



Default Price-Quality Path Compliance Statement

For the Assessment Date 31 March 2016

8 June 2016

Pursuant to the requirements of clause 11.1 of the Electricity Distribution
Services Default Price-Quality Path Determination 2015

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1. Summary of Compliance

We have complied with the price path (clause 8), but have not complied with the quality standards (clause 9) of the *Commerce Act (Electricity Distribution Default Price-Quality Path) Determination 2015* ("Determination") for the assessment date ended 31 March 2016.

We submit the following information in our *Default Price-Quality Path Compliance Statement* pursuant to the clause 11.1 of the Determination:

- Price path under clauses 11.4(c) to (k):
 - the amount of allowable notional revenue and notional revenue
 - prices and quantities
 - the amounts of Pass-through and Recoverable Costs and information used to determine these amounts
 - the methodology used to calculate Pass-through prices and Distribution prices
 - the amount of charge relating to New Investment Agreements
 - the variances between the forecast and actual amounts of Pass-through Costs and Recoverable Costs and explanatory notes of material variances.
 - a reconciliation between Pass through Balance for this period and last.
- Quality standards under clause 11.5(a), (b), (c), (e), and (f):
 - reasons for non-compliance
 - actions taken to mitigate non-compliance
 - 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, including policies and procedures
 - the cause of each Major Event Day within the assessment period.
- Director certification under clause 11.3(a) as set out in Schedule 6.
- An assurance report under clause 11.3(b) as set out in schedule 7.

Please note, under clause 11.2(a) to (f), we have:

- complied with price path in clause 8 for the assessment period
- not complied with the quality standards in clause 9 for the assessment period
- not restructured prices during the assessment period with the meaning of restructured prices set out under clause 4 (Interpretation) of the Determination
- not received a transfer of transmission assets or transferred assets to Transpower
- not amalgamated or merged with another party or participated in a Major Transaction with the meaning set out in clause 4 of the Determination.

This compliance statement was certified by a director of the board on 8 June 2016.

In conjunction with this compliance statement, copies of our New Investment Agreements with Transpower New Zealand have been submitted to the Commerce Commission in soft copy format in accordance with clause 11.4(h).

2. Compliance with the Price Path

We have complied with the price path as specified by clause 8 of the Determination. Clause 8.3 'Compliance with allowable notional revenue' requires that:

The notional revenue of a Non-exempt EDB in an Assessment Period must not exceed the allowable notional revenue for the Assessment Period, such that—

$$NR \leq ANR$$

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

Table 1: Notional Revenue calculation

Test:	$NR_{2015/16} \leq ANR_{2015/16}$	
NR _{2015/16}	\$	29,955,431
ANR _{2015/16}	\$	30,294,410
Result		0.9888 < 1
Result	<i>Price Path has not been breached</i>	

Table 1 above shows that our notional revenue, derived using posted prices as at 31 March 2016, was less than our allowable notional revenue. More details on the notional and allowable notional revenue calculations can be found at Appendix A at page 14. Our notional revenue calculation can be found at Appendix B, Table 11, on page 17.

Pass-through balance, Pass-through Prices and Quantities for 2016

The pass through balance for the assessment period is shown Table 2 below.

Table 2: Pass through balance for 2016

<i>PTB</i> _{2015/16}	Pass-through Balance for the Assessment Period ending 31 March 2016	867,231
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Pass through balance, Pass through Prices and Quantities for 2015

The pass through balance for the assessment period is shown in Table 3 below.

Table 3: Pass through balance for 2015

<i>PTB</i> _{2014/15}	Pass-through Balance from previous Assessment Period	Nil
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The pass-through balance did not apply for the Assessment Period ended 31 March 2015 so this equals zero.

Pass through Balance Reconciliation

We recovered \$21,843,757 via pass-through and transmission prices. The total pass – through and recoverable costs realised during the period were \$20,976,526. Making the pass-through balance \$867,231 (or 4%). The 2016 pass through balance reconciliation is shown in Table 4 below.

Table 4: Pass through balance reconciliation

Pass-through Balance Reconciliation 2015/16		
Term	Description	Value \$
<i>PTP_{2015/16} Q_{2015/16}</i>	Pass-through Prices during 2015/2016 multiplied by 2015/2016 Quantities	21,843,757
<i>Total Pass-through and Recoverable Costs</i>	Total Pass-through and Recoverable Costs for the year ending 31 March 2016	20,976,526
<i>PTB_{2015/16}</i>	Pass-through Balance for the Assessment Period ending 31 March 2016	867,231
<i>PTB_{2014/15}</i>	Pass-through Balance from previous Assessment Period	-
<i>Difference</i>	Reconciliation between Pass-through Balance for the Assessment Period with the Pass-through Balance for the preceding Assessment Period	867,231

When we set prices effective 1 April 2015 we forecast total pass-through and recoverable costs to be \$20,713,771. When comparing forecast pass-through and recoverable costs is against actual pass-through and recoverable costs this is a small difference of \$262,755 (or 1%). The difference at Table 4 above is attributable to the growth on our network being significantly higher than our forecast growth.

Quantities grew, on average, by approximately 4% more than we had forecast. This unforecasted growth means that we sold more services than what we had set prices to recover resulting in us over recovering our pass-through and recoverable costs. We will return this over recovery to consumers through prices effective 1 April 2017.

More information can be found in the Appendixes

Information on the calculation of pass-through and recoverable revenue can be found at Appendix B, Table 12, on page 18.

Information on the method used to calculate pass-through and recoverable costs can be found at Appendix C on page 19.

The proportion of distribution and pass-through and recoverable costs to total delivery charge can be found at Appendix D on page 25.

The methodology used to forecast pass-through and recoverable prices can be found at Appendix E on page 26.

3. Compliance with the Quality Path

Our year end performance was 1.13 SAIDI minutes over the SAIDI limit and accordingly we have not complied with the quality path as specified by clause 9.1(a) of the Determination. Because this year is the second year at two immediately preceding extant Assessment Periods that we have not complied with clause 9.1(a) we have also not complied with clause 9.1(b) and accordingly we have breached the quality standards.

Clause 9.1 'Compliance with the quality standards' requires that:

A Non-exempt EDB 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 non-compliance with the quality path, under clause 9.1(a), is shown at Table 5 below.

Table 5: Performance against the quality standards

	SAIDI	SAIFI	Compliance
Compliance with 9.1(a) 2015/16 Assessment Period	Exceeds limit	Does not exceed limit	<i>Does not comply</i>
or			
Compliance with 9.1(b)			<i>Does not comply</i>
2014/15 Assessment Period	Does not exceed limit	Does not exceed limit	<i>Complies</i>
2013/14 Assessment Period	Exceeds limit	Exceeds limit	<i>Does not comply</i>
Clause 9.1 Result:	<i>Does not comply</i>		

Supporting evidence is presented in Appendices F to I.

Reasons for non-compliance

Our breach of the SAIDI limit is not indicative of a sustained deterioration of the network. Rather our exceeding of the limit is the result of four major event days (MEDs) experienced during the year. A summary of the causes of the major event days is shown in Table 6 below.

Table 6: Causes of the major event days

Date	Cause	Total SAIDI minutes	No. of minutes SAIDI was reduced by	Total SAIFI interruptions	No. of interruptions SAIFI was reduced by
12 April	Burnt Cross-arm	13.17	4.00	0.090	0.018
18 June	Snow storm	206.61	197.43	0.094	0.022
19 June	Snow storm	28.86	19.68	0.078	0.006
4 October	High winds	18.92	9.74	0.066	NA

Actions to mitigate non-compliance

We recognise the inconvenience caused to customers and costs associated when outages occur. To reduce the impact of outages on customers we have purchased:

- a 33/11 kV mobile substation
- two 500 kW portable generators
- one 190 kW portable generator.

The mobile substation is used as an emergency back-up for faults and as a temporary second transformer to support supply during a planned outages. Our portable generators can run separate at 400 V, ganged at 400 V, or stepped up to 11 kV, helping maintain service expectations of our consumers.

We also hire generators for larger multi MW projects to support supply to minimise disruption to customers.

More details on the steps that we take to reduce the impact of outages on customers can be found in our report *Performance against the quality standards*—an attachment to this annual compliance statement. A copy of the report can be found on our website¹ or from Reception at our main office² or we can send a copy to you³.

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:

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

¹ <http://www.alpineenergy.co.nz/disclosures>

² 31 Meadows Rd, Washdyke.

³ To have a copy sent to you, soft or hard copy, please email analyst@alpineenergy.co.nz with your request.

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

We have exceeded the allowable SAIDI limit but not the allowable SAIFI limit. Our assessed SAIDI and SAIFI calculations are demonstrated at Table 7 and Table 8 below.

Table 7: Assessed SAIDI calculation

Test:	$SAIDI_{Assess\ 2015/16} \leq SAIDI_{Limit}$
SAIDI _{Assess 2015/16}	155.29
SAIDI _{Limit}	154.16
	1.0074 > 1
Clause 9.1(a) Result:	<i>Exceeds limit</i>

Table 8: Assessed SAIFI calculation

Test:	$SAIFI_{Assess\ 2015/16} \leq SAIFI_{Limit}$
SAIFI _{Assess 2015/16}	1.18
SAIFI _{Limit}	1.51
	0.7831 < 1
Clause 9.1(a) Result:	<i>Does not exceed limit</i>

More information can be found in the Appendixes

Details on the quality standard compliance calculation can be found at Appendix F on page 28.

The calculation of revenue lost under the quality incentive scheme can be found at Appendix G on page 30.

Our performance at the prior two extant periods can be found at Appendix H on page 32.

Our policies and procedures for recording SAIDI and SAIFI can be found at Appendix I on page 33.

4. Restructure of prices

We did not restructure our prices that applied during the assessment period.

5. Transactions

We did not:

- receive a transfer of transmission assets from Transpower that become System Fixed Assets, or transferred System Fixed Assets to Transpower; or
- amalgamate or merger with another regulated service; or
- undertake any major transactions;

during the assessment period.

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 Price-Quality Path Determination 2015* are true and accurate.



Alister John France

8 June 2016

7. Auditor's Report



Independent Assurance Report

to the directors of Alpine Energy Limited and to the Commerce Commission

The Auditor-General is the auditor of Alpine Energy 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 2016 on pages 3 to 11, and 16 to 34 has been prepared, in all material respects, with the Electricity Distribution Services Default Price-Quality Path Determination 2015 (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.

Our 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 (Revised): *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. Copies of these standards are available on the External Reporting Board's website.

These standards require that we comply with ethical requirements and plan and perform our assurance engagement to provide reasonable assurance about whether the Annual Compliance Statement has been prepared in all material respects in accordance with the Determination.

We have performed procedures to obtain evidence about the amounts and disclosures in the Annual Compliance Statement. The procedures selected depend on our 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, we considered internal control relevant to the Company's preparation of the Annual Compliance Statement in order to design 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 assessing the disclosures about compliance with the price path in clause 8 of the Determination for the assessment period ended on 31 March 2016, our assurance engagement included examination, on a test basis, of evidence relevant to the amounts and disclosures contained on pages 5 to 6, 10 to 11, 16 to 27, and 30 to 31 of the Annual Compliance Statement.

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Independent Assurance Report

Alpine Energy Limited

In assessing the disclosures about compliance with the quality standards in clause 9 of the Determination for the assessment period ended on 31 March 2016, our assurance engagement included examination, on a test basis, of evidence relevant to the amounts and disclosures contained on pages 7 to 9, 28 to 29, and 32 to 34 of the Annual Compliance Statement.

Our assurance engagement 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 evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Use of this report

This independent assurance report solely for the directors of the Company and for the Commerce Commission for the purpose of providing those parties with reasonable 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 a reasonable assurance 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 assurance report has been formed on the above basis.

Independence and quality control

When carrying out the engagement, we complied with the Auditor-General's:

- independence and other ethical requirements, which incorporate the independence and ethical requirements of Professional and Ethical Standard 1 (Revised) issued by the New Zealand Auditing and Assurance Standards Board; and
- quality control requirements, which incorporate the quality control requirements of Professional and Ethical Standard 3 (Amended) issued by the New Zealand Auditing and Assurance Standards Board.



Independent Assurance Report

Alpine Energy Limited

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. In addition to this engagement and the audit, we have also carried out assignments in the areas of compliance with the Electricity Distribution (Information Disclosure) Determination 2012, other regulatory requirements of the Commerce Act 1986 and tax compliance services for an associate of the Group, which are compatible with those independence requirements. Other than these engagements, we have no relationship with, or interests in, the Company and its subsidiaries.

Opinion

In our opinion:

- As far as appears from an examination, the information used in the preparation of the Annual Compliance statement has been properly extracted from the Company's accounting and other records, and has been sourced, where appropriate, from its financial and non-financial systems; and
- The Annual Compliance Statement of Company for the year ended on 31 March 2016, has been prepared, in all material respects, in accordance with the Determination.

In forming our opinion, we have obtained sufficient recorded evidence and all the information and explanations we have required.

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

Mark Bramley
PricewaterhouseCoopers
On behalf of the Auditor-General
Christchurch, New Zealand
8 June 2016

Appendix A – Notional and Allowable Notional Revenue Calculations

Our notional and allowable notional revenue for the assessment period is shown in Table 9 and Table 10 respectively below.

Table 9: Notional Revenue

Notional Revenue 2015/16		
Term	Description	Value \$
$\Sigma DP_{2015/16} Q_{2013/14}$	Distribution Prices during 2015/2016 multiplied by 2013/2014 Quantities	29,955,431
$NR_{2015/16}$	Notional Revenue for the year ending 31 March 2016	29,955,431

Table 10: Allowable Notional Revenue Calculation

Allowable Notional Revenue 2015/16		
Term	Description	Value \$
$MAR_{2015/16}$	Maximum allowable revenue as specified in Schedule 1 of the DPP Determination	30,458,000
ΔD	Change in constant price revenue as specified in Schedule 1 of the DPP Determination	1.0054
$ANR_{2015/16}$	Allowable Notional Revenue for the year ending 31 March 2016	30,294,410

Appendix B – Calculation of distribution and pass-through and recoverable revenues

Our distribution price and the lagged quantities used in the notional and allowable notional revenue calculations are shown in Table 11 below.

Table 11: Prices and Quantities for Notional Revenue

Load group		Distribution				Quantities as at 31 March 2014				Notional Revenue DP16 x Q14
		Fixed per annum	Variable Day per kWh	Variable Night per kWh	Demand per kW per	Day kWh	Night kWh	Demand Demand kW	Number of ICPs	
LOWHCA	Low User (controlled) high cost area	\$44.96	\$0.0633	\$0.0367	\$0.00	4,370,783	1,628,947		1,017	\$382,062
LOWLCA	Low User (controlled) low cost area	\$44.96	\$0.0579	\$0.0313	\$0.00	28,356,365	10,568,135		6,598	\$2,268,215
LOWUHCA	Low User (uncontrolled) high cost area	\$44.96	\$0.0633	\$0.0367	\$0.00	21,489	8,009		5	\$1,878
LOWULCA	Low User (uncontrolled) low cost area	\$44.96	\$0.0579	\$0.0313	\$0.00	60,168	22,424		14	\$4,813
015HCA	Single Phase (controlled) high cost area	\$288.62	\$0.0360	\$0.0094	\$0.00	49,861,407	18,582,850		6,190	\$3,757,104
015LCA	Single Phase (controlled) low cost area	\$240.09	\$0.0360	\$0.0094	\$0.00	114,638,318	42,724,559		14,733	\$8,067,676
015UHCA	Single Phase (uncontrolled) high cost area	\$288.62	\$0.0360	\$0.0094	\$0.00	24,235	9,032		36	\$11,348
015ULCA	Single Phase (uncontrolled) low cost area	\$240.09	\$0.0360	\$0.0094	\$0.00	2,204	822		55	\$13,292
360HCA	Three Phase (controlled) high cost area	\$1,209.01	\$0.0360	\$0.0094	\$0.00	8,809,416	3,283,181		435	\$874,065
360LCA	Three Phase (controlled) low cost area	\$1,003.51	\$0.0360	\$0.0094	\$0.00	13,791,292	5,139,877		681	\$1,228,423
360UHCA	Three Phase (uncontrolled) high cost area	\$1,209.01	\$0.0360	\$0.0094	\$0.00	263,270	98,118		13	\$26,121
360ULCA	Three Phase (uncontrolled) low cost area	\$1,003.51	\$0.0360	\$0.0094	\$0.00	141,761	52,833		7	\$12,627
ASSHCA	Assessed demand high cost area	\$207.59	\$0.0360	\$0.0094	\$24.32	79,925,144	29,787,305	86,993	1,125	\$5,508,169
ASSLCA	Assessed demand low cost area	\$167.47	\$0.0360	\$0.0094	\$21.24	21,064,300	7,850,455	34,215	353	\$1,618,268
TOU400HCA	Time-of-Use metering at 400 V high cost area	\$125.14	\$0.0158	\$0.0028	\$70.37	11,468,210	4,627,344	6,118	33	\$628,888
TOU400LCA	Time-of-Use metering at 400 V low cost area	\$117.79	\$0.0158	\$0.0028	\$58.49	62,775,648	28,270,069	22,495	104	\$2,399,058
TOU11HCA	Time-of-Use metering at 11 kV high cost area	\$130.52	\$0.0158	\$0.0028	\$54.20	17,189,719	6,411,576	5,801	6	\$604,979
TOU11LCA	Time-of-Use metering at 11 kV low cost area	\$107.46	\$0.0158	\$0.0028	\$48.80	11,585,964	5,078,137	4,065	4	\$396,108
Individually Priced	Customer 1	\$141,557							1	\$141,557
	Customer 2	\$1,845,448							2	\$1,845,448
	Customer 3	\$165,331							1	\$165,331
	Customer 4	\$755,155								\$0
	Customer 5									\$0
	Customer 6									\$0
						424,349,693	164,143,673	159,687	31,413	\$29,955,431

Revenue recovered for of pass-through and recoverable costs is shown at Table 12 below.

Table 12: Pass-through and Recoverable prices and quantities for year ended 31 March 2016

Load group		Pass-through and Recoverable Costs				Quantities as at 31 March 2016				Pass-through and Recovery PTP16 x Q16
		Fixed per annum	Variable Day per kWh	Variable Night per kWh	Demand per kW per	Day kWh	Night kWh	Demand Demand kW	Number of ICPs	
LOWHCA	Low User (controlled) high cost area	\$9.79	\$0.0301	\$0.0116	\$0.00	5,779,318	2,215,535		1,410	\$213,166
LOWLCA	Low User (controlled) low cost area	\$9.79	\$0.0289	\$0.0104	\$0.00	32,765,861	12,560,982		7,994	\$1,155,050
LOWUHCA	Low User (uncontrolled) high cost area	\$9.79	\$0.0566	\$0.0382	\$0.00	36,889	14,142		9	\$2,717
LOWULCA	Low User (uncontrolled) low cost area	\$9.79	\$0.0555	\$0.0370	\$0.00	90,174	34,569		22	\$6,494
015HCA	Single Phase (controlled) high cost area	\$67.86	\$0.0238	\$0.0053	\$0.00	53,342,714	20,449,238		5,941	\$1,781,401
015LCA	Single Phase (controlled) low cost area	\$57.11	\$0.0238	\$0.0053	\$0.00	122,642,328	47,015,645		13,533	\$3,941,735
015UHCA	Single Phase (uncontrolled) high cost area	\$307.10	\$0.0238	\$0.0053	\$0.00	25,927	9,939		33	\$10,804
015ULCA	Single Phase (uncontrolled) low cost area	\$296.36	\$0.0238	\$0.0053	\$0.00	2,358	904		46	\$13,693
360HCA	Three Phase (controlled) high cost area	\$248.15	\$0.0238	\$0.0053	\$0.00	9,671,936	3,707,793		470	\$366,530
360LCA	Three Phase (controlled) low cost area	\$212.30	\$0.0238	\$0.0053	\$0.00	14,425,590	5,530,133		701	\$521,547
360UHCA	Three Phase (uncontrolled) high cost area	\$487.39	\$0.0238	\$0.0053	\$0.00	308,679	118,334		15	\$15,286
360ULCA	Three Phase (uncontrolled) low cost area	\$451.54	\$0.0238	\$0.0053	\$0.00	205,786	78,889		10	\$9,832
ASSHCA	Assessed demand high cost area	\$22.59	\$0.0238	\$0.0053	\$37.07	85,505,491	32,779,024	98,908	1,221	\$5,903,636
ASSLCA	Assessed demand low cost area	\$19.29	\$0.0238	\$0.0053	\$36.04	22,535,002	8,638,923	33,621	366	\$1,801,038
TOU400HCA	Time-of-Use metering at 400 V high cost area	\$22.60	\$0.0053	\$0.0021	\$76.53	14,928,905	6,238,145	8,396	37	\$735,942
TOU400LCA	Time-of-Use metering at 400 V low cost area	\$19.44	\$0.0053	\$0.0021	\$74.87	66,576,892	30,123,127	23,043	106	\$2,144,978
TOU11HCA	Time-of-Use metering at 11 kV high cost area	\$22.60	\$0.0053	\$0.0021	\$73.56	15,581,630	5,819,948	6,177	6	\$549,707
TOU11LCA	Time-of-Use metering at 11 kV low cost area	\$19.44	\$0.0053	\$0.0021	\$72.31	8,648,654	3,690,721	4,280	4	\$363,387
Individually Priced	Customer 1	\$256,722							1	\$256,722
	Customer 2	\$1,676,329							2	\$1,676,329
	Customer 3	-\$142,314							1	-\$142,314
	Customer 4	\$465,929							1	\$465,929
	Customer 5	\$41,775							4	\$41,775
	Customer 6	\$8,371							3	\$8,371
						453,074,135	179,025,990	174,425	31,936	\$21,843,757

Appendix C – Pass-through and Recoverable Costs

Information and method used to calculate pass through costs

Pass-through costs are made up of four parts:

- rates on system fixed assets
- Commerce Act levies
- Electricity Authority levies
- Electricity and Gas Complaints Commission (EGCC) levies.

The pass-through costs are reported in Table 13 below.

Table 13: Reporting of pass-through costs

<i>K_{2015/16}</i>	Rates on system fixed assets for the year ending 31 March 2016	62,863
	Commerce Act levies for the year ending 31 March 2016	54,034
	Electricity Authority levies for the year ending 31 March 2016	135,469
	EGCC levies for the year ending 31 March 2016	14,217

Rates are sourced from rates notices payable from July to June each year. To calculate the rates applicable between April and March we add 25% of the rates applicable to the prior year with 75% of the rates applicable to the current year. For example, Table 14 below shows that for the period 1 July 2015 to 30 June 2016 rates payable to the Timaru District Council (TDC) were \$23,817. Recalculated for the period April 2015 to March 2016 rates payable to TDC were \$22,780.

Table 14: Calculation of rates

Compliance year	Timaru District Council	
	1 July to 30 June	1 April to 31 March
2011/12	\$ 13,876	
2012/13	\$ 15,428	\$ 15,040
2013/14	\$ 18,990	\$ 18,100
2014/15	\$ 19,667	\$ 19,498
2015/16	\$ 23,817	\$ 22,780

Commerce Act levies are payable in accordance with the *Commerce (Levy on Suppliers of Regulated Goods and Services) Regulations 2009*. Suppliers are liable for the levy at the beginning of the regulatory year but, accounts are invoiced quarterly by MBIE as shown at Table 15 below.

Table 15: Calculation of the Commerce Act levies

Commerce Commission Levies	2015/16 Invoiced
July	\$ 13,280
November	\$ 13,921
January	\$ 13,416
March	\$ 13,416
Total	\$ 54,034

Electricity Authority levies are sourced from invoices received during the year. The invoices received each month between April 2015 and March 2016 is shown in Table 16 below.

Table 16: Calculation of Electricity Authority levies

2015/16	Subtotal
April	\$ 11,043.92
May	\$ 11,267.18
June	\$ 10,050.79
July	\$ 9,416.02
August	\$ 10,416.43
September	\$ 10,662.68
October	\$ 12,566.23
November	\$ 12,766.06
December	\$ 12,770.28
January	\$ 11,338.44
February	\$ 11,306.26
March	\$ 11,864.33
	\$ 135,468.64

Electricity and Gas Complaints Commission (**EGCC**) levies are invoiced once a year at end year (i.e., March). Amounts invoiced each year for the last four years are shown at Table 17 below.

Table 17: EGCC annual levies

Compliance year	Amount
2012/13	\$ 15,322
2013/14	\$ 12,021
2014/15	\$ 11,576
2015/16	\$ 14,217

Information and method used to calculate recoverable costs

Recoverable costs are made up of 13 components:

- transmission charges
- new investment contract (NIC) charges
- System Operator services

- avoided transmission charges resulting from purchase of transmission asset from Transpower
- Distributed generation allowance
- Claw-back
- NPV Wash-up Allowance
- Energy efficiency and demand-side management incentive
- Catastrophic event allowance
- Extended reserves allowance
- Quality incentive adjustment
- Capex wash-up adjustment
- Reconsideration event allowance.

Recoverable costs are reported in Table 18 below.

Table 18: Recoverable costs

<i>V_{2015/16}</i>	Transpower transmission charges for the year ending 31 March 2016	14,018,846
	Transpower New Investment Contract charges for the year ending 31 March 2016	1,707,097
	System operator services charges for the year ending 31 March 2016	-
	Avoided transmission charges resulting from purchase of transmission asset from Transpower for the year ending 31 March 2016	-
	Distributed generation allowance for the year ending 31 March 2016	-
	Claw-back for the year ending 31 March 2016	2,408,000
	NPV Wash-up Allowance for the year ending 31 March 2016	2,576,000
	Energy efficiency and demand-side management incentive allowance for the year ending 31 March 2016	Nil
	Catastrophic event allowance for the year ending 31 March 2016	Nil
	Extended reserves allowance for the year ending 31 March 2016	Nil
	Quality incentive adjustment for the year ending 31 March 2016	Nil
	Capex wash-up adjustment for the year ending 31 March 2016	Nil
	Reconsideration event allowance for the year ending 31 March 2016	Nil

Transmission and **new investment** charges are sourced from monthly invoices received between April and March each year. The calculation of total transmission charges is shown Table 19 below.

In total we paid \$15,725,943 in transmission charges. Of total transmission charges \$1,707,097 (or 11%) were new investment charges. We did not enter any new investment contracts during the assessment period.

Table 19: Calculation of the transmission charges

Month	Monthly Connection Charge MCC	Monthly Interconnection Charge MIC	Monthly HVDC Charge HVDC	New Investment NIC	Total Transmission charges
April	\$ 253,003	\$ 891,508	\$ 23,725	\$ 143,088	\$ 1,311,325
May	\$ 253,003	\$ 891,508	\$ 23,725	\$ 143,088	\$ 1,311,325
June	\$ 253,003	\$ 891,508	\$ 23,725	\$ 143,088	\$ 1,311,325
July	\$ 253,003	\$ 891,508	\$ 23,725	\$ 141,982	\$ 1,310,219
August	\$ 253,003	\$ 891,508	\$ 23,725	\$ 141,982	\$ 1,310,219
September	\$ 253,003	\$ 891,508	\$ 23,725	\$ 141,982	\$ 1,310,219
October	\$ 253,003	\$ 891,508	\$ 23,725	\$ 141,982	\$ 1,310,219
November	\$ 253,003	\$ 891,508	\$ 23,725	\$ 141,982	\$ 1,310,219
December	\$ 253,003	\$ 891,508	\$ 23,725	\$ 141,982	\$ 1,310,219
January	\$ 253,003	\$ 891,508	\$ 23,725	\$ 141,982	\$ 1,310,219
February	\$ 253,003	\$ 891,508	\$ 23,725	\$ 141,982	\$ 1,310,219
March	\$ 253,003	\$ 891,508	\$ 23,725	\$ 141,982	\$ 1,310,219
Total	\$ 3,036,040	\$ 10,698,101	\$ 284,705	\$ 1,707,097	\$ 15,725,943

Amount to be recovered for **claw-back** each year is specified in Schedule 5C of the DPP Determination; as per Extract 1 below.

Extract 1: Copy of Schedule 5C of the DPP Determination

Table 5C.1: Claw-back amounts to be applied by specified Non-exempt EDBs in each Assessment Period

(All amounts in \$000)

Non-exempt EDB	Assessment Period				
	2015/16	2016/17	2017/18	2018/19	2019/20
Alpine Energy Limited	2,408	2,555	2,710	2,875	3,050
Centralines Limited	397	422	447	474	503
Top Energy Limited	1,554	1,649	1,749	1,855	1,968
Unison Networks Limited	2,009	2,132	2,262	2,399	2,545

The amount to be recovered for Net present value (NPV) wash-up allowance is specified in Schedule 5D of the DPP Determination; as Extract 2 below.

Extract 2: Copy of Schedule 5D of the DPP Determination

Table 5D.1: 2013-15 NPV Wash-up Allowances to be applied by specified Non-exempt EDBs in each Assessment Period

(All amounts in \$000)

Non-exempt EDB	Assessment Period				
	2015/16	2016/17	2017/18	2018/19	2019/20
Alpine Energy Limited	2,576	2,733	2,899	3,076	3,263
Centralines Limited	231	245	259	275	292
Top Energy Limited	578	614	651	691	733

The majority of recoverable costs (eight of 13) for the year ended 31 March 2016 are nil. The reasons for a nil value are provided at Table 20 below.

Table 20: Recoverable costs with zero values explained

Recoverable cost	Explanation
Energy efficiency and demand-side management incentive allowance	No later than 70 WD following the end of the Assessment period we must submit an application for approval of an allowance. If approved the amount is added to the pass-through balance in the next pricing year.
Distributed generation allowance	
Extended reserves allowance	
Avoided transmission charges resulting from purchase of transmission asset from Transpower	We will not have a figure to report here unless we buy transmission assets. If we were to buy transmission assets we would then calculate the avoided transmission costs for each Assessment Period and then recover that each year.
Catastrophic event allowance	Does not apply to us as we have not reported a catastrophic event this regulatory period.

Recoverable cost	Explanation
Quality incentive adjustment	Calculated within 50 WD following the end of the Assessment period in accordance with S5B, paragraph 4. The amount is recoverable in the assessment period following that in which it was calculated. For example, we have calculated the incentive adjustment for the period ended 31 March 2016 (see Appendix H) the revenue lost will be included in the 2017/18 prices.
Capex wash-up adjustment	We do not calculate this until after 1 April 2020 in accordance with clause 3.3.2(3) and clause 3.3.7(3) of the Incremental Rolling Incentive Scheme Input Methodology Amendments Determination 2014 (IRIS Determination).
Reconsideration event allowance	Only applies to Eastland and Network Tasman so this will always be zero.

Cost of debt

The cost of debt is 6.09% as shown at Table 21 below. The cost of debt is applied by the DPP Determination and is set by the commission through its Input Methodologies.

Table 21: Cost of debt

<i>r</i>	Cost of Debt	6.09%
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Appendix D - Portion of distribution and pass-through and recoverable costs

Table 22 below shows the proportion of total delivery prices made up of distribution and pass through and recoverable costs.

Table 22: Unbundled delivery prices

Load group		Distribution				Pass-through and Recoverable Costs			
		Fixed	Variable Day	Variable Night	Demand	Fixed	Variable Day	Variable Night	Demand
		<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 kW per annum</i>
LOWHCA	Low User (controlled) high cost area	82%	68%	76%	0%	18%	32%	24%	0%
LOWLCA	Low User (controlled) low cost area	82%	67%	75%	0%	18%	33%	25%	0%
LOWUHCA	Low User (uncontrolled) high cost area	82%	53%	49%	0%	18%	47%	51%	0%
LOWULCA	Low User (uncontrolled) low cost area	82%	51%	46%	0%	18%	49%	54%	0%
015HCA	Single Phase (controlled) high cost area	81%	60%	64%	0%	19%	40%	36%	0%
015LCA	Single Phase (controlled) low cost area	81%	60%	64%	0%	19%	40%	36%	0%
015UHCA	Single Phase (uncontrolled) high cost area	48%	60%	64%	0%	52%	40%	36%	0%
015ULCA	Single Phase (uncontrolled) low cost area	45%	60%	64%	0%	55%	40%	36%	0%
360HCA	Three Phase (controlled) high cost area	83%	60%	64%	0%	17%	40%	36%	0%
360LCA	Three Phase (controlled) low cost area	83%	60%	64%	0%	17%	40%	36%	0%
360UHCA	Three Phase (uncontrolled) high cost area	71%	60%	64%	0%	29%	40%	36%	0%
360ULCA	Three Phase (uncontrolled) low cost area	69%	60%	64%	0%	31%	40%	36%	0%
ASSHCA	Assessed demand high cost area	90%	60%	64%	40%	10%	40%	36%	60%
ASSLCA	Assessed demand low cost area	90%	60%	64%	37%	10%	40%	36%	63%
TOU400HCA	Time-of-Use metering at 400 V high cost area	85%	75%	57%	48%	15%	25%	43%	52%
TOU400LCA	Time-of-Use metering at 400 V low cost area	86%	75%	57%	44%	14%	25%	43%	56%
TOU11HCA	Time-of-Use metering at 11 kV high cost area	85%	75%	58%	42%	15%	25%	42%	58%
TOU11LCA	Time-of-Use metering at 11 kV low cost area	85%	75%	57%	40%	15%	25%	43%	60%

Appendix E – Methodology used to forecast distribution and pass-through and recoverable prices

Distribution prices

We recover our costs to serve each load group (e.g., 015HCA) via our distribution prices. Cost to serve consumers that use low voltage assets are allocated to load groups based on after diversity maximum demand (ADMD). Costs to serve consumers that use high voltage assets are allocated to load groups based on coincident peak demand (CPD).

Pass-through costs

We base our forecast pass-through costs on the prior year rates and levies plus a growth factor. The growth factor is based on the five year average growth for each type of pass-through cost. For example, the Commerce Commission levies have grown on average by 0.06% year-on-year since 2010. To forecast Commerce Commission levy we took the levies payable in 2014/15 of \$75,593 x 0.06% = \$75,636.

Recoverable costs

We receive notice of transmission charges from 1 April usually in mid- November of the prior year. We base our forecast transmission charges on the notices given. The commission sets both our claw-back and NPV wash-up allowance amounts in the DPP Determination we base our forecast claw-back and NPV wash-up allowance amounts on the published amounts.

More detail on the methodologies that we use to forecast pass-through and recoverable prices can be found in our *Pricing Methodology For Delivery Charges, effective as at 1 April 2015*. A copy of our Pricing Methodology is available at Reception and/or can be found on our website⁴.

Pass-through Cost reconciliation

Pass through variances are shown in Table 23 below.

Table 23: Pass-through Variances

Pass-through Costs for year ending March 2016				
K _{2015/16}	Actual (\$)	Forecast (\$)	Variance (\$)	Variance (%)
Rates on system fixed assets	62,863	67,538	(4,675)	(6.9%)
Commerce Act levies	54,034	75,636	(21,602)	(28.6%)
Electricity Authority levies	135,469	144,726	(9,257)	(6.4%)
EGCC levies	14,217	11,489	2,728	23.7%
Total Pass-through Costs	266,583	299,389	(32,806)	(11.0%)

⁴ <http://www.alpineenergy.co.nz/disclosures>

Explanation of material variances

The commission does not specify what 'material' is and so it is left up to EDBs to determine materiality. As a general rule we assess anything with a variance of more than 5%.

Materiality is then established based on variance in whole dollars and as a percentage before a decision is made to determine a variance material and an explanation provided.

For example, Commerce Act levies have a variance of -\$21,602 or -28.6%. Comparing the dollar variance to the total pass-through costs we establish that this variance is material at 8%. Whereas EGCC levies has a variance of \$2,728 or +23.7%. Comparing the dollar variance to the total pass-through costs we establish that this is a non-material variance at 1%.

Accordingly, we will provide an explanation of the variance for Commerce Act levies but not for EGCC levies.

We forecast Commerce Commission levies by taking the average levies paid in 2014 and 2015 and inflating by the percentage increase in the 2015 regulatory asset base (RAB). Levies up to 31 March 2015 included an adjustment for underpaid levies from the regulatory period ended 31 March 2010; levies applicable this regulatory period do not include the adjustment. Because we had used an average of 2014 and 2015, which included the adjustment we overstated the base on which we derived the average. Therefore when we grew the base by the percentage increase in the RAB we overstated the forecast levies.

Recoverable cost reconciliation

There are no material variances between forecast and actual recoverable costs for the year ended 31 March 2016. Recoverable cost variances are shown in Table 24 below.

Table 24: Recoverable Costs Variances

Recoverable Costs for year ending March 2016				
V _{2015/16}	Actual (\$)	Forecast (\$)	Variance (\$)	Variance (%)
Transpower transmission charges	14,018,846	14,018,846	0	0.0%
New investment contract charges	1,707,097	1,710,925	(3,828)	(0.2%)
System operator services charges	-	-	-	0.0%
Avoided transmission charges - purchases from Transpower	-	-	-	0.0%
Distributed generation allowance	-	-	-	0.0%
Claw-back	2,408,000	2,408,000	-	0.0%
NPV wash-up allowance	2,576,000	2,576,000	-	0.0%
Energy efficiency allowance	Nil	Nil	-	0.0%
Catastrophic event allowance	Nil	Nil	-	0.0%
Extended reserves allowance	Nil	Nil	-	0.0%
Quality incentive adjustment	Nil	Nil	-	0.0%
Capex wash-up adjustment	Nil	Nil	-	0.0%
Reconsideration event allowance	Nil	Nil	-	0.0%
Total Recoverable Costs	20,709,943	20,713,771	(3,828)	(0.0%)

Appendix F – Quality Standard Compliance Calculations

Reliability Limits

Our reliability limits and boundary values are shown in Table 25 below.

Table 25: Reliability Limits and Boundary Values

<i>SAIDI Limit 2015-2020 regulatory period</i>	154.155
<i>SAIFI Limit 2015-2020 regulatory period</i>	1.507
<i>SAIDI Unplanned Boundary Value 2015-2020 regulatory period</i>	9.175
<i>SAIFI Unplanned Boundary Value 2015-2020 regulatory period</i>	0.072
<i>SAIDI Limit 2010-2015 regulatory period</i>	164.221
<i>SAIFI Limit 2010-2015 regulatory period</i>	1.694

Our year end SAIDI and SAIFI performance pre-normalisation (raw data) and post normalisation (adjusted data) is shown at Table 26 and Table 27 respectively below.

Table 26: SAIDI Assessed Values

SAIDI Assessed Values

Raw data			Adjusted data		
SAIDI _B	Planned SAIDI	57.854	SAIDI _B	Planned SAIDI multiplied by 0.5	28.927
SAIDI _C	Unplanned SAIDI	357.222	SAIDI _C	Normalised unplanned SAIDI	126.365
			SAIDI _{Assess (B+C)}	155.292	

Table 27: SAIFI Assessed Values

SAIFI Assessed Values

Raw data			Adjusted data		
SAIFI _B	Planned SAIFI	0.209	SAIFI _B	Planned SAIFI multiplied by 0.5	0.105
SAIFI _C	Unplanned SAIFI	1.121	SAIFI _C	Normalised unplanned SAIFI	1.076
			SAIFI _{Assess (B+C)}	1.180	

Reliability Limits

There were four MEDs during the assessment period. Table 28 below shows the pre-normalised SAIDI minutes and Table 29 below shows the pre-normalised SIFI interruptions for each MED experienced.

Table 28: Event Days exceeding SAIDI Boundary Value

Date	Pre-Normalised unplanned SAIDI	Normalised unplanned SAIDI
12-Apr-15	13.172	9.175
18-Jun-15	206.609	9.175
19-Jun-15	28.860	9.175
4-Oct-15	18.916	9.175

Table 29: Event Days exceeding SAIFI Boundary Value

Date	Pre-Normalised unplanned SAIFI	Normalised unplanned SAIFI
12-Apr-15	0.090	0.072
18-Jun-15	0.094	0.072
19-Jun-15	0.078	0.072

Appendix G – Quality incentive scheme

This assessment period is the first period that the quality incentive scheme applies. Under the scheme we have lost \$67,291 in revenue for underperforming against the quality standards. The lost revenue will be returned to customers via prices effective as at 1 April 2017. Table 30 below shows the quality incentive adjustment calculation.

Table 30: Quality Incentive Adjustment

Quality Incentive Adjustment		
Term	Description	Value \$
S_{SAIDI}	SAIDI incentive	-152,290
S_{SAIFI}	SAIFI incentive	84,999
S_{TOTAL}	SAIDI incentive plus SAIFI incentive	-67,291

Table 31 below details the SAIDI incentive calculation.

Table 31: SAIDI Incentive

SAIDI Incentive		
Term	Description	Value
$SAIDI_{Target}$	SAIDI target specified in DPP Determination	132.8088
$SAIDI_{Collar}$	SAIDI incentive range collar specified in DPP Determination	111.4627
$SAIDI_{Cap}$	SAIDI incentive range cap specified in DPP Determination	154.1549
MAR	Maximum allowable revenue for the 2015/16 year	\$30,458,000
REV_{RISK}	Revenue at risk relating to SAIDI target (equal to 1% of MAR)	\$304,580
$SAIDI_{IR}$	SAIDI incentive rate per unit (equal to revenue at risk divided by Cap minus Target)	\$7,134
$SAIDI_{ASSESS}$	Assessed SAIDI value for purpose of incentive	154.155
S_{SAIDI}	SAIDI incentive adjustment (equal to incentive rate multiplied by SAIDI target minus Assessed SAIDI value)	-\$152,290

Table 32 below details the SAIFI incentive calculation.

Table 32: SAIFI Incentive

SAIFI Incentive		
Term	Description	Value
<i>SAIFI Target</i>	SAIFI target specified in DPP Determination	1.2973
<i>SAIFI Collar</i>	SAIFI incentive range collar specified in DPP Determination	1.0874
<i>SAIFI Cap</i>	SAIFI incentive range cap specified in DPP Determination	1.5071
<i>MAR</i>	Maximum allowable revenue for the 2015/16 year	\$30,458,000
<i>REV_{RISK}</i>	Revenue at risk relating to SAIFI target (equal to 1% of MAR)	\$304,580
<i>SAIFI_{IR}</i>	SAIFI incentive rate per unit (equal to revenue at risk divided by Cap minus Target)	\$725,882
<i>SAIFI_{ASSESS}</i>	Assessed SAIFI value for purpose of incentive	1.180
<i>S_{SAIFI}</i>	SAIFI incentive adjustment (equal to incentive rate multiplied by SAIFI target minus Assessed SAIFI value)	\$84,999

Appendix H – Prior Period Reliability Assessment

Our performance at the prior two extant Assessment Periods is shown in Table 33 and Table 34 below.

Table 33: Assessed Prior Period SAIDI performance

SAIDI _{Assess 2014/15}	140.28	SAIFI _{Assess 2014/15}	1.16
SAIDI _{Limit 2014/15}	164.22	SAIFI _{Limit 2014/15}	1.69
0.8542	< 1	0.6826	< 1
<i>Does not exceed limit</i>		<i>Does not exceed limit</i>	

Table 34: Assessed prior period SAIFI performance

SAIDI _{Assess 2013/14}	274.77	SAIFI _{Assess 2013/14}	2.00
SAIDI _{Limit 2013/14}	164.22	SAIFI _{Limit 2013/14}	1.69
1.6732	> 1	1.1798	> 1
<i>Exceeds limit</i>		<i>Exceeds limit</i>	

Appendix I – 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 database is interrogated for consumer numbers in the outage area
- monthly reports are prepared for executive management and the Board.

Figure 1 over page outlines our process for recording outages.

