DEFAULT PRICE-QUALITY PATH

ANNUAL COMPLIANCE STATEMENT

Assessment Period: 1 April 2021 – 31 March 2022

16 June 2022

Pursuant to: Electricity Distribution Services Default Price-Quality Path Determination 2020 (May 2020)

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1. INTRODUCTION

Alpine Energy Limited (Alpine Energy) is subject to price-quality regulation under Part 4 of the Commerce Act 1986. The Commerce Commission has set a Default Price-Quality Path (DPP) that Alpine Energy is subject to for five years, 1 April 2020 to 31 March 2025 (the DPP regulatory period).

This annual compliance statement is published per clause 11.4 of the Electricity Distribution Services Default Price-Quality Path Determination 2020 (the Determination). This statement applies to the second assessment period, commencing 1 April 2021 and ending 31 March 2022.

This statement confirms that Alpine Energy:

- complies with the requirement to calculate the wash-up amount for the assessment period (Section 3);
- complies with the quality standards for the assessment period (Section 4); and
- has not entered into any agreement with another electricity distribution business (EDB) or Transpower for an amalgamation, merger, major transaction, or non-reopener transaction in the assessment period (Section 5).

2. DATE PREPARED

This annual compliance statement was prepared on 2 June 2022. A copy is available at Alpine Energy's office at 24 Elginshire Street, Washdyke, Timaru. The annual compliance statement is published on Alpine Energy's website at www.alpineenergy.co.nz, and additional copies can be provided on request.

3. WASH-UP AMOUNT

As required by clause 8.6 of the Determination, Alpine Energy must calculate a wash-up amount for each assessment period using the methodology specified in Schedule 1.6 of the Determination.

The wash-up amount calculated for this assessment period will be used in determining the forecast allowable revenue for the fourth assessment period, beginning 1 April 2023, as part of the opening wash-up account balance.

As demonstrated in Table 1 below, and consistent with clause 8.6 of the Determination, Alpine Energy has **complied** with the requirement to calculate the wash-up amount for the second assessment period.

Wash up amount		
Term	**Description**	**Value ($000)**
Actual allowable revenue (AAR)	Actual net allowable revenue + actual pass-through costs and actual recoverable costs	60,010
Actual revenue (AR)	Actual revenue from prices + other regulated income	52,614
Revenue foregone (RV)	Actual net allowable revenue x (RRP – 20%) when RRP is greater than 20%, otherwise nil	-
Wash-up amount	AAR - AR - RV	**7,396**

Table 1: Wash-up amount calculation

This wash-up amount calculated for this assessment period will increase the forecast allowable revenue[1] for the fourth assessment period starting 1 April 2023. The main reasons for the wash-up of this assessment period are:

- The actual net allowable revenue ($44.913 million) exceeded the forecast net allowable revenue[2] ($43.484 million) by $1.429 million. The CPI adjustments for the last two quarters of the year were much higher than forecasted which increased the actual net allowable revenue significantly.
- The actual revenue from prices ($52.594 million) were $1.510 million lower than the forecast revenue from prices ($54.104 million[3]). The consumption for the year was lower than forecasted due to an unusually wet summer in South Canterbury, resulting in actual variable revenue being lower than forecasted variable revenue.

The variables resulting in these differences (i.e., CPI and weather patterns) could not have been demonstrably forecasted as at 31 March 2021, when the prices for this assessment period were set.

The other contributing factors to the wash-up amount are:

- The pass-through balance allowance true-up of negative $3.199 million was included when the forecast allowable revenue for the second assessment period was calculated but are not included in the definition of actual allowable revenue for the second assessment period. The actual pass-through balance allowance for the previous regulatory period (specifically for the assessment

[1] Schedule 1.5 "forecast allowable revenue' for an assessment period is the amount calculated in accordance with the following formula– $FNAR+FPRC+OWAB+PTBA$, where OWAB is the opening wash-up account balance.
[2] The forecast net allowable revenue has been disclosed in the Annual Price-Setting Compliance Statement for the assessment period starting 1 April 2021 and can be viewed on the Alpine Energy website: https://www.alpineenergy.co.nz/__data/assets/pdf_file/0017/17108/AEL-Price-setting-Compliance-Statement-Apr-2021.pdf
[3] The forecast revenue from prices has been disclosed in the Annual Price-Setting Compliance Statement for the assessment period starting 1 April 2021 and can be viewed on the Alpine Energy website: https://www.alpineenergy.co.nz/__data/assets/pdf_file/0017/17108/AEL-Price-setting-Compliance-Statement-Apr-2021.pdf

period ended 31 March 2020) has already been appropriately included when determining the actual allowable revenue for the first assessment period ended 31 March 2021[4].

- The forecast incremental rolling incentive scheme (IRIS) for the second assessment period used in the determining the forecast allowable revenue for the second assessment period was negative $444K and the actual IRIS for the second assessment period was $898K, resulting in a difference of $1.413 million.

3.1 ACTUAL ALLOWABLE REVENUE

Actual allowable revenue includes actual pass-through and recoverable costs excluding any recoverable cost that is a revenue wash-up draw down amount.

Table 2 below shows the actual allowable revenue for the second assessment period is consistent with Schedule 1.6 of the Determination.

Actual allowable revenue		
Term	**Description**	**Value ($000)**
Actual net allowable revenue (ANAR)	Amount calculated in accordance with Schedule 1.6 of the Determination	44,913
Actual pass-through costs	Sum of all pass-through costs that were incurred or approved by the Commission in the assessment period	384
Actual recoverable costs	Sum of all recoverable costs that were incurred or approved by the Commission in the assessment period	14,713
Total actual allowable revenue (AAR)	Actual net allowable revenue + actual pass-through costs and actual recoverable costs	**60,010**

Table 2: Actual allowable revenue calculation

Further information supporting actual pass-through costs and actual recoverable costs are included in Appendix A.

[4] The actual allowable revenue calculation is shown in Table 2 of the Annual Compliance Statement for the assessment period ended 31 March 2021 and can be viewed on the Alpine Energy website: https://www.alpineenergy.co.nz/__data/assets/pdf_file/0023/17717/Alpine-Energy-Limited-Signed-DPP-Annual-Compliance-Statement-2021.pdf

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3.2 ACTUAL REVENUE

The Determination defines actual revenue as the sum of actual revenue from prices and other regulated income.

Table 3 below shows actual revenue for the assessment period consistent with clause 4.2 of the Determination.

Actual revenue		
Term	**Description**	**Value ($000)**
Actual revenue from prices	Actual prices between 1 April 2021 and 31 March 2022 multiplied by actual quantities for the assessment period	52,594
Other regulated income	Other income associated with supply of electricity distribution services	20
Total actual revenue (AR)	Sum of actual revenue from prices + other regulated income	**52,614**

Table 3: Actual revenue calculation

Further information supporting actual revenue from prices is included in Appendix B.

3.3 REVENUE FOREGONE

Per clause 4.2 of the Determination, revenue foregone is the actual net allowable revenue multiplied by the revenue reduction percentage – 20%. Where the revenue reduction percentage is not greater than 20%, the revenue forgone is nil.

Table 4 below shows that Alpine Energy's revenue foregone was not greater than 20% for the second assessment period and is nil.

Revenue foregone		
Term	**Description**	**Value ($000)**
Actual net allowable revenue (ANAR)	Actual net allowable revenue for the second assessment period	44,913
Revenue reduction percentage (RRP)	1 – (actual revenue from prices / forecast revenue from prices)	3%
Revenue foregone (RV)	Actual net allowable revenue x (RRP – 20%) when RRP is greater than 20%, otherwise nil	**Nil**

Table 4: Revenue foregone calculation

4. QUALITY STANDARDS

Alpine Energy must comply with the quality standards specified in the Determination. This section of the Annual Compliance Statement demonstrates Alpine Energy's compliance with the quality standards

4.1 STATEMENT OF COMPLIANCE WITH PLANNED INTERRUPTIONS QUALITY STANDARDS

Planned interruptions consist of all Class B interruptions on the Alpine Energy network measured as System Average Interruption Duration Index (SAIDI) and System Average Interruption Frequency Index (SAIFI).

Clause 9.2 of the Determination specifies that to comply with the planned interruptions reliability assessment cap the sum of planned SAIDI and SAIFI values for all five assessment periods of the DPP regulatory period (i.e., the five years 1 April 2020 to 31 March 2025) must not exceed the planned accumulated SAIDI and SAIFI limits as specified in Schedule 3.1 of the Determination.

Table 5 and Table 6 below show the planned accumulated SAIDI and SAIFI limits for Alpine Energy for the DPP regulatory period and the planned SAIDI and SAIFI assessed values for the second assessment period and shows that Alpine Energy has **complied** with planned interruption quality standards.

Alpine Energy has also compared the planned accumulated SAIDI assessed values for the regulatory period to date (i.e., the first two assessment periods) against the planned accumulated average limit at the end of the second assessment period.

Planned interruptions quality standard - SAIDI	
Planned accumulated SAIDI limit for the regulatory period	824.87
Planned SAIDI assessed value for the second assessment period	78.39
Planned accumulated SAIDI at the end of the second assessment period	165.94
Planned accumulated average SAIDI limit at the end of the second assessment period	329.95
Compliance result	**Compliant**

Table 5: Planned SAIDI for the assessment period

Planned interruptions quality standard - SAIFI	
Planned accumulated SAIFI limit for the regulatory period	3.493
Planned SAIFI assessed value for the second assessment period	0.244
Planned accumulated SAIFI at the end of the second assessment period	0.502
Planned accumulated average SAIFI limit at the end of the second assessment period	1.397
Compliance result	**Compliant**

Table 6: Planned SAIFI for the assessment period

Further information supporting planned SAIDI assessed values are included in Section 4.1.1.

4.1.1 Planned SAIDI assessed values

Alpine Energy has calculated the SAIDI assessed value for in accordance with subclause 2 of Schedule 3.1.

Table 7 below show the calculation of Alpine Energy's planned SAIDI assessed values for the assessment period.

Planned SAIDI assessed value		
Term	**Description**	**Value**
Class B non-notified interruptions	Class B interruptions excluding the Class B notified interruptions	70.79
Class B notified interruptions falling outside window	Class B notified interruptions occurred partially or wholly outside of their specified notified interruption window or alternate day	0.13
$SAIDI_B$	Sum of Class B non-notified interruptions	70.92
Class B notified interruptions falling inside window	The SAIDI values of any Class B notified interruptions where the SAIDI value is the greater of that calculated based on: (i) the duration of minutes accumulated for each ICP that the Class B notified interruption occurred for; and (ii) the period of the notified interruption window minus two hours	14.65
Class B intended interruptions cancelled without notice	The 'intended SAIDI values' of any intended interruption cancelled without notice is the greater of that calculated based on: (i) the duration of minutes accumulated for each ICP that the intended interruption occurred for, which will be nil; and (ii) the period of the notified interruption window minus two hours	0.29
Class B intended interruptions cancelled with notice	The 'intended SAIDI values' of any intended interruption cancelled with notice, where the 'intended SAIDI value' for each of those intended interruptions cancelled with notice is nil.	0.00
$SAIDI_N$	Sum of Class B notified interruptions	14.94
Planned SAIDI assessed value	$SAIDI_B + (SAIDI_N / 2)$	**78.39**

Table 7: Planned SAIDI assessed value calculation

4.2 STATEMENT OF COMPLIANCE WITH UNPLANNED INTERRUPTIONS QUALITY STANDARDS

Clause 9.8 of the Determination specifies that to comply with the annual unplanned interruptions reliability assessment Alpine Energy's unplanned SAIDI and SAIFI assessed values must not exceed the SAIDI and SAIFI annual limits.

The unplanned SAIDI assessment value and the unplanned SAIFI assessment value are specified in Schedule 3.2 of the Determination.

Unplanned SAIDI is calculated by listing all unplanned Class C interruptions on the Alpine Energy network for the assessment period. Unplanned SAIDI is normalised for major event days (MEDs). A MED occurs when the daily SAIDI value for unplanned interruptions exceeds Alpine Energy's SAIDI boundary value of 9.17 SAIDI minutes, specified in Schedule 3.2 of the Determination.

Table 8 below shows that Alpine Energy has **complied** with the unplanned interruptions quality standard as Alpine Energy's unplanned SAIDI assessed value is less than its unplanned SAIDI limit for the assessment period.

Unplanned interruptions quality standard - SAIDI		
Unplanned SAIDI limit	Schedule 3.2 of the Determination	124.71
Unplanned SAIDI assessed value	Sum of the SAIDI values for Class C interruptions commencing within the assessment period, where the SAIDI value for each 30-minute period that starts on the hour or half past the hour within a SAIDI major event that exceeds 1/48th of the SAIDI unplanned boundary value for that assessment period is replaced with 1/48th of the SAIDI unplanned boundary value for that assessment period	89.32
Compliance result		**Compliant**

Table 8: Unplanned SAIDI for the assessment period

Unplanned SAIFI is calculated by listing all unplanned Class C interruptions on the Alpine Energy network for the assessment period. Unplanned SAIFI is normalised for major event days (MEDs). A MED occurs when the daily SAIFI value for unplanned interruptions exceeds Alpine Energy's SAIFI boundary value of 0.0671 SAIFI interruptions, specified in Schedule 3.2 of the Determination.

Table 9 below shows that Alpine Energy has **complied** with the unplanned interruptions quality standard as Alpine Energy's unplanned SAIFI assessed value is less than its unplanned SAIFI limit for the assessment period.

Unplanned interruptions quality standard - SAIFI		
Unplanned SAIFI limit	Schedule 3.2 of the Determination	1.197
Unplanned SAIFI assessed value	Sum of the SAIFI values for Class C interruptions commencing within the assessment period, where the SAIFI value for each 30-minute period that starts on the hour or half past the hour within a SAIFI major event that exceeds 1/48th of the SAIFI unplanned boundary value for that assessment period is replaced with 1/48th of the SAIFI unplanned boundary value for that assessment period.	0.711
Compliance result		**Compliant**

Table 9: Unplanned SAIFI for the assessment period

Information about policies, procedures and calculations for measuring planned and unplanned interruptions during the assessment period is included in Appendix C.

4.3 MAJOR EVENTS

Table 10 below shows that Alpine Energy had two unplanned SAIDI major events during the assessment period.

Unplanned SAIDI major events					
Start time	End time	Location(s)	Equipment involved	Pre-normalised unplanned SAIDI	Normalised unplanned SAIDI
9/09/2021 0:30	13/09/2021 18:30	Various (See Appendix D)	Distribution lines (excluding LV)	112.87	5.23
17/12/2021 15:00	19/12/2021 14:00	Various (See Appendix D)	Distribution lines (excluding LV)	15.16	0.40

Table 10: Unplanned SAIDI major events for the assessment period

Table 11 below shows that Alpine Energy had two unplanned SAIFI major events during the assessment period.

Unplanned SAIFI major events					
Start time	End time	Location(s)	Equipment involved	Pre-normalised unplanned SAIFI	Normalised unplanned SAIFI
8/08/2021 11:30	9/08/2021 15:30	Various (See Appendix D)	Distribution lines (excluding LV)	0.074	0.004
9/09/2021 2:30	11/09/2021 0:30	Various (See Appendix D)	Distribution lines (excluding LV)	0.100	0.018

Table 11: Unplanned SAIFI major events for the assessment period

Further information about major events is included in Appendix D.

4.4 STATEMENT OF COMPLIANCE WITH EXTREME EVENT STANDARD

Clause 9.10 of the Determination specifies that, to comply with the extreme event standards, Alpine Energy must not have an extreme event[5] in the assessment period. The calculation of the unplanned interruptions excludes any unplanned interruption that is the result of major external factors[6]. The extreme event standard limit is specified in paragraphs (1)(a) and (b) in Schedule 3.3 of the Determination.

Table 12 below shows that Alpine Energy has **complied** with the extreme event standard for the assessment period.

Extreme event standard	
Number of extreme events	Nil
Compliance result	**Compliant**

Table 12: Extreme event standard for the assessment period

[5] An extreme event occurs wherein 24 hours of an interruption starting the aggregate SAIDI value exceeds 120 minutes, or the total duration of customer interruption minutes resulting from all unplanned interruptions exceeds a total of six million customer interruption minutes.

[6] Major external factors include natural disaster, third-party interference, a fire that does not originate on Alpine Energy's network, or wildlife.

4.5 QUALITY INCENTIVE ADJUSTMENT

The quality incentive adjustment is intended to provide an incentive for Alpine Energy to maintain or improve its quality of supply over the DPP regulatory period.

The method to calculate the quality incentive adjustment is specified in Schedule 4 of the Determination.

Table 13 below shows Alpine Energy's quality incentive adjustment for the assessment period is a penalty of $78k.

Quality Incentive Adjustment		
Term	**Description**	**Value ($000)**
SAIDI planned adjustment	$(SAIDI_{planned, target} - SAIDI_{planned, assessed}) \times 0.5 \times IR$	(92)
SAIDI unplanned adjustment	$(SAIDI_{unplanned, target} - SAIDI_{unplanned, assessed}) \times IR$	20
Total adjustment	SAIDI planned adjustment + SAIDI unplanned adjustment	**(72)**
Revenue at risk	0.02* ANAR	898
Total penalty/reward		(72)
67th percentile estimate of post-tax WACC		4.23%
Quality incentive adjustment		**(78)**

Table 13: Quality incentive adjustment calculation

The quality incentive rate will be returned to customers as a recoverable cost applied to prices two years after this assessment period, i.e., prices effective 1 April 2023.

Table 14 below show the inputs used to calculate Alpine Energy's quality incentive adjustment for the assessment period.

Quality Incentive Adjustment Inputs					
Raw Inputs					
Term	**Units**	**Value**	**Term**	**Units**	**Value**
SAIDI planned interruption cap	minutes	164.97	**SAIDI unplanned interruption cap**	minutes	124.71
SAIDI planned interruption collar	minutes	-	**SAIDI unplanned interruption collar**	minutes	-
SAIDI planned interruption target	minutes	54.99	**SAIDI unplanned interruption target**	minutes	91.88
Planned SAIDI assessed value	minutes	78.39	**Unplanned SAIDI assessed value**	minutes	89.32
Incentive rate		7,879			
Actual net allowable revenue (ANAR)	$000	44,913			
Output Calculations					
SAIDI planned interruption target	minutes	54.99	**SAIDI unplanned interruption target**	minutes	91.88
Minimum of the planned SAIDI cap and assessed value	minutes	78.39	**Minimum of the unplanned SAIDI cap and assessed value**	minutes	89.32
Planned SAIDI subject to incentive	minutes	(23)	**Unplanned SAIDI subject to incentive**	minutes	3
Adjustment (IR x 0.5)	$	3,940	**Adjustment (IR)**	$	7,879
SAIDI planned adjustment	$000	(92)	**SAIDI unplanned adjustment**	$000	20

Table 14: Quality incentive adjustment calculation

5. TRANSACTIONS

Alpine Energy has not entered into any agreements with another EDB or Transpower for an amalgamation, merger, major transaction, or transfer in the assessment period.

6. DIRECTOR'S CERTIFICATION

A Director's certificate in the form set out in Schedule 7 of the Determination is included in Appendix E.

7. ASSURANCE REPORT

An assurance report meeting the requirements of Schedule 8 of the Determination is included in Appendix F.

APPENDIX A – PASS-THROUGH AND RECOVERABLE COSTS

Pass-through costs

Table 15 below shows the actual pass-through cost for the second assessment period.

Actual pass-through costs	
Actual pass-through costs	**Actual ($000)**
Rates on system fixed assets	115
Commerce Act levies	106
Electricity Authority levies	143
Utilities Disputes levies	20
Total actual pass-through cost	**384**

Table 15: Pass-through costs for the assessment period

Recoverable costs

Table 16 below shows the actual recoverable costs for the second assessment period.

Actual recoverable costs	
Actual recoverable costs	**Actual ($000)**
IRIS incentive adjustment	898
Transmission charges	12,308
New investment contract charges	1,337
Avoided transmission costs	-
System operator services charges	10
Distributed generation allowance	-
Catastrophic event allowance	-
Extended reserve allowance	-
Quality incentive adjustment	251
Capex wash-up	(130)
Transmission asset wash-up adjustment	-
Reconsideration event allowance	-
Quality standard variation engineers fee	-
Revenue wash-up draw down amount	-
Fire and Emergency NZ levies	39
Innovation project allowance	-
Urgent project allowance	-
Total actual recoverable costs	**14,713**

Table 16: Recoverable costs for the assessment period

APPENDIX B – PRICES AND QUANTITIES

Table 17 shows the actual prices and quantities for actual revenue from prices for the second assessment period.

Actual revenue from prices				
Price Category	**Unit**	**Unit Price**	**Actual Quantity**	**Actual Revenue ($000)**
LOWHCA Fixed	$/day	0.1500	2,080	114
LOWLCA Fixed	$/day	0.1500	10,661	584
LOWUHCA Fixed	$/day	0.1500	16	1
LOWULCA Fixed	$/day	0.1500	41	2
015HCA Fixed	$/day	1.4438	5,841	3,078
015LCA Fixed	$/day	1.3026	11,412	5,426
015UHCA Fixed	$/day	2.0281	35	26
015ULCA Fixed	$/day	1.8690	39	27
360HCA Fixed	$/day	6.1302	518	1,159
360LCA Fixed	$/day	4.4242	727	1,174
360UHCA Fixed	$/day	6.5964	14	34
360ULCA Fixed	$/day	5.0109	15	27
ASSHCA Fixed	$/day	2.0014	1,292	944
ASSLCA Fixed	$/day	1.3659	405	202
TOU400HCA Fixed	$/day	1.4062	36	18
TOU400LCA Fixed	$/day	1.1086	100	40
TOU11HCA Fixed	$/day	1.1604	4	2
TOU11LCA Fixed	$/day	1.1235	4	2
LOWHCA Variable Day	$/kWh	0.1051	9,355,420	983
LOWLCA Variable Day	$/kWh	0.0995	44,362,225	4,414
LOWUHCA Variable Day	$/kWh	0.1288	69,722	9
LOWULCA Variable Day	$/kWh	0.1224	167,755	21
015HCA Variable Day	$/kWh	0.0527	39,483,628	2,081

Price Category	Unit	Unit Price	Actual Quantity	Actual Revenue ($000)
015LCA Variable Day	$/kWh	0.0527	69,978,488	3,688
015UHCA Variable Day	$/kWh	0.0527	356,859	19
015ULCA Variable Day	$/kWh	0.0527	242,130	13
360HCA Variable Day	$/kWh	0.0527	7,222,306	381
360LCA Variable Day	$/kWh	0.0527	14,625,456	771
360UHCA Variable Day	$/kWh	0.0527	445,018	23
360ULCA Variable Day	$/kWh	0.0527	254,181	13
ASSHCA Variable Day	$/kWh	0.0527	73,719,668	3,885
ASSLCA Variable Day	$/kWh	0.0527	26,019,003	1,371
TOU400HCA Variable Day	$/kWh	0.0175	13,566,793	237
TOU400LCA Variable Day	$/kWh	0.0186	60,597,759	1,127
TOU11HCA Variable Day	$/kWh	0.0297	15,141,605	450
TOU11LCA Variable Day	$/kWh	0.0243	8,219,853	200
LOWHCA Variable Night	$/kWh	0.0751	4,009,466	301
LOWLCA Variable Night	$/kWh	0.0694	19,012,382	1,319
LOWUHCA Variable Night	$/kWh	0.0988	29,881	3
LOWULCA Variable Night	$/kWh	0.0923	71,895	7
015HCA Variable Night	$/kWh	0.0226	16,921,555	382
015LCA Variable Night	$/kWh	0.0226	29,990,781	678
015UHCA Variable Night	$/kWh	0.0226	152,940	3
015ULCA Variable Night	$/kWh	0.0226	103,770	2
360HCA Variable Night	$/kWh	0.0226	3,095,274	70
360LCA Variable Night	$/kWh	0.0226	6,268,053	142
360UHCA Variable Night	$/kWh	0.0226	190,722	4
360ULCA Variable Night	$/kWh	0.0226	108,935	2
ASSHCA Variable Night	$/kWh	0.0226	31,594,143	714
ASSLCA Variable Night	$/kWh	0.0226	11,151,001	252
TOU400HCA Variable Night	$/kWh	0.0075	8,635,673	65

Price Category	Unit	Unit Price	Actual Quantity	Actual Revenue ($000)
TOU400LCA Variable Night	$/kWh	0.0080	39,725,024	318
TOU11HCA Variable Night	$/kWh	0.0128	8,808,240	113
TOU11LCA Variable Night	$/kWh	0.0105	5,348,662	56
ASSHCA Demand	$/kWday	0.1361	107,737	5,352
ASSLCA Demand	$/kWday	0.0895	36,625	1,196
TOU400HCA Demand	$/kWday	0.4140	7,605	1,149
TOU400LCA Demand	$/kWday	0.2838	22,137	2,293
TOU11HCA Demand	$/kWday	0.2338	6,581	562
TOU11LCA Demand	$/kWday	0.3652	3,544	472
Direct Billed Customer 1	$/year			314
Direct Billed Customer 2	$/year			2,733
Direct Billed Customer 3	$/year			84
Direct Billed Customer 4	$/year			1,216
Direct Billed Customer 5	$/year			189
Direct Billed Customer 6	$/year			56
Total actual revenue from prices				**52,594**

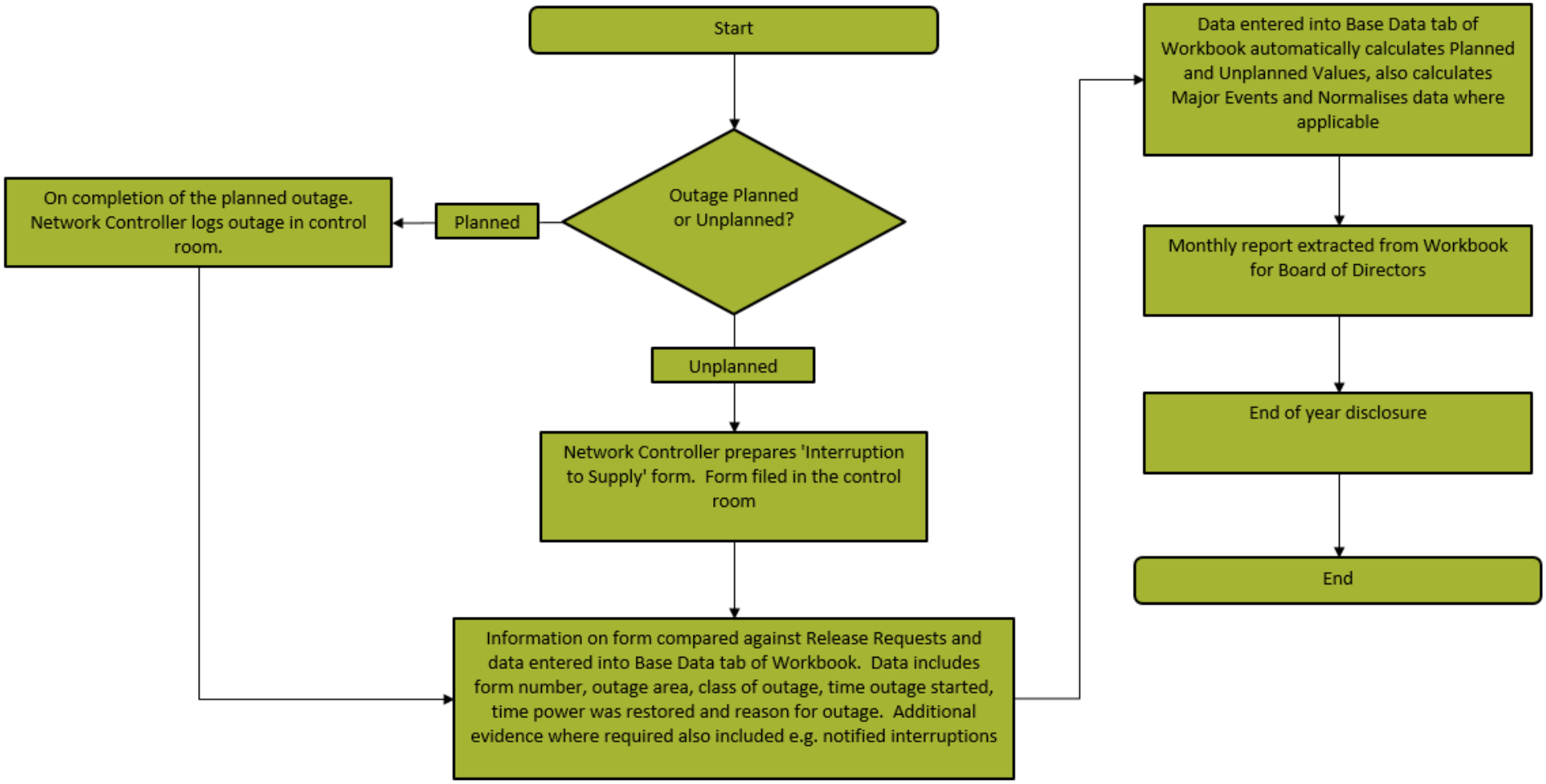
Table 17: Actual revenue from prices for the assessment period

Table 18 below shows the forecast revenue from prices for the second assessment period from the price setting compliance statement.

Forecast revenue from prices	
Total forecast revenue from prices	**54,104**

Table 18: Forecast revenue from prices for the assessment period

APPENDIX C – POLICIES AND PROCEDURES FOR MEASURING PLANNED AND UNPLANNED INTERRUPTIONS



APPENDIX D – SAIDI AND SAIFI MAJOR EVENTS

Table 19 and Table 20 below show the normalisation of the SAIDI and SAIFI major events during the assessment period. The approach to normalise unplanned SAIDI major events is specified in Schedule 3.2 of the Determination.

Normalisation of unplanned SAIDI Major Events								
SAIDI Major Event 1								
Data and time (half-hour commencing)	Sum SAIDI (half-hour)	Sum SAIDI (previous 24-hour)	Max SAIDI (rolling 24-hour)	Boundary value	1/48th Boundary Value	SAIDI Unplanned Assessed Value	Zone Substation	Feeder
9/09/2021 0:30	0.00	0.04	26.14	9.17	0.19	0.00		
9/09/2021 1:00	0.00	0.04	28.85	9.17	0.19	0.00		
9/09/2021 1:30	0.00	0.04	54.61	9.17	0.19	0.00		
9/09/2021 2:00	0.00	0.04	66.49	9.17	0.19	0.00		
9/09/2021 2:30	0.00	0.04	82.01	9.17	0.19	0.00		
9/09/2021 3:00	0.00	0.04	82.01	9.17	0.19	0.00		
9/09/2021 3:30	0.00	0.04	86.95	9.17	0.19	0.00		
9/09/2021 4:00	0.00	0.04	86.95	9.17	0.19	0.00		
9/09/2021 4:30	0.00	0.04	86.95	9.17	0.19	0.00		
9/09/2021 5:00	0.00	0.04	86.95	9.17	0.19	0.00		
9/09/2021 5:30	0.00	0.04	86.95	9.17	0.19	0.00		
9/09/2021 6:00	0.00	0.04	88.08	9.17	0.19	0.00		
9/09/2021 6:30	0.00	0.04	88.08	9.17	0.19	0.00		
9/09/2021 7:00	0.00	0.00	88.08	9.17	0.19	0.00		
9/09/2021 7:30	0.00	0.00	88.20	9.17	0.19	0.00		
9/09/2021 8:00	0.00	0.00	88.21	9.17	0.19	0.00		
9/09/2021 8:30	0.03	0.03	88.36	9.17	0.19	0.03	Pareora	St Andrews
9/09/2021 9:00	0.01	0.05	88.36	9.17	0.19	0.01	Pareora	St Andrews
9/09/2021 9:30	0.00	0.05	88.36	9.17	0.19	0.00		
9/09/2021 10:00	0.00	0.05	88.36	9.17	0.19	0.00		
9/09/2021 10:30	0.00	0.05	88.36	9.17	0.19	0.00		
9/09/2021 11:00	0.00	0.05	88.46	9.17	0.19	0.00		

pwc

Data and time (half-hour commencing)	Sum SAIDI (half-hour)	Sum SAIDI (previous 24-hour)	Max SAIDI (rolling 24-hour)	Boundary value	1/48th Boundary Value	SAIDI Unplanned Assessed Value	Zone Substation	Feeder
9/09/2021 11:30	0.00	0.05	89.29	9.17	0.19	0.00		
9/09/2021 12:00	0.00	0.05	89.29	9.17	0.19	0.00		
9/09/2021 12:30	0.00	0.05	89.29	9.17	0.19	0.00		
9/09/2021 13:00	0.00	0.05	89.29	9.17	0.19	0.00		
9/09/2021 13:30	0.00	0.05	89.29	9.17	0.19	0.00		
9/09/2021 14:00	0.00	0.05	89.29	9.17	0.19	0.00		
9/09/2021 14:30	0.00	0.05	89.29	9.17	0.19	0.00		
9/09/2021 15:00	0.00	0.05	89.29	9.17	0.19	0.00		
9/09/2021 15:30	0.00	0.05	89.29	9.17	0.19	0.00		
9/09/2021 16:00	0.00	0.05	92.03	9.17	0.19	0.00		
9/09/2021 16:30	0.00	0.05	92.09	9.17	0.19	0.00		
9/09/2021 17:00	0.03	0.08	92.22	9.17	0.19	0.03	Pareora	St Andrews
9/09/2021 17:30	0.00	0.08	92.22	9.17	0.19	0.00		
9/09/2021 18:00	0.00	0.08	92.30	9.17	0.19	0.00		
9/09/2021 18:30	0.00	0.08	92.30	9.17	0.19	0.00		
9/09/2021 19:00	0.00	0.08	92.36	9.17	0.19	0.00		
9/09/2021 19:30	0.48	0.56	92.36	9.17	0.19	0.19	Albury	Raincliff
9/09/2021 20:00	0.00	0.56	92.36	9.17	0.19	0.00		
9/09/2021 20:30	0.00	0.56	92.36	9.17	0.19	0.00		
9/09/2021 21:00	0.00	0.56	92.36	9.17	0.19	0.00		
9/09/2021 21:30	0.00	0.56	92.36	9.17	0.19	0.00		
9/09/2021 22:00	0.00	0.56	92.36	9.17	0.19	0.00		
9/09/2021 22:30	0.00	0.56	92.36	9.17	0.19	0.00		
9/09/2021 23:00	0.00	0.56	92.36	9.17	0.19	0.00		
9/09/2021 23:30	8.54	9.10	92.36	9.17	0.19	0.19	Albury	Cave
10/09/2021 0:00	17.04	26.14	92.36	9.17	0.19	0.19	Pareora	Holme Station
10/09/2021 0:30	2.71	28.85	92.36	9.17	0.19	0.19	Fairlie	Fairlie Rural
10/09/2021 1:00	25.76	54.61	92.36	9.17	0.19	0.19	Studholme	Otaio

pwc

Data and time (half-hour commencing)	Sum SAIDI (half-hour)	Sum SAIDI (previous 24-hour)	Max SAIDI (rolling 24-hour)	Boundary value	1/48th Boundary Value	SAIDI Unplanned Assessed Value	Zone Substation	Feeder
10/09/2021 1:30	11.88	66.49	92.36	9.17	0.19	0.19	Timaru	Hadlow
10/09/2021 2:00	15.51	82.01	92.36	9.17	0.19	0.19	Studholme	Waimate
10/09/2021 2:30	0.00	82.01	92.36	9.17	0.19	0.00		
10/09/2021 3:00	4.94	86.95	92.36	9.17	0.19	0.19	Temuka	Winchester
10/09/2021 3:30	0.00	86.95	92.36	9.17	0.19	0.00		
10/09/2021 4:00	0.00	86.95	92.36	9.17	0.19	0.00		
10/09/2021 4:30	0.00	86.95	92.36	9.17	0.19	0.00		
10/09/2021 5:00	0.00	86.95	92.36	9.17	0.19	0.00		
10/09/2021 5:30	1.14	88.08	92.36	9.17	0.19	0.19	Temuka	Waitohi
10/09/2021 6:00	0.00	88.08	92.36	9.17	0.19	0.00		
10/09/2021 6:30	0.00	88.08	92.36	9.17	0.19	0.00		
10/09/2021 7:00	0.12	88.20	92.36	9.17	0.19	0.12	Pleasant_Point	Waitawa
10/09/2021 7:30	0.01	88.21	92.36	9.17	0.19	0.01	Twizel	Twizel Rural
10/09/2021 8:00	0.15	88.36	92.36	9.17	0.19	0.15	Pareora	Holme Station
10/09/2021 8:30	0.00	88.32	92.36	9.17	0.19	0.00		
10/09/2021 9:00	0.00	88.31	92.36	9.17	0.19	0.00		
10/09/2021 9:30	0.00	88.31	92.36	9.17	0.19	0.00		
10/09/2021 10:00	0.00	88.31	92.36	9.17	0.19	0.00		
10/09/2021 10:30	0.15	88.46	92.36	9.17	0.19	0.15	Studholme	Glenavy
10/09/2021 11:00	0.83	89.29	92.36	9.17	0.19	0.19	Timaru	Arowhenua
10/09/2021 11:30	0.00	89.29	92.36	9.17	0.19	0.00		
10/09/2021 12:00	0.00	89.29	92.36	9.17	0.19	0.00		
10/09/2021 12:30	0.00	89.29	92.36	9.17	0.19	0.00		
10/09/2021 13:00	0.00	89.29	92.36	9.17	0.19	0.00		
10/09/2021 13:30	0.00	89.29	92.36	9.17	0.19	0.00		
10/09/2021 14:00	0.00	89.29	92.36	9.17	0.19	0.00		
10/09/2021 14:30	0.00	89.29	92.36	9.17	0.19	0.00		

Data and time (half-hour commencing)	Sum SAIDI (half-hour)	Sum SAIDI (previous 24-hour)	Max SAIDI (rolling 24-hour)	Boundary value	1/48th Boundary Value	SAIDI Unplanned Assessed Value	Zone Substation	Feeder
10/09/2021 15:00	0.00	89.29	92.36	9.17	0.19	0.00		
10/09/2021 15:30	2.74	92.03	92.36	9.17	0.19	0.19	Pareora	Normanby
10/09/2021 16:00	0.06	92.09	92.36	9.17	0.19	0.06	Pleasant_Point	Totara Valley
10/09/2021 16:30	0.13	92.22	92.36	9.17	0.19	0.13	Timaru	Hadlow
10/09/2021 17:00	0.00	92.19	92.36	9.17	0.19	0.00		
10/09/2021 17:30	0.12	92.30	92.36	9.17	0.19	0.12	Temuka	Winchester
10/09/2021 18:00	0.00	92.30	92.36	9.17	0.19	0.00		
10/09/2021 18:30	0.06	92.36	92.36	9.17	0.19	0.06	Pleasant_Point	Totara Valley
10/09/2021 19:00	0.00	92.36	92.36	9.17	0.19	0.00		
10/09/2021 19:30	0.00	91.88	91.88	9.17	0.19	0.00		
10/09/2021 20:00	0.00	91.88	91.88	9.17	0.19	0.00		
10/09/2021 20:30	0.00	91.88	91.88	9.17	0.19	0.00		
10/09/2021 21:00	0.00	91.88	91.88	9.17	0.19	0.00		
10/09/2021 21:30	0.00	91.88	91.88	9.17	0.19	0.00		
10/09/2021 22:00	0.00	91.88	91.88	9.17	0.19	0.00		
10/09/2021 22:30	0.00	91.88	91.88	9.17	0.19	0.00		
10/09/2021 23:00	0.00	91.88	91.88	9.17	0.19	0.00		
10/09/2021 23:30	0.00	83.34	83.34	9.17	0.19	0.00		
11/09/2021 0:00	0.00	66.30	66.30	9.17	0.19	0.00		
11/09/2021 0:30	0.00	63.59	63.59	9.17	0.19	0.00		
11/09/2021 1:00	0.00	37.83	37.83	9.17	0.19	0.00		
11/09/2021 1:30	0.00	25.95	25.95	9.17	0.19	0.00		
11/09/2021 2:00	0.00	10.43	10.43	9.17	0.19	0.00		
11/09/2021 2:30	0.00	10.43	10.43	9.17	0.19	0.00		
11/09/2021 19:30	0.00	0.65	13.70	9.17	0.19	0.00		
11/09/2021 20:00	0.00	0.65	19.38	9.17	0.19	0.00		
11/09/2021 20:30	0.00	0.65	19.38	9.17	0.19	0.00		

pwc

Data and time (half-hour commencing)	Sum SAIDI (half-hour)	Sum SAIDI (previous 24-hour)	Max SAIDI (rolling 24-hour)	Boundary value	1/48th Boundary Value	SAIDI Unplanned Assessed Value	Zone Substation	Feeder
11/09/2021 21:00	0.00	0.65	19.38	9.17	0.19	0.00		
11/09/2021 21:30	0.00	0.65	19.38	9.17	0.19	0.00		
11/09/2021 22:00	0.00	0.65	19.38	9.17	0.19	0.00		
11/09/2021 22:30	0.00	0.65	19.38	9.17	0.19	0.00		
11/09/2021 23:00	0.00	0.65	19.38	9.17	0.19	0.00		
11/09/2021 23:30	0.00	0.65	19.38	9.17	0.19	0.00		
12/09/2021 0:00	0.00	0.65	19.38	9.17	0.19	0.00		
12/09/2021 0:30	0.00	0.65	19.38	9.17	0.19	0.00		
12/09/2021 1:00	0.00	0.65	19.38	9.17	0.19	0.00		
12/09/2021 1:30	0.00	0.65	19.38	9.17	0.19	0.00		
12/09/2021 2:00	0.00	0.65	19.38	9.17	0.19	0.00		
12/09/2021 2:30	0.00	0.65	19.43	9.17	0.19	0.00		
12/09/2021 3:00	0.00	0.65	19.43	9.17	0.19	0.00		
12/09/2021 3:30	0.00	0.65	19.79	9.17	0.19	0.00		
12/09/2021 4:00	0.00	0.65	19.79	9.17	0.19	0.00		
12/09/2021 4:30	0.00	0.65	19.79	9.17	0.19	0.00		
12/09/2021 5:00	0.00	0.65	19.79	9.17	0.19	0.00		
12/09/2021 5:30	0.00	0.65	19.79	9.17	0.19	0.00		
12/09/2021 6:00	0.00	0.65	19.79	9.17	0.19	0.00		
12/09/2021 6:30	0.00	0.65	19.79	9.17	0.19	0.00		
12/09/2021 7:00	0.00	0.65	19.79	9.17	0.19	0.00		
12/09/2021 7:30	0.00	0.65	19.79	9.17	0.19	0.00		
12/09/2021 8:00	0.00	0.65	19.98	9.17	0.19	0.00		
12/09/2021 8:30	0.06	0.71	20.03	9.17	0.19	0.06	Studholme	Glenavy
12/09/2021 9:00	0.00	0.71	20.03	9.17	0.19	0.00		
12/09/2021 9:30	0.00	0.71	20.03	9.17	0.19	0.00		
12/09/2021 10:00	0.00	0.71	20.03	9.17	0.19	0.00		
12/09/2021 10:30	0.00	0.22	20.03	9.17	0.19	0.00		

pwc

Data and time (half-hour commencing)	Sum SAIDI (half-hour)	Sum SAIDI (previous 24-hour)	Max SAIDI (rolling 24-hour)	Boundary value	1/48th Boundary Value	SAIDI Unplanned Assessed Value	Zone Substation	Feeder
12/09/2021 11:00	0.00	0.22	20.03	9.17	0.19	0.00		
12/09/2021 11:30	0.00	0.22	20.07	9.17	0.19	0.00		
12/09/2021 12:00	0.00	0.22	20.08	9.17	0.19	0.00		
12/09/2021 12:30	0.00	0.22	20.09	9.17	0.19	0.00		
12/09/2021 13:00	0.00	0.22	20.16	9.17	0.19	0.00		
12/09/2021 13:30	0.01	0.23	20.16	9.17	0.19	0.01	Geraldine	Woodbury
12/09/2021 14:00	0.00	0.23	20.16	9.17	0.19	0.00		
12/09/2021 14:30	4.59	4.81	20.22	9.17	0.19	0.19	Geraldine	Woodbury
12/09/2021 15:00	0.00	4.81	20.22	9.17	0.19	0.00		
12/09/2021 15:30	0.00	4.81	20.22	9.17	0.19	0.00		
12/09/2021 16:00	0.00	4.81	20.22	9.17	0.19	0.00		
12/09/2021 16:30	0.16	4.98	20.22	9.17	0.19	0.16	Studholme	Otaio
12/09/2021 17:00	1.36	6.34	20.22	9.17	0.19	0.19	Fairlie	Fairlie Rural
12/09/2021 17:30	0.26	6.44	20.22	9.17	0.19	0.19	Geraldine	Speechley
12/09/2021 18:00	0.68	7.12	20.22	9.17	0.19	0.19	Studholme	Otaio
12/09/2021 18:30	0.00	7.12	20.22	9.17	0.19	0.00		
12/09/2021 19:00	6.58	13.70	20.22	9.17	0.19	0.19	Timaru	Hadlow
12/09/2021 19:30	5.68	19.38	20.22	9.17	0.19	0.19	Geraldine	Woodbury
12/09/2021 20:00	0.00	19.38	20.22	9.17	0.19	0.00		
12/09/2021 20:30	0.00	19.38	20.22	9.17	0.19	0.00		
12/09/2021 21:00	0.00	19.38	20.22	9.17	0.19	0.00		
12/09/2021 21:30	0.00	19.38	20.22	9.17	0.19	0.00		
12/09/2021 22:00	0.00	19.38	20.22	9.17	0.19	0.00		
12/09/2021 22:30	0.00	19.38	20.22	9.17	0.19	0.00		
12/09/2021 23:00	0.00	19.38	20.22	9.17	0.19	0.00		
12/09/2021 23:30	0.00	19.38	20.22	9.17	0.19	0.00		
13/09/2021 0:00	0.00	19.38	20.22	9.17	0.19	0.00		
13/09/2021 0:30	0.00	19.38	20.22	9.17	0.19	0.00		

Data and time (half-hour commencing)	Sum SAIDI (half-hour)	Sum SAIDI (previous 24-hour)	Max SAIDI (rolling 24-hour)	Boundary value	1/48th Boundary Value	SAIDI Unplanned Assessed Value	Zone Substation	Feeder
13/09/2021 1:00	0.00	19.38	20.22	9.17	0.19	0.00		
13/09/2021 1:30	0.00	19.38	20.22	9.17	0.19	0.00		
13/09/2021 2:00	0.05	19.43	20.22	9.17	0.19	0.05	Geraldine	Woodbury
13/09/2021 2:30	0.00	19.43	20.22	9.17	0.19	0.00		
13/09/2021 3:00	0.36	19.79	20.22	9.17	0.19	0.19	Temuka	Rangitata
13/09/2021 3:30	0.00	19.79	20.22	9.17	0.19	0.00		
13/09/2021 4:00	0.00	19.79	20.22	9.17	0.19	0.00		
13/09/2021 4:30	0.00	19.79	20.22	9.17	0.19	0.00		
13/09/2021 5:00	0.00	19.79	20.22	9.17	0.19	0.00		
13/09/2021 5:30	0.00	19.79	20.22	9.17	0.19	0.00		
13/09/2021 6:00	0.00	19.79	20.22	9.17	0.19	0.00		
13/09/2021 6:30	0.00	19.79	20.22	9.17	0.19	0.00		
13/09/2021 7:00	0.00	19.79	20.22	9.17	0.19	0.00		
13/09/2021 7:30	0.19	19.98	20.22	9.17	0.19	0.19	Twizel	Twizel Rural
13/09/2021 8:00	0.05	20.03	20.22	9.17	0.19	0.05	Albury	Cave
13/09/2021 8:30	0.01	19.98	20.22	9.17	0.19	0.01	Albury	Raincliff
13/09/2021 9:00	0.00	19.98	20.22	9.17	0.19	0.00	Studholme	Waihaorunga
13/09/2021 9:30	0.03	20.02	20.22	9.17	0.19	0.03	Studholme	Waihaorunga
13/09/2021 10:00	0.00	20.02	20.22	9.17	0.19	0.00		
13/09/2021 10:30	0.00	20.02	20.22	9.17	0.19	0.00		
13/09/2021 11:00	0.05	20.07	20.22	9.17	0.19	0.05	Timaru	Hadlow
13/09/2021 11:30	0.01	20.08	20.22	9.17	0.19	0.01	Albury	Cave
13/09/2021 12:00	0.01	20.09	20.22	9.17	0.19	0.01	Albury	Cave
13/09/2021 12:30	0.08	20.16	20.22	9.17	0.19	0.08	Geraldine	Woodbury
13/09/2021 13:00	0.00	20.16	20.22	9.17	0.19	0.00		
13/09/2021 13:30	0.00	20.16	20.22	9.17	0.19	0.00		
13/09/2021 14:00	0.06	20.22	20.22	9.17	0.19	0.06	Twizel	Twizel Rural
13/09/2021 14:30	0.00	15.63	15.63	9.17	0.19	0.00		

Data and time (half-hour commencing)	Sum SAIDI (half-hour)	Sum SAIDI (previous 24-hour)	Max SAIDI (rolling 24-hour)	Boundary value	1/48th Boundary Value	SAIDI Unplanned Assessed Value	Zone Substation	Feeder
13/09/2021 15:00	0.00	15.63	15.63	9.17	0.19	0.00		
13/09/2021 15:30	0.00	15.63	15.63	9.17	0.19	0.00		
13/09/2021 16:00	0.00	15.63	15.63	9.17	0.19	0.00		
13/09/2021 16:30	0.00	15.47	15.47	9.17	0.19	0.00		
13/09/2021 17:00	0.00	14.11	14.11	9.17	0.19	0.00		
13/09/2021 17:30	0.00	13.85	13.85	9.17	0.19	0.00		
13/09/2021 18:00	0.14	13.32	13.32	9.17	0.19	0.14	Studholme	Waihaorunga
13/09/2021 18:30	0.00	13.32	13.32	9.17	0.19	0.00		
TOTAL	**112.87**					**5.23**		
Cause	Significant weather event - strong wind.							
How Alpine Energy responded	Event started late in the evening. Due to public and personnel safety consideration any identified faults were made safe at the time throughout the night before attempting to begin repair and restoration the following day. The following day the major event team was brought together as per Alpine Energy's Emergency Preparedness Plan. Significant coordination effort was realised both internally and with field service providers.							
Any mitigating factors that could have prevented the event	Overhead assets are most prone to wind events. To mitigate against this would require undergrounding of assets at a hugely significant capital expenditure. Almost all the faults during this event were due to trees being brought down by the wind damaging the overhead assets, or tree debris being blown into the line. In accordance with the Trees Regulations, Alpine Energy has managed its vegetation strategy to avoid tree encroaching the Minimum Approach Distance (MAD) however this has not precluded the issues encountered during the storm.							
Steps to mitigate risk of future similar events	It is possible to minimise the impact of the wind events by deploying more automated switches and sectionalising feeders into smaller sections. Alpine Energy is looking at automating more field devices as part of its AMP. Alpine Energy is also doing a tree awareness campaign to raise awareness and to encourage a more pro-network tree planting strategy.							

SAIDI Major Event 2								
Data and time (half-hour commencing)	Sum SAIDI (half-hour)	Sum SAIDI (previous 24-hour)	Max SAIDI (rolling 24-hour)	Boundary value	1/48th Boundary Value	SAIDI Unplanned Assessed Value	Zone Substation	Feeder
17/12/2021 15:00	0.00	0.00	15.16	9.17	0.19	0.00		
17/12/2021 15:30	0.00	0.00	15.16	9.17	0.19	0.00		
17/12/2021 16:00	0.00	0.00	15.16	9.17	0.19	0.00		
17/12/2021 16:30	0.00	0.00	15.16	9.17	0.19	0.00		
17/12/2021 17:00	0.00	0.00	15.16	9.17	0.19	0.00		
17/12/2021 17:30	0.00	0.00	15.16	9.17	0.19	0.00		
17/12/2021 18:00	0.00	0.00	15.16	9.17	0.19	0.00		
17/12/2021 18:30	0.00	0.00	15.16	9.17	0.19	0.00		
17/12/2021 19:00	0.00	0.00	15.16	9.17	0.19	0.00		
17/12/2021 19:30	0.00	0.00	15.16	9.17	0.19	0.00		
17/12/2021 20:00	0.00	0.00	15.16	9.17	0.19	0.00		
17/12/2021 20:30	0.00	0.00	15.16	9.17	0.19	0.00		
17/12/2021 21:00	0.00	0.00	15.16	9.17	0.19	0.00		
17/12/2021 21:30	0.00	0.00	15.16	9.17	0.19	0.00		
17/12/2021 22:00	0.00	0.00	15.16	9.17	0.19	0.00		
17/12/2021 22:30	0.00	0.00	15.16	9.17	0.19	0.00		
17/12/2021 23:00	0.00	0.00	15.16	9.17	0.19	0.00		
17/12/2021 23:30	0.00	0.00	15.16	9.17	0.19	0.00		
18/12/2021 0:00	0.00	0.00	15.16	9.17	0.19	0.00		
18/12/2021 0:30	0.00	0.00	15.16	9.17	0.19	0.00		
18/12/2021 1:00	0.00	0.00	15.16	9.17	0.19	0.00		
18/12/2021 1:30	0.00	0.00	15.16	9.17	0.19	0.00		
18/12/2021 2:00	0.00	0.00	15.16	9.17	0.19	0.00		
18/12/2021 2:30	0.00	0.00	15.16	9.17	0.19	0.00		
18/12/2021 3:00	0.00	0.00	15.16	9.17	0.19	0.00		
18/12/2021 3:30	0.00	0.00	15.16	9.17	0.19	0.00		
18/12/2021 4:00	0.00	0.00	15.16	9.17	0.19	0.00		

Data and time (half-hour commencing)	Sum SAIDI (half-hour)	Sum SAIDI (previous 24-hour)	Max SAIDI (rolling 24-hour)	Boundary value	1/48th Boundary Value	SAIDI Unplanned Assessed Value	Zone Substation	Feeder
18/12/2021 4:30	0.00	0.00	15.16	9.17	0.19	0.00		
18/12/2021 5:00	0.01	0.01	15.16	9.17	0.19	0.01	Temuka	Winchester
18/12/2021 5:30	0.00	0.01	15.16	9.17	0.19	0.00		
18/12/2021 6:00	0.00	0.01	15.16	9.17	0.19	0.00		
18/12/2021 6:30	0.00	0.01	15.16	9.17	0.19	0.00		
18/12/2021 7:00	0.00	0.01	15.16	9.17	0.19	0.00		
18/12/2021 7:30	0.00	0.01	15.16	9.17	0.19	0.00		
18/12/2021 8:00	0.00	0.01	15.16	9.17	0.19	0.00		
18/12/2021 8:30	0.00	0.01	15.16	9.17	0.19	0.00		
18/12/2021 9:00	0.00	0.01	15.16	9.17	0.19	0.00		
18/12/2021 9:30	0.00	0.01	15.16	9.17	0.19	0.00		
18/12/2021 10:00	0.00	0.01	15.16	9.17	0.19	0.00		
18/12/2021 10:30	0.00	0.01	15.16	9.17	0.19	0.00		
18/12/2021 11:00	0.00	0.01	15.16	9.17	0.19	0.00		
18/12/2021 11:30	0.00	0.01	15.16	9.17	0.19	0.00		
18/12/2021 12:00	0.00	0.01	15.16	9.17	0.19	0.00		
18/12/2021 12:30	0.22	0.24	15.16	9.17	0.19	0.19	Studholme	Waimate
18/12/2021 13:00	0.00	0.24	15.16	9.17	0.19	0.00		
18/12/2021 13:30	0.00	0.24	15.16	9.17	0.19	0.00		
18/12/2021 14:00	0.00	0.24	15.16	9.17	0.19	0.00		
18/12/2021 14:30	14.93	15.16	15.16	9.17	0.19	0.19	Fairlie	Fairlie Township
18/12/2021 15:00	0.00	15.16	15.16	9.17	0.19	0.00		
18/12/2021 15:30	0.00	15.16	15.16	9.17	0.19	0.00		
18/12/2021 16:00	0.00	15.16	15.16	9.17	0.19	0.00		
18/12/2021 16:30	0.00	15.16	15.16	9.17	0.19	0.00		
18/12/2021 17:00	0.00	15.16	15.16	9.17	0.19	0.00		
18/12/2021 17:30	0.00	15.16	15.16	9.17	0.19	0.00		
18/12/2021 18:00	0.00	15.16	15.16	9.17	0.19	0.00		

Data and time (half-hour commencing)	Sum SAIDI (half-hour)	Sum SAIDI (previous 24-hour)	Max SAIDI (rolling 24-hour)	Boundary value	1/48th Boundary Value	SAIDI Unplanned Assessed Value	Zone Substation	Feeder
18/12/2021 18:30	0.00	15.16	15.16	9.17	0.19	0.00		
18/12/2021 19:00	0.00	15.16	15.16	9.17	0.19	0.00		
18/12/2021 19:30	0.00	15.16	15.16	9.17	0.19	0.00		
18/12/2021 20:00	0.00	15.16	15.16	9.17	0.19	0.00		
18/12/2021 20:30	0.00	15.16	15.16	9.17	0.19	0.00		
18/12/2021 21:00	0.00	15.16	15.16	9.17	0.19	0.00		
18/12/2021 21:30	0.00	15.16	15.16	9.17	0.19	0.00		
18/12/2021 22:00	0.00	15.16	15.16	9.17	0.19	0.00		
18/12/2021 22:30	0.00	15.16	15.16	9.17	0.19	0.00		
18/12/2021 23:00	0.00	15.16	15.16	9.17	0.19	0.00		
18/12/2021 23:30	0.00	15.16	15.16	9.17	0.19	0.00		
19/12/2021 0:00	0.00	15.16	15.16	9.17	0.19	0.00		
19/12/2021 0:30	0.00	15.16	15.16	9.17	0.19	0.00		
19/12/2021 1:00	0.00	15.16	15.16	9.17	0.19	0.00		
19/12/2021 1:30	0.00	15.16	15.16	9.17	0.19	0.00		
19/12/2021 2:00	0.00	15.16	15.16	9.17	0.19	0.00		
19/12/2021 2:30	0.00	15.16	15.16	9.17	0.19	0.00		
19/12/2021 3:00	0.00	15.16	15.16	9.17	0.19	0.00		
19/12/2021 3:30	0.00	15.16	15.16	9.17	0.19	0.00		
19/12/2021 4:00	0.00	15.16	15.16	9.17	0.19	0.00		
19/12/2021 4:30	0.00	15.16	15.16	9.17	0.19	0.00		
19/12/2021 5:00	0.00	15.15	15.15	9.17	0.19	0.00		
19/12/2021 5:30	0.00	15.15	15.15	9.17	0.19	0.00		
19/12/2021 6:00	0.00	15.15	15.15	9.17	0.19	0.00		
19/12/2021 6:30	0.00	15.15	15.15	9.17	0.19	0.00		
19/12/2021 7:00	0.00	15.15	15.15	9.17	0.19	0.00		
19/12/2021 7:30	0.00	15.15	15.15	9.17	0.19	0.00		
19/12/2021 8:00	0.00	15.15	15.15	9.17	0.19	0.00		

Data and time (half-hour commencing)	Sum SAIDI (half-hour)	Sum SAIDI (previous 24-hour)	Max SAIDI (rolling 24-hour)	Boundary value	1/48th Boundary Value	SAIDI Unplanned Assessed Value	Zone Substation	Feeder
19/12/2021 8:30	0.00	15.15	15.15	9.17	0.19	0.00		
19/12/2021 9:00	0.00	15.15	15.15	9.17	0.19	0.00		
19/12/2021 9:30	0.00	15.15	15.15	9.17	0.19	0.00		
19/12/2021 10:00	0.00	15.15	15.15	9.17	0.19	0.00		
19/12/2021 10:30	0.00	15.15	15.15	9.17	0.19	0.00		
19/12/2021 11:00	0.00	15.15	15.15	9.17	0.19	0.00		
19/12/2021 11:30	0.00	15.15	15.15	9.17	0.19	0.00		
19/12/2021 12:00	0.00	15.15	15.15	9.17	0.19	0.00		
19/12/2021 12:30	0.00	14.93	14.93	9.17	0.19	0.00		
19/12/2021 13:00	0.00	14.93	14.93	9.17	0.19	0.00		
19/12/2021 13:30	0.00	14.93	14.93	9.17	0.19	0.00		
19/12/2021 14:00	0.00	14.93	14.93	9.17	0.19	0.00		
TOTAL	**15.16**					**0.40**		
Cause	Maloperation of the transformer oil pressure alarm caused the tripping of the Albury T1 transformer.							
How Alpine Energy responded	On the day of the fault, a normal fault response was carried out. Alpine Energy responded within the fault response time frame. An engineering assessment was sought to ensure the transformer could be put back into service to ensure restoration was possible without further risk. After restoration, a plan was put in place to mobilise the mobile substation to run in place of the T1 transformer until further diagnostics were carried out. There were two potential causes for the fault, and thus a planned outage was needed to investigate and repair the root cause of the fault. A faulty proximity switch that provides an alarm when the valve operates was the cause of the fault and was replaced. T1 is back in normal service.							
Any mitigating factors that could have prevented the event	Alpine Energy currently have a routine four-yearly maintenance programme, where the transformer is inspected and the transformer's protective devices, like the pressure relief device, are tested. Having two different pressure alarm devices connected to a single (electrical PLC) pressure alarm circuit made identifying the fault difficult. Using separate alarm circuits for separate alarms would have made identifying the cause of the alarm easier. The proximity switch, which was used, was old and water penetrated the seals of the proximity switch.							

Steps to mitigate risk of future similar events	Alpine Energy need to keep transformer alarm circuits separate from other alarm circuits so that alarms are easier to trace and investigate. Alpine Energy now inspect proximity switches during the four-yearly maintenance cycle and replace them if they seem suspect, if the seals are degraded, or if water has penetrated them.

Table 19: Normalisation of unplanned SAIDI major events and additional required information for the assessment period

Normalisation of unplanned SAIFI Major Events								
SAIFI Major Event 1								
Data and time (half-hour commencing)	Sum SAIFI (half-hour)	Sum SAIFI (previous 24-hour)	Max SAIFI (rolling 24-hour)	Boundary value	1/48th Boundary Value	SAIFI Unplanned Assessed Value	Zone Substation	Feeder
8/08/2021 11:30	0.000	0.000	0.074	0.067	0.0014	0.000		
8/08/2021 12:00	0.000	0.000	0.074	0.067	0.0014	0.000		
8/08/2021 12:30	0.000	0.000	0.074	0.067	0.0014	0.000		
8/08/2021 13:00	0.001	0.001	0.074	0.067	0.0014	0.001	Studholme	Mt Studholme
8/08/2021 13:30	0.000	0.001	0.074	0.067	0.0014	0.000		
8/08/2021 14:00	0.000	0.001	0.074	0.067	0.0014	0.000		
8/08/2021 14:30	0.000	0.001	0.074	0.067	0.0014	0.000		
8/08/2021 15:00	0.000	0.001	0.074	0.067	0.0014	0.000		
8/08/2021 15:30	0.000	0.001	0.074	0.067	0.0014	0.000		
8/08/2021 16:00	0.015	0.016	0.074	0.067	0.0014	0.001	Rangitata	Belfield
8/08/2021 16:30	0.000	0.016	0.074	0.067	0.0014	0.000		
8/08/2021 17:00	0.000	0.016	0.074	0.067	0.0014	0.000		
8/08/2021 17:30	0.000	0.016	0.074	0.067	0.0014	0.000		
8/08/2021 18:00	0.000	0.016	0.074	0.067	0.0014	0.000		
8/08/2021 18:30	0.000	0.016	0.074	0.067	0.0014	0.000		
8/08/2021 19:00	0.000	0.016	0.074	0.067	0.0014	0.000		
8/08/2021 19:30	0.000	0.016	0.074	0.067	0.0014	0.000		
8/08/2021 20:00	0.000	0.016	0.074	0.067	0.0014	0.000		
8/08/2021 20:30	0.000	0.016	0.074	0.067	0.0014	0.000		
8/08/2021 21:00	0.000	0.016	0.074	0.067	0.0014	0.000		
8/08/2021 21:30	0.000	0.016	0.074	0.067	0.0014	0.000		
8/08/2021 22:00	0.000	0.016	0.074	0.067	0.0014	0.000		
8/08/2021 22:30	0.000	0.016	0.074	0.067	0.0014	0.000		
8/08/2021 23:00	0.000	0.016	0.074	0.067	0.0014	0.000		
8/08/2021 23:30	0.000	0.016	0.074	0.067	0.0014	0.000		
9/08/2021 0:00	0.000	0.016	0.074	0.067	0.0014	0.000		

Data and time (half-hour commencing)	Sum SAIFI (half-hour)	Sum SAIFI (previous 24-hour)	Max SAIFI (rolling 24-hour)	Boundary value	1/48th Boundary Value	SAIFI Unplanned Assessed Value	Zone Substation	Feeder
9/08/2021 0:30	0.000	0.016	0.074	0.067	0.0014	0.000		
9/08/2021 1:00	0.000	0.016	0.074	0.067	0.0014	0.000		
9/08/2021 1:30	0.000	0.016	0.074	0.067	0.0014	0.000		
9/08/2021 2:00	0.000	0.016	0.074	0.067	0.0014	0.000		
9/08/2021 2:30	0.000	0.016	0.074	0.067	0.0014	0.000		
9/08/2021 3:00	0.000	0.016	0.074	0.067	0.0014	0.000		
9/08/2021 3:30	0.000	0.016	0.074	0.067	0.0014	0.000		
9/08/2021 4:00	0.000	0.016	0.074	0.067	0.0014	0.000		
9/08/2021 4:30	0.000	0.016	0.074	0.067	0.0014	0.000		
9/08/2021 5:00	0.000	0.016	0.074	0.067	0.0014	0.000		
9/08/2021 5:30	0.000	0.016	0.074	0.067	0.0014	0.000		
9/08/2021 6:00	0.000	0.016	0.074	0.067	0.0014	0.000		
9/08/2021 6:30	0.000	0.016	0.074	0.067	0.0014	0.000		
9/08/2021 7:00	0.000	0.016	0.074	0.067	0.0014	0.000		
9/08/2021 7:30	0.000	0.016	0.074	0.067	0.0014	0.000		
9/08/2021 8:00	0.000	0.016	0.074	0.067	0.0014	0.000		
9/08/2021 8:30	0.000	0.016	0.074	0.067	0.0014	0.000		
9/08/2021 9:00	0.000	0.016	0.074	0.067	0.0014	0.000		
9/08/2021 9:30	0.000	0.016	0.074	0.067	0.0014	0.000		
9/08/2021 10:00	0.000	0.016	0.074	0.067	0.0014	0.000		
9/08/2021 10:30	0.000	0.016	0.074	0.067	0.0014	0.000		
9/08/2021 11:00	0.058	0.074	0.074	0.067	0.0014	0.001	Studholme	Waimate
9/08/2021 11:30	0.000	0.074	0.074	0.067	0.0014	0.000		
9/08/2021 12:00	0.000	0.074	0.074	0.067	0.0014	0.000		
9/08/2021 12:30	0.000	0.074	0.074	0.067	0.0014	0.000		
9/08/2021 13:00	0.000	0.073	0.073	0.067	0.0014	0.000		
9/08/2021 13:30	0.000	0.073	0.073	0.067	0.0014	0.000		
9/08/2021 14:00	0.000	0.073	0.073	0.067	0.0014	0.000		
9/08/2021 14:30	0.000	0.073	0.073	0.067	0.0014	0.000		

Data and time (half-hour commencing)	Sum SAIFI (half-hour)	Sum SAIFI (previous 24-hour)	Max SAIFI (rolling 24-hour)	Boundary value	1/48th Boundary Value	SAIFI Unplanned Assessed Value	Zone Substation	Feeder
9/08/2021 15:00	0.000	0.073	0.073	0.067	0.0014	0.000		
9/08/2021 15:30	0.000	0.073	0.073	0.067	0.0014	0.000		
TOTAL	**0.074**					**0.004**		
Cause	A broken insulator causing the tripping of the feeder.							
How Alpine Energy responded	On the day of the fault, a normal fault response was carried out. Alpine Energy responded within the fault response time frame. The fault was able to be quickly found, and restoration to bulk of the customers within 48 minutes.							
Any mitigating factors that could have prevented the event	A more robust pole inspection programme to detect faulty insulators. Utilising drones would allow Alpine Energy to get close and quality images of pole top assets.							
Steps to mitigate risk of future similar events	Alpine Energy have re-inspected the feeder and are stepping up the pole inspection programme from 4000 to 6000 poles a year. Alpine Energy are utilising more drones for pole inspections.							

SAIFI Major Event 2

Data and time (half-hour commencing)	Sum SAIFI (half-hour)	Sum SAIFI (previous 24-hour)	Max SAIFI (rolling 24-hour)	Boundary value	1/48th Boundary Value	SAIFI Unplanned Assessed Value	Zone Substation	Feeder
9/09/2021 2:30	0.000	0.001	0.082	0.067	0.0014	0.000		
9/09/2021 3:00	0.000	0.001	0.082	0.067	0.0014	0.000		
9/09/2021 3:30	0.000	0.001	0.092	0.067	0.0014	0.000		
9/09/2021 4:00	0.000	0.001	0.092	0.067	0.0014	0.000		
9/09/2021 4:30	0.000	0.001	0.092	0.067	0.0014	0.000		
9/09/2021 5:00	0.000	0.001	0.092	0.067	0.0014	0.000		
9/09/2021 5:30	0.000	0.001	0.092	0.067	0.0014	0.000		
9/09/2021 6:00	0.000	0.001	0.092	0.067	0.0014	0.000		

Data and time (half-hour commencing)	Sum SAIFI (half-hour)	Sum SAIFI (previous 24-hour)	Max SAIFI (rolling 24-hour)	Boundary value	1/48th Boundary Value	SAIFI Unplanned Assessed Value	Zone Substation	Feeder
9/09/2021 6:30	0.000	0.001	0.092	0.067	0.0014	0.000		
9/09/2021 7:00	0.000	0.000	0.092	0.067	0.0014	0.000		
9/09/2021 7:30	0.000	0.000	0.093	0.067	0.0014	0.000		
9/09/2021 8:00	0.000	0.000	0.093	0.067	0.0014	0.000		
9/09/2021 8:30	0.005	0.005	0.093	0.067	0.0014	0.001	Pareora	St Andrews
9/09/2021 9:00	0.000	0.005	0.093	0.067	0.0014	0.000		
9/09/2021 9:30	0.000	0.005	0.093	0.067	0.0014	0.000		
9/09/2021 10:00	0.000	0.005	0.093	0.067	0.0014	0.000		
9/09/2021 10:30	0.000	0.005	0.093	0.067	0.0014	0.000		
9/09/2021 11:00	0.000	0.005	0.093	0.067	0.0014	0.000		
9/09/2021 11:30	0.000	0.005	0.093	0.067	0.0014	0.000		
9/09/2021 12:00	0.000	0.005	0.093	0.067	0.0014	0.000		
9/09/2021 12:30	0.000	0.005	0.093	0.067	0.0014	0.000		
9/09/2021 13:00	0.000	0.005	0.093	0.067	0.0014	0.000		
9/09/2021 13:30	0.000	0.005	0.093	0.067	0.0014	0.000		
9/09/2021 14:00	0.000	0.005	0.093	0.067	0.0014	0.000		
9/09/2021 14:30	0.000	0.005	0.093	0.067	0.0014	0.000		
9/09/2021 15:00	0.000	0.005	0.093	0.067	0.0014	0.000		
9/09/2021 15:30	0.000	0.005	0.093	0.067	0.0014	0.000		
9/09/2021 16:00	0.000	0.005	0.093	0.067	0.0014	0.000		
9/09/2021 16:30	0.000	0.005	0.093	0.067	0.0014	0.000		
9/09/2021 17:00	0.005	0.011	0.093	0.067	0.0014	0.001	Pareora	St Andrews
9/09/2021 17:30	0.000	0.011	0.093	0.067	0.0014	0.000		
9/09/2021 18:00	0.000	0.011	0.093	0.067	0.0014	0.000		
9/09/2021 18:30	0.000	0.011	0.093	0.067	0.0014	0.000		
9/09/2021 19:00	0.000	0.011	0.093	0.067	0.0014	0.000		
9/09/2021 19:30	0.000	0.011	0.093	0.067	0.0014	0.000		
9/09/2021 20:00	0.000	0.011	0.093	0.067	0.0014	0.000		
9/09/2021 20:30	0.000	0.011	0.093	0.067	0.0014	0.000		

Data and time (half-hour commencing)	Sum SAIFI (half-hour)	Sum SAIFI (previous 24-hour)	Max SAIFI (rolling 24-hour)	Boundary value	1/48th Boundary Value	SAIFI Unplanned Assessed Value	Zone Substation	Feeder
9/09/2021 21:00	0.000	0.011	0.093	0.067	0.0014	0.000		
9/09/2021 21:30	0.000	0.011	0.093	0.067	0.0014	0.000		
9/09/2021 22:00	0.000	0.011	0.093	0.067	0.0014	0.000		
9/09/2021 22:30	0.000	0.011	0.093	0.067	0.0014	0.000		
9/09/2021 23:00	0.000	0.011	0.093	0.067	0.0014	0.000		
9/09/2021 23:30	0.004	0.015	0.093	0.067	0.0014	0.001	Albury	Cave
10/09/2021 0:00	0.007	0.023	0.093	0.067	0.0014	0.001	Pareora	Holme Station
10/09/2021 0:30	0.002	0.025	0.093	0.067	0.0014	0.001	Fairlie	Fairlie Rural
10/09/2021 1:00	0.028	0.053	0.093	0.067	0.0014	0.001	Studholme	Otaio
10/09/2021 1:30	0.013	0.066	0.093	0.067	0.0014	0.001	Timaru	Hadlow
10/09/2021 2:00	0.016	0.082	0.093	0.067	0.0014	0.001	Studholme	Waimate
10/09/2021 2:30	0.000	0.082	0.093	0.067	0.0014	0.000		
10/09/2021 3:00	0.010	0.092	0.093	0.067	0.0014	0.001	Temuka	Winchester
10/09/2021 3:30	0.000	0.092	0.093	0.067	0.0014	0.000		
10/09/2021 4:00	0.000	0.092	0.093	0.067	0.0014	0.000		
10/09/2021 4:30	0.000	0.092	0.093	0.067	0.0014	0.000		
10/09/2021 5:00	0.000	0.092	0.093	0.067	0.0014	0.000		
10/09/2021 5:30	0.001	0.092	0.093	0.067	0.0014	0.001	Temuka	Waitohi
10/09/2021 6:00	0.000	0.092	0.093	0.067	0.0014	0.000		
10/09/2021 6:30	0.000	0.092	0.093	0.067	0.0014	0.000		
10/09/2021 7:00	0.000	0.093	0.093	0.067	0.0014	0.000		
10/09/2021 7:30	0.000	0.093	0.093	0.067	0.0014	0.000		
10/09/2021 8:00	0.000	0.093	0.093	0.067	0.0014	0.000		
10/09/2021 8:30	0.000	0.087	0.091	0.067	0.0014	0.000		
10/09/2021 9:00	0.000	0.087	0.091	0.067	0.0014	0.000		
10/09/2021 9:30	0.000	0.087	0.091	0.067	0.0014	0.000		
10/09/2021 10:00	0.000	0.087	0.091	0.067	0.0014	0.000		
10/09/2021 10:30	0.000	0.087	0.091	0.067	0.0014	0.000		

Data and time (half-hour commencing)	Sum SAIFI (half-hour)	Sum SAIFI (previous 24-hour)	Max SAIFI (rolling 24-hour)	Boundary value	1/48th Boundary Value	SAIFI Unplanned Assessed Value	Zone Substation	Feeder
10/09/2021 11:00	0.001	0.088	0.091	0.067	0.0014	0.001	Timaru	Arowhenua
10/09/2021 11:30	0.000	0.088	0.091	0.067	0.0014	0.000		
10/09/2021 12:00	0.000	0.088	0.091	0.067	0.0014	0.000		
10/09/2021 12:30	0.000	0.088	0.091	0.067	0.0014	0.000		
10/09/2021 13:00	0.000	0.088	0.091	0.067	0.0014	0.000		
10/09/2021 13:30	0.000	0.088	0.091	0.067	0.0014	0.000		
10/09/2021 14:00	0.000	0.088	0.091	0.067	0.0014	0.000		
10/09/2021 14:30	0.000	0.088	0.091	0.067	0.0014	0.000		
10/09/2021 15:00	0.000	0.088	0.091	0.067	0.0014	0.000		
10/09/2021 15:30	0.002	0.090	0.091	0.067	0.0014	0.001	Pareora	Normanby
10/09/2021 16:00	0.000	0.091	0.091	0.067	0.0014	0.000		
10/09/2021 16:30	0.000	0.091	0.091	0.067	0.0014	0.000		
10/09/2021 17:00	0.000	0.085	0.089	0.067	0.0014	0.000		
10/09/2021 17:30	0.003	0.089	0.089	0.067	0.0014	0.001	Temuka	Winchester
10/09/2021 18:00	0.000	0.089	0.089	0.067	0.0014	0.000		
10/09/2021 18:30	0.001	0.089	0.089	0.067	0.0014	0.001	Pleasant_Point	Totara Valley
10/09/2021 19:00	0.000	0.089	0.089	0.067	0.0014	0.000		
10/09/2021 19:30	0.000	0.089	0.089	0.067	0.0014	0.000		
10/09/2021 20:00	0.000	0.089	0.089	0.067	0.0014	0.000		
10/09/2021 20:30	0.000	0.089	0.089	0.067	0.0014	0.000		
10/09/2021 21:00	0.000	0.089	0.089	0.067	0.0014	0.000		
10/09/2021 21:30	0.000	0.089	0.089	0.067	0.0014	0.000		
10/09/2021 22:00	0.000	0.089	0.089	0.067	0.0014	0.000		
10/09/2021 22:30	0.000	0.089	0.089	0.067	0.0014	0.000		
10/09/2021 23:00	0.000	0.089	0.089	0.067	0.0014	0.000		
10/09/2021 23:30	0.000	0.085	0.085	0.067	0.0014	0.000		
11/09/2021 0:00	0.000	0.077	0.077	0.067	0.0014	0.000		
11/09/2021 0:30	0.000	0.075	0.075	0.067	0.0014	0.000		
TOTAL	**0.100**					**0.018**		

Additional disclosures	Refer to information for SAIDI Major Event 1 above.

Table 20: Normalisation of unplanned SAIFI major events and additional required information for the assessment period

APPENDIX E – DIRECTOR'S CERTIFICATE

Schedule 7: Form of director's certificate for annual compliance statement

Clause 11.5 (d)

We, Warren McNabb and Linda Robertson, being directors of Alpine Energy Limited certify that, having made all reasonable enquiry, to the best of my/our 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 2020 has been prepared in accordance with all the relevant requirements.

Warren McNabb

Linda Robertson

16 June 2022

Note: Section 103(2) of the Commerce Act 1986 provides that no person shall attempt to deceive or knowingly mislead the Commission in relation to any matter before it. It is an offence to contravene section 103(2) and any person who does so is liable on summary conviction to a fine not exceeding $100,000 in the case of an individual or $300,000 in the case of a body corporate.

APPENDIX F – ASSURANCE REPORT

Independent assurance report

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

Assurance Report on the annual compliance statement for the assessment period ended 31 March 2022 as required by the electricity distribution services default price-quality path determination 2020 (consolidated 20 May 2020)

The Auditor-General is the auditor of Alpine Energy Limited (the company). The Auditor-General has appointed me, Nathan Wylie, using the staff and resources of PricewaterhouseCoopers, to undertake a reasonable assurance engagement, on his behalf, on whether the Annual Compliance Statement on pages 4 to 41 for the assessment period ended on 31 March 2022 has been prepared, in all material respects, in compliance with the Electricity Distribution Services Default Price-Quality Path Determination 2020 (consolidated 20 May 2020) (the Determination).

Opinion

In our opinion, in all material respects:

- as far as appears from our examination, the information used in the preparation of the Annual Compliance Statement has been properly extracted from the company's accounting and other records, sourced from its financial and non-financial systems; and
- the company has complied with clauses 11.5 and 11.6 of the Determination in preparing the Annual Compliance Statement for the assessment period ended 31 March 2022.

Basis for opinion

We conducted our engagement in accordance with the Standard on Assurance Engagements (SAE) 3100 (Revised) *Assurance Engagements on Compliance*, issued by the New Zealand Auditing and Assurance Standards Board. An engagement conducted in accordance with SAE 3100 (Revised) requires that we also comply with the International Standard on Assurance Engagements (New Zealand) 3000 (Revised) *Assurance Engagements Other Than Audits or Reviews of Historical Financial Information*.

We have obtained sufficient recorded evidence and explanations that we required to provide a basis for our opinion.

Directors' responsibilities

The directors of the company are responsible for the:

- preparation of the Annual Compliance Statement under clause 11.4 and in accordance with the requirements in clauses 11.5 and 11.6 of the Determination; and
- identification of risks that may threaten compliance with the clauses identified above and controls which will mitigate those risks and monitor ongoing compliance.

Auditor's responsibilities

Our responsibilities in terms of clause 11.5(e) and schedule 8(1)(b)(vi) and 8(1)(c) of the Determination, are to express an opinion on whether:

- as far as appears from our examination, the information used in the preparation of the Annual Compliance Statement has been properly extracted from the company's accounting and other records, sourced from its financial and non-financial systems; and
- the Annual Compliance Statement, for the assessment period ended 31 March 2022, has been prepared, in all material respects, in accordance with the requirements in clauses 11.5 and 11.6 of the Determination.

To meet these responsibilities, we planned and performed procedures in accordance with SAE 3100 (Revised), to obtain reasonable assurance about whether the company has complied, in all material respects, with clauses 11.5 and 11.6 of the Determination.

In relation to the wash-up amount set out in clause 8.6 of the Determination, our procedures included recalculation of the wash-up amount in accordance with schedule 1.6 of the Determination and assessing it against the amounts and disclosures contained on pages 4 to 7 and 16 to 20 of the Annual Compliance Statement.

In relation to the quality standards in clause 9 of the Determination, our procedures included examination, on a test basis, of evidence relevant to the values and disclosures contained on pages 8 to 13 and 21 to 41 of the Annual Compliance Statement.

In relation to the quality incentive adjustment set out in Schedule 4 of the Determination, our procedures included recalculation of the quality incentive adjustment in accordance with Schedule 4 of the Determination and assessing it against the amounts and disclosures contained on pages 14 to 15 of the Annual Compliance Statement.

An assurance engagement to report on the company's compliance with the Determination involves performing procedures to obtain evidence about the compliance activity and controls implemented to meet the requirements. The procedures selected depend on our judgement, including the identification and assessment of the risks of material non-compliance with the requirements.

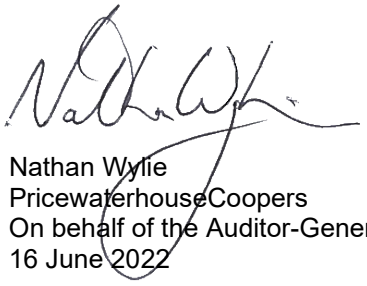
Inherent limitations
Because of the inherent limitations of an assurance engagement, together with the internal control structure, it is possible that fraud, error or non-compliance with clauses 11.5 and 11.6 of the Determination may occur and not be detected. A reasonable assurance engagement throughout the assessment period does not provide assurance on whether compliance with clauses 11.5 and 11.6 of the Determination will continue in the future.

Restricted use
This report has been prepared for use by the directors of the company and the Commerce Commission in accordance with clause 11.5 (e) of the Determination and is provided solely for the purpose of establishing whether the compliance requirements have been met. We disclaim any assumption of responsibility for any reliance on this report to any person other than the directors of the company and the Commerce Commission, or for any other purpose than that for which it was prepared.

Independence and quality control
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 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.

The Auditor-General, and his 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 trading activities of the company, this engagement, regulatory advisory services, the assurance engagement on the Information Disclosures and Independent Appraiser's Report and the annual audit of the company's financial statements and performance information, we have no relationship with, or interests in, the company.



Nathan Wylie
PricewaterhouseCoopers
On behalf of the Auditor-General
16 June 2022

Christchurch, New Zealand