## Alpine Energy Limited

## DEFAULT PRICE QUALITY PATH COMPLIANCE STATEMENT

FOR THE ASSESSMENT DATE 31 MARCH 2011

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

12 July 2011

### Contents

- 1) Compliance with the Price Path (Clause 11.1(a))
- 2) Compliance with the Quality Standards (Clause 11.1(a))
- 3) Director Certification (Clause 11.1(c))
- 4) Auditor's Report (Clause 11.2)

#### Supporting Information (Clause 11.1(b))

APPENDIX A Price Path Compliance Calculations
APPENDIX B Price and Quantity Schedules
APPENDIX C Pass Through Costs
APPENDIX D Quality Standard Compliance Calculations
APPENDIX E Policies and Procedures for Recording SAIDI and SAIFI

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

Alpine Energy Limited does comply with the price path at the assessment date, 31 March 2011, as specified in the *Commerce Act (Electricity Distribution Default Price-Quality Path) Determination 2010.* 

**Clause 8.4** - 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 ( $R_t$ ) 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:	$\frac{NR_{2011}}{R_{2011}} \le 1$	
NR <sub>2011</sub> :	\$ 23,770,616	
R <sub>2011</sub> :	\$ 24,568,447	
Result:	0.9675 < 1	
Result:	Price Path has not been breached	
Test:	$\frac{NR_{Max}}{R_{2011}} \le I$	
NRM	\$ 23 917 847	

NR <sub>Max</sub> :	\$	23,917,847	
R <sub>2011</sub> :	\$	24,568,447	
Result:		0.9735 < 1	
Result:	Price F	Path has not been breache	ed

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

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

Alpine Energy Limited does comply with all requirements of the quality standards at the assessment date, 31 March 2011, 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.

#### Commerce Act (Electricity Distribution Default Price-Quality Path) Determination 2010 Assessment Against the Quality Standards for the Assessment Date 31 March 2011

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

Test:	$\frac{SAIDI_{Assess \ 2011}}{SAIDI_{Limit}} \leq l$	,
SAIDI <sub>Assess 2011</sub> SAIDI <sub>Limit</sub>	225. 164.	
Result:	1.3755 > 1	
Result:	SAIDI Limit has been exceeded.	

Test:	$\boxed{\frac{SAIFI_{Assess 2011}}{SAIFI_{Limit}}} \leq 1$	,
SAIFI <sub>Assess 2011</sub> SAIFI <sub>Limit</sub>	1.70 1.69	
Result:	1.0081 > 1	
Result:	SAIFI Limit has been exceeded	

Supporting evidence is presented in Appendices D and E.

SAIDI & SAIFI Assess have exceeded the SAIDI & SAIFI Limits for 2011. This does not place Alpine Energy in a position of non-compliance with the quality standards for 2011 (as this is the first assessment period).

## **Director Certification (Clause 11.1(c))**

I Ian James Bowan, being director of Alpine Energy Ltd 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 July 2011

## 4. Auditor's Report (Clause 11.2)

[Insert signed Auditor's Report]

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

Clause 8.4

Notional Rev	Notional Revenue for the year ending March 2011										
Term	Description	Value \$									
P 2011 *Q 2009	Prices at 31 March 2011 multiplied by 31 March 2009 Base Quantities	33,947,270									
	Transmission Charges for year ending 31 March 2011	9,646,293									
	Avoided Transmission Charges for year ending 31 March 2011	328,773									
K 2011	Rates for year ending 31 March 2011	51,106									
A 2011	Electricity Authority Levies for year ending 31 March 2011	72,544									
	Commerce Act Levies for year ending 31 March 2011 + 1/5 of Commerce Act Levies for year ending 31 March 2010	77,938									
NR 2011	Notional Revenue for the year ending 31 March 2011	23,770,616									

Maximum Notional Revenue for the year ending March 2011										
Term										
P <sub>Max</sub> *Q <sub>2009</sub>	1 April 2010 and 31 March 2011 multiplied by 31 March 2009 Base	34,094,501								
	Transmission Charges for year ending 31 March 2011	9,646,293								
	Avoided Transmission Charges for year ending 31 March 2011	328,773								
K 2011	Rates for year ending 31 March 2011	51,106								
K 2011	Electricity Authority Levies for year ending 31 March 2011	72,544								
	Commerce Act Levies for year ending 31 March 2011 + 1/5 of Commerce Act Levies for year ending 31 March 2010	77,938								
NR <sub>Max</sub>	Notional Revenue for the year ending 31 March 2011	23,917,847								

#### Clause 8.5

Allov			
Term	Description	Value \$	
P 2010 *Q 2009	Prices at 31 March 2010 multiplied by 31 March 2009 Base Quantities	33,841,891	Supported by P*Q schedules presented in Appendix B
	Transmission Charges for year ending 31 March 2010	9,730,159	
K 2010	Avoided Transmission Charges for 2010	-	
A 2010	Rates for year ending 31 March 2010	49,945	
	Electricity Commission Levies for year ending 31 March 2010	84,393	
X	X Factor	-	
$(1 + \Delta CPI_{2011})$	Average change in Consumer Price Index	1.0247	
R 2011	Allowable Notional Revenue under the CPI-X Price Path for the year ending 31 March 2011	24,568,447	

	ΔCPI <sub>2011</sub>											
Numerator		Denominator										
CPI <sub>Dec2008</sub>	1072	CPI <sub>Dec2007</sub>	1037									
CPI <sub>Mar2009</sub>	1075	CPI <sub>Mar2008</sub>	1044									
CPI <sub>Jun2009</sub>	1081	CPI <sub>Jun2008</sub>	1061									
CPI <sub>Sep2009</sub>	1095	CPI <sub>Sep2008</sub>	1077									
Total	4323	Total	4219									
∆CPI <sub>2011</sub>		2.47%										

Alpine Energy Limited					2009/10 Pric	ing Schedule			2009 Quantities				Revenue - 2010 Prices			
			Di	stribution			Trar	nsmission								
		Fixed	Variable Day	Variable Night	Demand	Fixed	Variable Day	Variable Night	. Demand					Distribution	Transmission	Total Revenue
		per annum	per kWh	per kWh	per kW per annum	per annum	per kWh	per kWh	per kW per annum	Day kWh	Night kWh	Demand kW	Number of ICPs	Distribution	mansmission	Total Revenue
LOWHCA	Low Charge	\$54.75	\$0.0473	\$0.0281	\$0.00	\$0.00	\$0.0152	\$0.0030	\$0.00	1,625,402	617,582		500	121,591	26,551	148,142
LOWLCA	Low Charge	\$54.75	\$0.0460	\$0.0268	\$0.00	\$0.00	\$0.0152	\$0.0030	\$0.00	12,787,061	4,858,522		4,070	941,265	208,875	1,150,140
LOWUHCA	Low Uncontrolled	\$54.75	\$0.0473	\$0.0281	\$0.00	\$0.00	\$0.0388	\$0.0266	\$0.00	0	0		1	55	0	55
LOWULCA	Low Uncontrolled	\$54.75	\$0.0460	\$0.0268	\$0.00	\$0.00	\$0.0388	\$0.0266	\$0.00	0	0		0	0	0	0
015HCA	015	\$243.83	\$0.0263	\$0.0071	\$0.00	\$0.00	\$0.0152	\$0.0030	\$0.00	52,649,162	20,004,369		6,472	3,103,552	860,018	3,963,570
015LCA	015	\$232.22	\$0.0263	\$0.0071	\$0.00	\$0.00	\$0.0152	\$0.0030	\$0.00	121,047,755	45,992,831		16,946	7,442,258	1,977,301	9,419,558
015UHCA	015 Uncontrolled	\$243.83	\$0.0263	\$0.0071	\$0.00	\$212.54	\$0.0152	\$0.0030	\$0.00	25,590	9,723		26	7,022	5,892	12,914
015ULCA	015 Uncontrolled	\$232.22	\$0.0263	\$0.0071	\$0.00	\$212.54	\$0.0152	\$0.0030	\$0.00	2,328	884		42	9,877	9,016	18,893
360HCA	360	\$888.65	\$0.0263	\$0.0071	\$0.00	\$0.00	\$0.0152	\$0.0030	\$0.00	8,328,818	3,164,585		297	505,656	136,050	641,706
360LCA	360	\$846.33	\$0.0263	\$0.0071	\$0.00	\$0.00	\$0.0152	\$0.0030	\$0.00	15,918,623	6,048,378		540	917,828	260,029	1,177,857
360UHCA	360 Uncontrolled	\$888.65	\$0.0263	\$0.0071	\$0.00	\$212.54	\$0.0152	\$0.0030	\$0.00	0	0		3	2,370	567	2,937
360ULCA	360 Uncontrolled	\$846.33	\$0.0263	\$0.0071	\$0.00	\$212.54	\$0.0152	\$0.0030	\$0.00	44,550	16,927		1	2,419	1,011	3,430
ASSHCA	Assessed	\$80.89	\$0.0263	\$0.0071	\$8.78	\$0.00	\$0.0152	\$0.0030	\$30.15	84,393,765	32,065,925	62,705	957	3,073,271	3,269,408	6,342,678
ASSLCA	Assessed	\$77.04	\$0.0263	\$0.0071	\$8.37	\$0.00	\$0.0152	\$0.0030	\$30.15	22,242,006	8,450,986	27,781	291	899,239	1,201,062	2,100,301
TOU400HCA	TOU 400V	\$80.89	\$0.0101	\$0.0015	\$42.51	\$0.00	\$0.0025	\$0.0015	\$57.44	11,769,970	4,347,972	5,033	32	342,280	325,454	667,734
TOU400LCA	TOU 400V	\$77.04	\$0.0101	\$0.0015	\$40.48	\$0.00	\$0.0025	\$0.0015	\$57.44	63,213,500	28,329,137	23,854	109	1,656,839	1,573,081	3,229,920
TOU11HCA	TOU 11kV	\$80.89	\$0.0101	\$0.0015	\$31.88	\$0.00	\$0.0025	\$0.0015	\$57.44	16,694,697	6,392,535	5,773	6	363,199	383,531	746,730
TOU11LCA	TOU 11kV	\$77.04	\$0.0101	\$0.0015	\$30.36	\$0.00	\$0.0025	\$0.0015	\$57.44	11,546,413	5,018,360	4,080	4	248,666	271,182	519,849
Individually Priced	Customer 1												1	133,986	240,389	374,375
	Customer 2												1	1,741,214	931,417	2,672,631
	Customer 3												1	152,462	496,010	648,472
										422,289,638	165,318,715	129,226	30,300	21,665,048	12,176,843	33,841,891

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

Alpine Energy Limited					2010/11 Prici	ing Schedule	2		2009 Quantities				Revenue - 2011 Prices			
			Di	stribution			Т	ransmission								
		Fixed	Variable Day	Variable Night	Demand	Fixed	Variable Day	Variable Night	: Demand					Distribution	Transmission	Total Revenue
		per annum	per kWh	per kWh	per kW per annum	per annum	per kWh	per kWh	per kW per annum	Day kWh	Night kWh	Demand kW	Number of ICPs	Distribution	Transmission	Total Revenue
LOWHCA	Low Charge	\$54.75	\$0.0484	\$0.0288	\$0.00	\$0.00	\$0.0152	\$0.0030	\$0.00	1,625,402	617,582		500	123,748	26,551	150,299
LOWLCA	Low Charge	\$54.75	\$0.0465	\$0.0269	\$0.00	\$0.00	\$0.0152	\$0.0030	\$0.00	12,787,061	4,858,522		4,070	948,674	208,875	1,157,549
LOWUHCA	Low Uncontrolled	\$54.75	\$0.0484	\$0.0288	\$0.00	\$0.00	\$0.0388	\$0.0266	\$0.00	0	0		1	55	0	55
LOWULCA	Low Uncontrolled	\$54.75	\$0.0465	\$0.0269	\$0.00	\$0.00	\$0.0388	\$0.0266	\$0.00	0	0		0	0	0	0
015HCA	015	\$248.71	\$0.0268	\$0.0072	\$0.00	\$0.00	\$0.0152	\$0.0030	\$0.00	52,649,162	20,004,369		6,472	3,165,623	860,018	4,025,641
015LCA	015	\$232.22	\$0.0268	\$0.0072	\$0.00	\$0.00	\$0.0152	\$0.0030	\$0.00	121,047,755	45,992,831		16,946	7,512,399	1,977,301	9,489,700
015UHCA	015 Uncontrolled	\$248.71	\$0.0268	\$0.0072	\$0.00	\$212.54	\$0.0152	\$0.0030	\$0.00	25,590	9,723		26	7,162	5,892	13,055
015ULCA	015 Uncontrolled	\$232.22	\$0.0268	\$0.0072	\$0.00	\$212.54	\$0.0152	\$0.0030	\$0.00	2,328	884		42	9,878	9,016	18,895
360HCA	360	\$906.42	\$0.0268	\$0.0072	\$0.00	\$0.00	\$0.0152	\$0.0030	\$0.00	8,328,818	3,164,585		297	515,769	136,050	651,819
360LCA	360	\$846.33	\$0.0268	\$0.0072	\$0.00	\$0.00	\$0.0152	\$0.0030	\$0.00	15,918,623	6,048,378		540	927,052	260,029	1,187,081
360UHCA	360 Uncontrolled	\$906.42	\$0.0268	\$0.0072	\$0.00	\$212.54	\$0.0152	\$0.0030	\$0.00	0	0		3	2,417	567	2,984
360ULCA	360 Uncontrolled	\$846.33	\$0.0268	\$0.0072	\$0.00	\$212.54	\$0.0152	\$0.0030	\$0.00	44,550	16,927		1	2,445	1,011	3,456
ASSHCA	Assessed	\$82.51	\$0.0268	\$0.0072	\$8.96	\$0.00	\$0.0152	\$0.0030	\$30.76	84,393,765	32,065,925	62,705	957	3,134,736	3,307,224	6,441,960
ASSLCA	Assessed	\$77.04	\$0.0268	\$0.0072	\$8.37	\$0.00	\$0.0152	\$0.0030	\$30.15	22,242,006	8,450,986	27,781	291	912,127	1,201,062	2,113,189
TOU400HCA	TOU 400V	\$82.51	\$0.0103	\$0.0015	\$43.36	\$0.00	\$0.0025	\$0.0015	\$57.44	11,769,970	4,347,972	5,033	32	349,126	325,454	674,579
TOU400LCA	TOU 400V	\$77.04	\$0.0103	\$0.0015	\$40.48	\$0.00	\$0.0025	\$0.0015	\$57.44	63,213,500	28,329,137	23,854	109	1,670,494	1,573,081	3,243,575
TOU11HCA	TOU 11kV	\$82.51	\$0.0103	\$0.0015	\$32.52	\$0.00	\$0.0025	\$0.0015	\$57.44	16,694,697	6,392,535	5,773	6	370,463	383,531	753,994
TOU11LCA	TOU 11kV	\$77.04	\$0.0103	\$0.0015	\$30.36	\$0.00	\$0.0025	\$0.0015	\$57.44	11,546,413	5,018,360	4,080	4	251,156	271,182	522,338
Individually Priced	Customer 1												1	135,332	187,896	323,228
	Customer 2												1	1,741,214	931,417	2,672,631
	Customer 3												1	152,462	348,779	501,241
										422,289,638	165,318,715	129,226	30,300	21,932,334	12,014,936	33,947,270

Alpine Energy Limited					2010/11 Prici	ng Schedule	1			2009 Quantities				Revenue - Maximum		
			Dis	stribution			Т	ransmission								
		Fixed	Variable Day	Variable Night	t Demand	Fixed	Variable Day	Variable Night	Demand					Distribution	Transmission	Total Revenue
		per annum	per kWh	per kWh	per kW per annum	per annum	per kWh	per kWh	per kW per annum	Day kWh	Night kWh	Demand kW	Number of ICPs	Distribution	Transmission	Total Revenue
LOWHCA	Low Charge	\$54.75	\$0.0484	\$0.0288	\$0.00	\$0.00	\$0.0152	\$0.0030	\$0.00	1,625,402	617,582		500	123,748	26,551	150,299
LOWLCA	Low Charge	\$54.75	\$0.0465	\$0.0269	\$0.00	\$0.00	\$0.0152	\$0.0030	\$0.00	12,787,061	4,858,522		4,070	948,674	208,875	1,157,549
LOWUHCA	Low Uncontrolled	\$54.75	\$0.0484	\$0.0288	\$0.00	\$0.00	\$0.0388	\$0.0266	\$0.00	0	0		1	55	0	55
LOWULCA	Low Uncontrolled	\$54.75	\$0.0465	\$0.0269	\$0.00	\$0.00	\$0.0388	\$0.0266	\$0.00	0	0		0	0	0	C
015HCA	015	\$248.71	\$0.0268	\$0.0072	\$0.00	\$0.00	\$0.0152	\$0.0030	\$0.00	52,649,162	20,004,369		6,472	3,165,623	860,018	4,025,64
015LCA	015	\$232.22	\$0.0268	\$0.0072	\$0.00	\$0.00	\$0.0152	\$0.0030	\$0.00	121,047,755	45,992,831		16,946	7,512,399	1,977,301	9,489,700
015UHCA	015 Uncontrolled	\$248.71	\$0.0268	\$0.0072	\$0.00	\$212.54	\$0.0152	\$0.0030	\$0.00	25,590	9,723		26	7,162	5,892	13,055
015ULCA	015 Uncontrolled	\$232.22	\$0.0268	\$0.0072	\$0.00	\$212.54	\$0.0152	\$0.0030	\$0.00	2,328	884		42	9,878	9,016	18,895
360HCA	360	\$906.42	\$0.0268	\$0.0072	\$0.00	\$0.00	\$0.0152	\$0.0030	\$0.00	8,328,818	3,164,585		297	515,769	136,050	651,819
360LCA	360	\$846.33	\$0.0268	\$0.0072	\$0.00	\$0.00	\$0.0152	\$0.0030	\$0.00	15,918,623	6,048,378		540	927,052	260,029	1,187,08 <sup>-</sup>
360UHCA	360 Uncontrolled	\$906.42	\$0.0268	\$0.0072	\$0.00	\$212.54	\$0.0152	\$0.0030	\$0.00	0	0		3	2,417	567	2,984
360ULCA	360 Uncontrolled	\$846.33	\$0.0268	\$0.0072	\$0.00	\$212.54	\$0.0152	\$0.0030	\$0.00	44,550	16,927		1	2,445	1,011	3,456
ASSHCA	Assessed	\$82.51	\$0.0268	\$0.0072	\$8.96	\$0.00	\$0.0152	\$0.0030	\$30.76	84,393,765	32,065,925	62,705	957	3,134,736	3,307,224	6,441,960
ASSLCA	Assessed	\$77.04	\$0.0268	\$0.0072	\$8.37	\$0.00	\$0.0152	\$0.0030	\$30.15	22,242,006	8,450,986	27,781	291	912,127	1,201,062	2,113,189
TOU400HCA	TOU 400V	\$82.51	\$0.0103	\$0.0015	\$43.36	\$0.00	\$0.0025	\$0.0015	\$57.44	11,769,970	4,347,972	5,033	32	349,126	325,454	674,579
TOU400LCA	TOU 400V	\$77.04	\$0.0103	\$0.0015	\$40.48	\$0.00	\$0.0025	\$0.0015	\$57.44	63,213,500	28,329,137	23,854	109	1,670,494	1,573,081	3,243,575
TOU11HCA	TOU 11kV	\$82.51	\$0.0103	\$0.0015	\$32.52	\$0.00	\$0.0025	\$0.0015	\$57.44	16,694,697	6,392,535	5,773	6	370,463	383,531	753,994
TOU11LCA	TOU 11kV	\$77.04	\$0.0103	\$0.0015	\$30.36	\$0.00	\$0.0025	\$0.0015	\$57.44	11,546,413	5,018,360	4,080	4	251,156	271,182	522,338
Individually Priced	Customer 1												1	135,332	187,896	323,228
	Customer 2												1	1,741,214	931,417	2,672,63
	Customer 3												1	152,462	496,010	648,472
										422,289,638	165,318,715	129,226	30,300	21,932,334	12,162,167	34,094,50

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

Pass Through Costs for year ending March 2011												
K <sub>2011</sub>	Actual (\$)	Forecast (\$)	Variance (\$)	Variance (%)								
Transmission	9,646,293	9,485,965	160,328	1.66%								
Avoided Transmission	328,773	-	328,773	100.%								
Rates	51,106	50,000	1,106	2.16%								
Electricity Authority Levies	72,544	35,000	37,544	51.75%								
Commerce Act Levies	77,938	80,000	(2,062)	(2.65)%								
Total Pass Through Costs	10,176,654	9,650,965	525,689	5.17%								

No calculation of avoided transmission costs was undertaken at the time of budgeting for 2010-11 prices.

Electricity Authority Levies were significantly greater than expected.

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

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

# Assessment Against the Quality Standards for the Assessment Date 31 March 2011

Year SAIDI (Interr		DI (Interruption Du	ration)	SAIFI (Interruption Frequency)		
rear	Class B	Class C	Total	Class B	Class C	Total
2005	10.86	58.07	68.92	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	1.69
2009	82.81	118.13	200.94	0.36	1.33	1.69
		e Period Total SAIDI	1,591.90	Reference Peri	od Total SAIFI	7.32
		Period Average SAIDI	318.38	Reference Pe SA	0	1.46
2011	62.42	163.47	225.89	0.27	1.43	1.71

#### Reliability Data (Before Normalisation)

### **Reliability Limit Calculations**

SAIDI Boundary Calcul	ations	
<i>a</i> <sub>SAIDI</sub>	-1.1647	The average of the natural logarithm (In) of each daily SAIDI Value in the non-zero data set
$\beta_{SAIDI}$	1.6490	The standard deviation of the natural logarithm (In) of each daily SAIDI Value in the non-zero data set
$B_{SAIDI} = e^{(\alpha SAIDI + 2.5*\beta SAIDI)}$	19.2546	SAIDI Boundary Value

SAIFI Boundary Calculat	tions	
$\alpha_{SAIFI}$	-6.1189	The average of the natural logarithm (In) of each daily SAIFI Value in the non-zero data set
$\beta_{SAIFI}$	1.7889	The standard deviation of the natural logarithm (In) of each daily SAIFI Value in the non-zero data set
$B_{SAIFI} = e^{(\alpha SAIFI + 2.5*\beta SAIFI)}$	0.1927	SAIFI Boundary Value

# 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	19.2546	0.1927
			-	-
			-	-
			-	-
			-	-
			-	-
			-	-
			-	-
			-	-
			-	-
			-	-
			-	-
			-	-
			-	-
			-	-

SAIDI Limit		
μ <sub>SAIDI</sub>	140.3620	The average annual SAIDI Value in the Normalised Reference Dataset
σ <sub>SAIDI</sub>	23.8586	The standard deviation of daily SAIDI Values in the Normalised Reference Dataset multiplied by √365
	1	
$SAIDI_{Limit} = \mu_{SAIDI} + \sigma_{SAIDI}$	164.2206	SAIDI Limit Value

1.4319	The average annual SAIFI Value in the Normalised Reference Dataset
0.2624	The standard deviation of daily SAIFI Values in the Normalised Reference Dataset multiplied by √365
1.6943	SAIFI Limit Value
	0.2624

### Reliability Assessment Calculations

## *Event Days exceeding SAIDI Boundary Value within the Assessment Dataset*

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

SAIDI <sub>2011</sub>	225.8863	The sum of daily SAIDI Values in the 1 April 2010 - 31 March 2011 Normalised Assessment Dataset

Assessed SAIFI Value		
SAIFI <sub>2011</sub>	1.7080	The sum of daily SAIFI Values in the 1 Apri 2010 - 31 March 2011 Normalised Assessment Dataset

#### Appendix E – Policies and Procedures for Recording SAIDI and SAIFI (Clause 11.1(b)(v))

The following are the Policies and Procedures which Alpine Energy uses for recording SAIDI and SAIFI statistics:

- All planned and unplanned outages 3.3kV and above are recorded.
- Outages less than 1 minute duration are still 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 prepared for Board of Directors.

