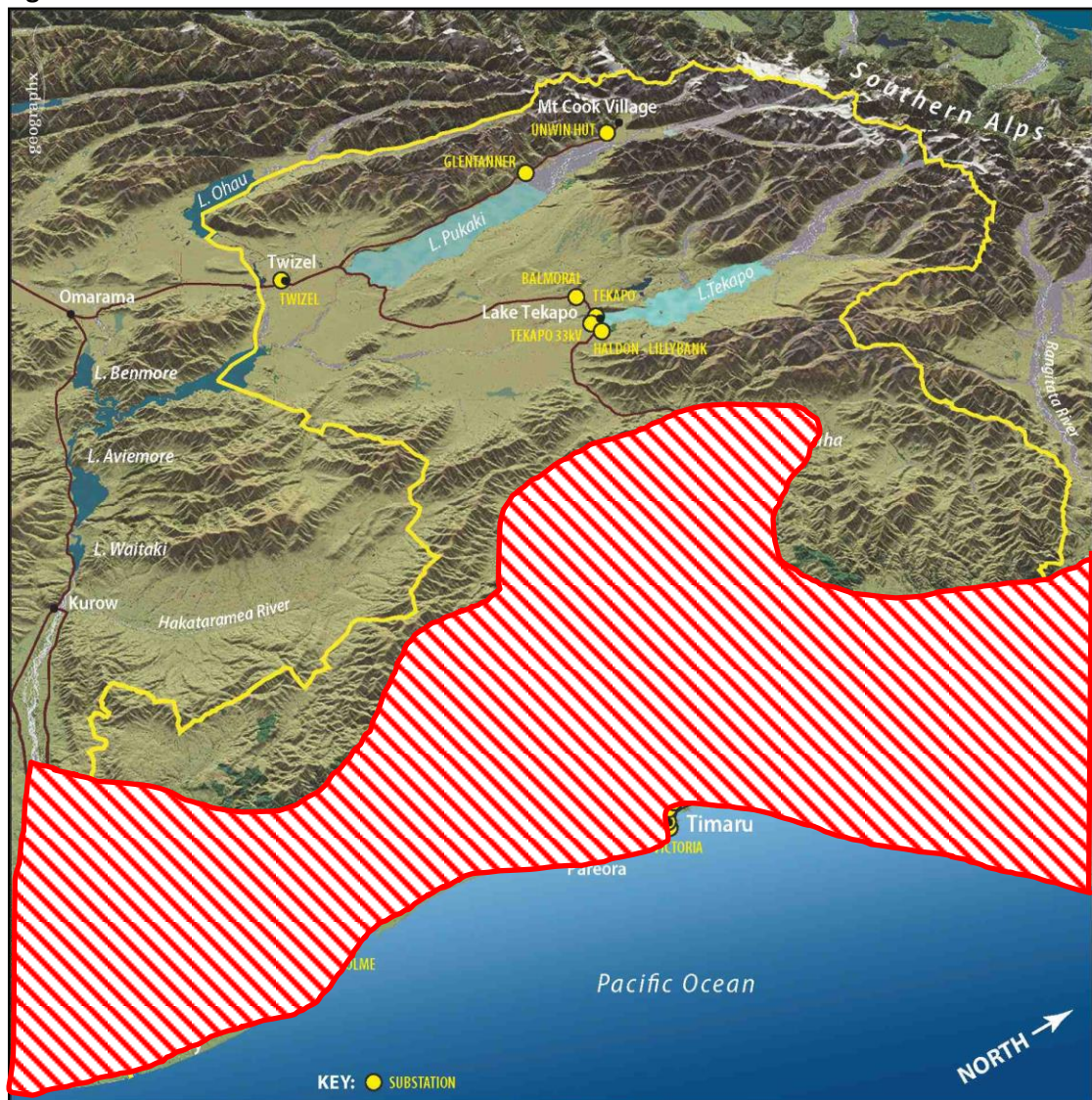
Wind storms contributed approximately 600 SAIDI minutes to total performance.

Wind storms impacted our network on three separate occasions during 2013. It is rare, in South Canterbury, to have strong wind storms. Wind gusts reached up to 200 km/hour. Police warned people not to travel at all around South Canterbury as debris was flying around and weather and road conditions were treacherous.

Most damage on our network was caused by trees hitting our overhead assets and softwood poles snapping from the force of the wind. Wind threw debris into our lines causing multiple fire events. Hundreds of trees were uprooted, which pushed over neighbouring trees causing a domino effect.

Figure 3 below shows the wind storm affected area within our network.

**Figure 3: Wind storm affected area within our network**



## Appendix F—Prior Period Reliability Assessment

**Table 21: Assessed Prior Period SAIDI and SAIFI value**

Year	SAIDI	SAIFI
2013	148.2667	1.2979
2012	161.6607	1.2611

**Table 22: Assessed Prior Period SAIDI and SAIFI Compliance**

SAIDI <sub>Assess 2013</sub>	148.2667	SAIFI <sub>Assess 2013</sub>	1.30
SAIDI <sub>Limit</sub>	164.2206	SAIFI <sub>Limit</sub>	1.69
0.9029	< 1	0.7660	< 1
<i>SAIDI is within limit</i>		<i>SAIFI is within limit</i>	

SAIDI <sub>Assess 2012</sub>	161.6607	SAIFI <sub>Assess 2012</sub>	1.26
SAIDI <sub>Limit</sub>	164.2206	SAIFI <sub>Limit</sub>	1.69
0.9844	< 1	0.7443	< 1
<i>SAIDI is within limit</i>		<i>SAIFI is within limit</i>	



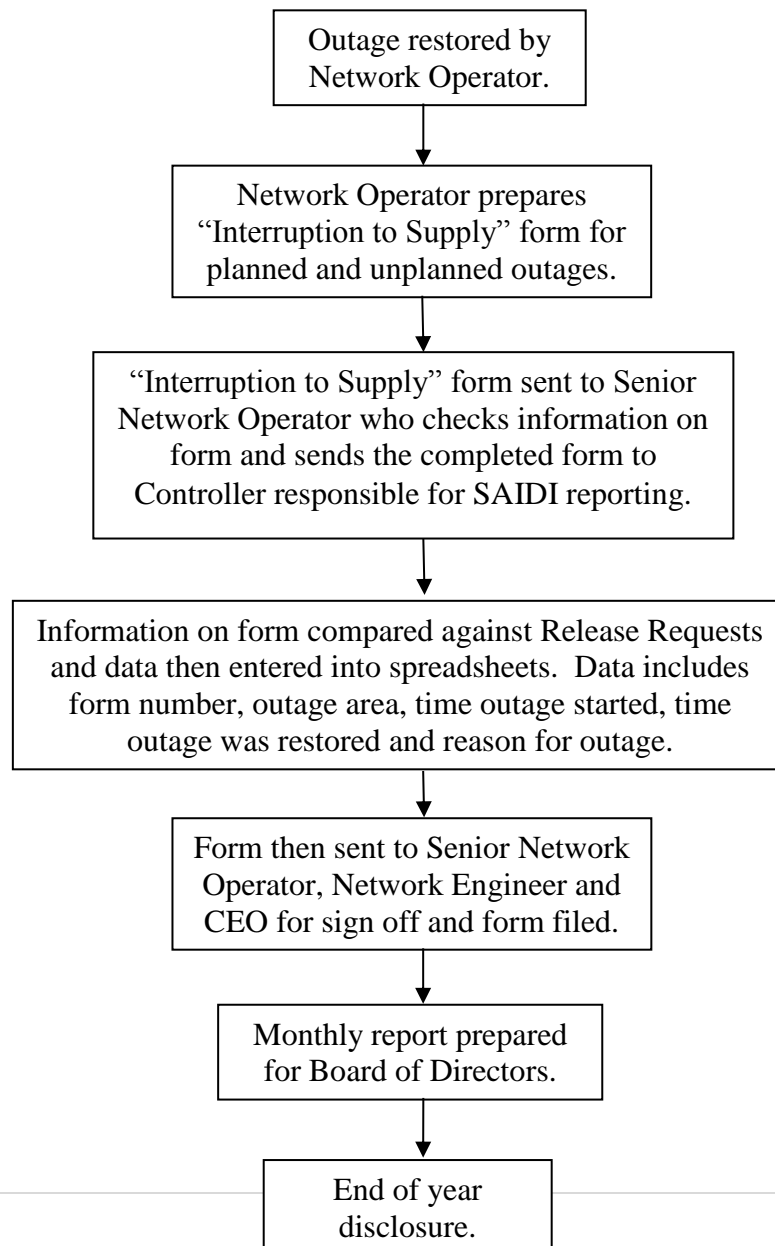
## Appendix G—Policies and Procedures for Recording SAIDI and SAIFI

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

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

Figure 4 below, outlines our process for recording outages.

**Figure 4: Process for recording outages**



## Appendix H—Photos of the Impacts of Severe Weather Events

Figure 5: The flooding



Figure 6: Vehicle access problem caused by depth of storms



**Figure 7: Poles broken by wind storms**



**Figure 8: Trees pushed by strong winds**

