Company Name	Alpine Energy
For Year Ended	31 March 2016

Schedule 14 Mandatory Explanatory Notes

1. This schedule requires EDBs to provide explanatory notes to information provided in accordance with clauses 2.3.1, 2.4.21, 2.4.22, and subclauses 2.5.1(1)(f),and 2.5.2(1)(e).

2. This schedule is mandatory—EDBs must provide the explanatory comment specified below, in accordance with clause 2.7.1. Information provided in boxes 1 to 12 of this schedule is part of the audited disclosure information, and so is subject to the assurance requirements specified in section 2.8.

3. Schedule 15 (Voluntary Explanatory Notes to Schedules) provides for EDBs to give additional explanation of disclosed information should they elect to do so.

Return on Investment (Schedule 2)

4. In the box below, comment on return on investment as disclosed in Schedule 2. This comment must include information on reclassified items in accordance with subclause 2.7.1(2).

Box 1: Explanatory comment on return on investment

Our 2016 ROI-comparable to a post-tax WACC is 4.91%, a minor decrease from 4.98% last year. Our resulting ROI is approximately 2.28 percentage points below the WACC rate used to set regulatory price path of 7.19%.

The result is as expected given that we have had a smaller increase in the value of the RAB compared to last year.

Regulatory Profit (Schedule 3)

5. In the box below, comment on regulatory profit for the disclosure year as disclosed in Schedule 3. This comment must include-

   5.1 a description of material items included in other regulated income (other than gains / (losses) on asset disposals), as disclosed in 3(i) of Schedule 3

   5.2 information on reclassified items in accordance with subclause 2.7.1(2).

Box 2: Explanatory comment on regulatory profit

Our regulated income for 2016 is $52m which is $1m higher than previously. This is less than the increase from 2014 to 2015 of $8.8m, which was attributable to higher energy volumes due to the significant drought during the 2014/15 period.

Other regulated income is sundry revenue of $21k close to the amount received in 2014 ($27k) but a large increase from last year's figure of $4k. As per last year we consider this to be part of regulated revenues (other than line charge revenues and disposed assets).

No items were reclassified.

Merger and acquisition expenses (3(iv) of Schedule 3)

6. If the EDB incurred merger and acquisitions expenditure during the disclosure year, provide the following information in the box below-

   6.1 information on reclassified items in accordance with subclause 2.7.1(2)

   6.2 any other commentary on the benefits of the merger and acquisition expenditure to the EDB.

Box 3: Explanatory comment on merger and acquisition expenditure

Not applicable as we did not merge with nor acquire another regulated business.

Value of the Regulatory Asset Base (Schedule 4)

7. In the box below, comment on the value of the regulatory asset base (rolled forward) in Schedule 4. This comment must include information on reclassified items in accordance with subclause 2.7.1(2).

Box 4: Explanatory comment on the value of the regulatory asset based (rolled forward)
Our RAB increased in value from $166m to $167m during the disclosure year. This compares to a $9m increase in the previous year.

For this disclosure year we had fewer additions than in 2015 ($12m compared to $18m in 2015) as well as 'lost' assets worth $2m in 2016. While in 2015 there was $817k of 'found' assets. The 'lost' asset value represents the value of smart meters entered into the RAB in 2015. We are now of the opinion that these are not used to supply distribution services, and therefore consider smart meters do not add network benefit. They therefore meet the definition of a lost asset as they have not been used in the current year to provide distribution services.

Major projects for the year included the Waihao Downs Irrigation project, a locally owned initiative to supply irrigation to farms in the lower eastern half of the network. This project required a new substation to be built including a new 11 kV circuit.

Assets disposed were $87k, from the sale of eight distribution transformers in the main.

No items were reclassified.

Regulatory tax allowance: disclosure of permanent differences (5a(i) of Schedule 5a)

8. In the box below, provide descriptions and workings of the material items recorded in the following asterisked categories of 5a(i) of Schedule 5a-

    8.1 Income not included in regulatory profit / (loss) before tax but taxable;

    8.2 Expenditure or loss in regulatory profit / (loss) before tax but not deductible;

    8.3 Income included in regulatory profit / (loss) before tax but not taxable;

    8.4 Expenditure or loss deductible but not in regulatory profit / (loss) before tax.

Box 5: Regulatory tax allowance: permanent differences

Income not included in regulatory profit / (loss) before tax but taxable; $2k is from additional use of money interest

Expenditure or loss in regulatory profit / (loss) before tax but not deductible; $87k is from:

- Consultancy fees $78k
- Entertainment $7k
- GST on entertainment $0.4k
- Legal fees $1.4k

There were no other material items to report.

Regulatory tax allowance: disclosure of temporary differences (5a(vi) of Schedule 5a)

9. In the box below, provide descriptions and workings of material items recorded in the asterisked category 'Tax effect of other temporary differences' in 5a(vi) of Schedule 5a.

Box 6: Tax effect of other temporary differences (current disclosure year)

There were no material items to report.

Related party transactions: disclosure of related party transactions (Schedule 5b)

10. In the box below, provide descriptions of related party transactions beyond those disclosed on Schedule 5b including identification and descriptions as to the nature of directly attributable costs disclosed under subclause 2.3.6(1)(b).

Box 7: Related party transactions

Netcon Limited is our wholly owned subsidiary. Netcon offers a wide range of professional services to us, other electricity distribution companies, and to large and small consumers. Professional services over the year have included but are not limited to:

- line construction
- technical services
- land development
- asset management
- substation and distribution
- industrial electrical.

All our related party costs are directly attributable to the related service.

Infratec is another wholly own subsidiary. Infratec traditionally engages in offshore development work such as supplying remote area power to Bamyan province in Afghanistan. Netcon has also recently been involved in a local project installing a mobile battery storage unit on our network during in 2015/2016.

Cost allocation (Schedule 5d)

11. In the box below, comment on cost allocation as disclosed in Schedule 5d. This comment must include information on reclassified items in accordance with subclause 2.7.1(2).

Box 8: Cost allocation

All of our corporate costs for this period can be directly attributable to the regulated service.

This year we were below the 20% unregulated/regulated revenue threshold and accordingly our not directly attributable costs are applied in totality to the regulated service.

Being under the threshold allows us to allocate all *not directly attributable* costs to the regulated service.

No items were reclassified.

Asset allocation (Schedule 5e)

12. In the box below, comment on asset allocation as disclosed in Schedule 5e. This comment must include information on reclassified items in accordance with subclause 2.7.1(2).

Box 9: Commentary on asset allocation

We have classified all of our assets as being directly attributable to the provision of electricity distribution, therefore 100% of the asset values are allocated as directly attributable.

No items were reclassified.

Capital Expenditure for the Disclosure Year (Schedule 6a)

13. In the box below, comment on expenditure on assets for the disclosure year, as disclosed in Schedule 6a. This comment must include-

    13.1 a description of the materiality threshold applied to identify material projects and programmes described in Schedule 6a;

    13.2 information on reclassified items in accordance with subclause 2.7.1(2),

Box 10: Explanation of capital expenditure for the disclosure year

Capital expenditure for this period was $15.2m compared to $14.4m during 2015.
We do not apply a materiality threshold to identify material CAPEX projects and programmes. All of our CAPEX spend is given a project number within our accounting system Nimbus against which forecast expenditure and actual expenditure is set. The materiality of our CAPEX projects is based on impact of the project on the network, resource availability, etc. not a monetary threshold.

No items have been reclassified during the period.

Operational Expenditure for the Disclosure Year (Schedule 6b)

14. In the box below, comment on operational expenditure for the disclosure year, as disclosed in Schedule 6b. This comment must include-

    14.1 Commentary on assets replaced or renewed with asset replacement and renewal operational expenditure, as reported in 6b(i) of Schedule 6b;

    14.2 Information on reclassified items in accordance with subclause 2.7.1(2);

    14.3 Commentary on any material atypical expenditure included in operational expenditure disclosed in Schedule 6b, a including the value of the expenditure the purpose of the expenditure, and the operational expenditure categories the expenditure relates to.

Box 11: Explanation of operational expenditure for the disclosure year

Opex for 2016 is $14.7m, which is an increase of 7% when compared to $13.8m expended in 2015. The increase was across all subcategories of expenditure.

- service interruptions and emergencies increased by 133% (or $873k)
- vegetation management increased by 315% (or $544k)
- routine and corrective maintenance and inspection increased by 32% (or 1m)
- asset replacement and renewal decreased by 25% (or $66k)
- non-network decreased by 15% (or $1.4m).

The increases in service interruptions and emergencies, and vegetation management were predominately due to correctional work and prevention following the storm events. Increases in routine and corrective maintenance and inspection, were due to resources being available following the conclusion of a number of significant capex jobs. While asset replacement and renewal decreased due to the added spend in routine maintenance finding issue before they produced a fault.

The decrease in non-network is the result reduced spending on new IT projects and reduced costs to business support after the accounting department was transferred from NETcon to ourselves (Alpine).No items have been reclassified this period.

Atypical expenditure that occurred during this period included spending on:
Sharepoint

- Axos billing system
- GIS upgrade
- Tech 1 asset management software
- Vehicles

Variance between forecast and actual expenditure (Schedule 7)

15. In the box below, comment on variance in actual to forecast expenditure for the disclosure year, as reported in Schedule 7. This comment must include information on reclassified items in accordance with subclause 2.7.1(2).

Box 12: Explanatory comment on variance in actual to forecast expenditure

Capital Expenditure

The forecast values reported in Schedule 7(ii) are based on the Forecast in Schedule 11a of our Asset Management Plan-2016 to 2026. Using these values result in some significant variances between forecast and actual expenditure as seen in Figure 1 below.

Figure 1: Variance between the forecast CAPEX and actual CAPEX

7(ii): Expenditure on Assets	Forecast ($000) [2]	Actual ($000)	% variance
Consumer connection	2,850	8,031	182%
System growth	1,660	3,079	86%
Asset replacement and renewal	4,163	4,131	(1%)
Asset relocations	495	108	(78%)
Reliability, safety and environment:			
Quality of supply	860	613	(29%)
Legislative and regulatory	–	211	–
Other reliability, safety and environment	450	2,426	439%
Total reliability, safety and environment	1,310	3,250	148%
Expenditure on network assets	10,478	18,600	78%
Expenditure on non-network assets	3,767	2,495	(34%)
Expenditure on assets	14,245	21,095	48%

Some variance is a result of work in progress (WIP) not being included in the Forecasts published in s11a, but being included in s6a for Commissioned assets from which Actual CAPEX at s7(ii) is linked. Other variances are explained more fully below.

System growth

When we budget for system growth we only include those builds which have a high level of certainty of proceeding, where capital contributions are paid or are expected to be paid. This is due to the size of the intended builds which involve significant investment on our part. While this method of forecasting is not ideal it does reveal the nature of our customer's sensitivity to announcing their intentions to us as a third party. That is they are often unwilling to reveal their plans to us until the last moment.

For this year we have started work on three large developments of over $1m, while one development estimated to be around $50m, had its start delayed. Large developments for 2015/2016 included:

1. Holcim Cement
2. Waihao Downs Irrigation (WDI)
3. Tawa-Ikiwai dedicated feeder (related to WDI)

Consumer Connection

As with System Growth above, the consumer connection budget remains conservative by not taking into account large capex projects which may or may not occur in the forecasted

year.

Asset replacement and renewal

There was little variance between actual and budget for 2016

Asset relocations

For 2016 we were under budget for Asset relocations. The majority of this budget is for overhead lines to underground cable conversion (OH/UG), an ongoing requirement under local authority district plans. Budget for 2016 has been transferred to 2017 for a major OH/UG project in the Timaru area (Pages Rd to Waiiti Rd) which also requires managing 33kV line which run over the 11kV lines being converted to underground.

There was also some OH/UG which was budgeted for under Total reliability, safety and environment, ($1.7m) which if it was included in Asset relocations would bring budgeted and actual closer to together.

Total reliability, safety and environment

Overall we were 148% over budget but within the category of Total reliability, safety and environment, we had significant movements between Quality of supply and other, reliability safety and environment. This latter movement is partly due to coding between the two descriptors, and largely due to conservative budgets being written. If the 'tentative' budget is also included the total budgeted is for $3m, although this 'tentative' figure also includes a portion of OH/UG as described in Asset relocations above.

Non-network

We were 40% under budget for this category due to underspend on IT and property.

Operational Expenditure

Our network OPEX was 24% above budgeted spending. Below shows the variance in OPEX spending.

Figure 2: Variance in OPEX spending

7(iii): Operational Expenditure			
Service interruptions and emergencies	1,450	1,528	5%
Vegetation management	500	716	43%
Routine and corrective maintenance and inspection	2,801	4,212	50%
Asset replacement and renewal	598	190	(68%)
Network opex	5,348	6,646	24%
System operations and network support	4,552	2,877	(37%)
Business support	8,910	5,245	(41%)
Non-network opex	13,462	8,121	(40%)
Operational expenditure	18,810	14,767	(21%)

Service interruptions and emergencies

We were 5% above forecasted spending. This is a good figure for us due to the uncertainty around forecasting the impact of severe weather events. However it also shows the effectiveness of programs to remove vegetation around lines to reduce tree in line outages, which are a common cause of outages during wind and snow storms.

Vegetation management

Vegetation management was 43% over budget this year. This is because of the emphasis we have placed on vegetation management to help reduce unplanned outages. We now have a program to remove trees out of the fall zone at our cost. The uptake of this offer by tree owners is hard to predict.

Routine and corrective maintenance and inspection

We were 50% higher than forecast this year, and **asset replacement and renewal** was 68% lower. This indicates a change in priorities this year between the two groups. By increasing inspection of assets we were able to defer replacing or renewing.

Non-network opex

We were under budget by 34% on non-network assets due to reduced spending on new IT projects and reduced costs to business support after the accounting department was transferred from NETcon to ourselves (Alpine).

There were no re-classified items for either OPEX or CAPEX

Information relating to revenues and quantities for the disclosure year

16. In the box below provide-

    16.1 a comparison of the target revenue disclosed before the start of the disclosure year, in accordance with clause 2.4.1 and subclause 2.4.3(3) to total billed line charge revenue for the disclosure year, as disclosed in Schedule 8; and

    16.2 explanatory comment on reasons for any material differences between target revenue and total billed line charge revenue.

Box 13: Explanatory comment relating to revenue for the disclosure year

Actual line charge revenue 2% above budget due to organic growth across the network.

Network Reliability for the Disclosure Year (Schedule 10)

17. In the box below, comment on network reliability for the disclosure year, as disclosed in Schedule 10.

Box 14: Commentary on network reliability for the disclosure year

Our SAIDI performance was 452.77 SAIDI minutes, normalised to 217.70 SAIDI minutes, which amounted to a breach of 63.55 SAIDI minutes above our limit of 154.16.

Our SAIFI performance was 2.97 interruptions or 0.18 below the normalised limit of 1.33 interruptions. 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 1 below.

Table 1: 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

Please note that the method used to normalise data is the method stated in the Input Methodologies and not in the Default price quality path.

Notes to the qualified audit opinion—Our network reliability performance exceeds the quality requirements under the default price-quality path, however there are inherent limitations in ability of Alpine Energy Limited to collect and record the network reliability information required to be disclosed in Reports 10(i) to 10(iv). Consequently there is no independent evidence available to support the completeness and accuracy of recorded faults and control over the completeness and accuracy of installation control point ('ICP') data included in the SAIDI and SAIFI calculations is limited throughout the year.

Insurance cover

18. In the box below, provide details of any insurance cover for the assets used to provide electricity distribution services, including-

18.1 The EDB's approaches and practices in regard to the insurance of assets used to provide electricity distribution services, including the level of insurance;

18.2 In respect of any self insurance, the level of reserves, details of how reserves are managed and invested, and details of any reinsurance.

Box 15: Explanation of insurance cover

We insure our vehicles and buildings (including substations) and have public liability insurance. We do not insure our network, for example poles and lines as the premiums are prohibitive. And we do not self-insure.

Amendments to previously disclosed information

19. In the box below, provide information about amendments to previously disclosed information disclosed in accordance with clause 2.12.1 in the last 7 years, including:

19.1 a description of each error; and

19.2 for each error, reference to the web address where the disclosure made in accordance with clause 2.12.1 is publicly disclosed.

Box 16: Disclosure of amendment to previously disclosed information

In the 2014/15 IDs schedule 1 cell I21, the formula used was incorrect, as cell G36 (used to calculate the answer for s1 cell I21) in s8 (number of ICPs) was divided by 1000 when it should not have been. If this figure was not divided by 1000 the total in the 2014/15 IDs for cell I21 should have read $1,002,546 instead of $1,003 as it shows in the published 2014/15 ID schedules. This is obvious when we compare this year's average revenue per ICP with last years.

The published 2014/15 IDs can be found at http://www.alpineenergy.co.nz/disclosures

Company Name Alpine Energy

For Year Ended 2016

Schedule 14a Mandatory Explanatory Notes on Forecast Information

1. This Schedule requires EDBs to provide explanatory notes to reports prepared in accordance with clause 2.6.6.

2. This Schedule is mandatory—EDBs must provide the explanatory comment specified below, in accordance with clause 2.7.2. This information is not part of the audited disclosure information, and so is not subject to the assurance requirements specified in section 2.8.

Commentary on difference between nominal and constant price capital expenditure forecasts (Schedule 11a)

3. In the box below, comment on the difference between nominal and constant price capital expenditure for the current disclosure year and 10 year planning period, as disclosed in Schedule 11a.

Box 1: Commentary on difference between nominal and constant price capital expenditure forecasts
To derive the capital expenditure in nominal dollar terms the constant price forecasts were inflated by approximately 2% per annum, on a straight-line basis, to derive the 10–year forecast. 2% was selected as a conservative inflationary rate based on New Zealand Treasury 10-year outlook. Therefore the difference between nominal and constant expenditure forecasts is an inflationary impact of 2% per year.

Commentary on difference between nominal and constant price operational expenditure forecasts (Schedule 11b)

4. In the box below, comment on the difference between nominal and constant price operational expenditure for the current disclosure year and 10 year planning period, as disclosed in Schedule 11b.

Box 2: Commentary on difference between nominal and constant price operational expenditure forecasts
To derive the operational expenditure in nominal dollar terms the constant price forecasts were deflated by approximately 2% per annum, on a straight-line basis, to derive the 10–year forecast. The expenditure is reducing to reflect the expected efficiency gains per annum that will be found by improvements to our processes and practices. We expect to share these benefits with customers by reducing our operating expenditure, in real terms, over the next 10 years. Therefore the difference between nominal and constant operational expenditure forecasts is a reduction of 2% per year.

Company Name Alpine Energy

For Year Ended 2016

Schedule 15 Voluntary Explanatory Notes

1. This schedule enables EDBs to provide, should they wish to-

   1.1 additional explanatory comment to reports prepared in accordance with clauses 2.3.1, 2.4.21, 2.4.22, 2.5.1 and 2.5.2;

   1.2 information on any substantial changes to information disclosed in relation to a prior disclosure year, as a result of final wash-ups.

2. Information in this schedule is not part of the audited disclosure information, and so is not subject to the assurance requirements specified in section 2.8.

3. Provide additional explanatory comment in the box below.

Box 1: Voluntary explanatory comment on disclosed information

For this year's IDs, figures for schedule 9a 'Items at start of year (quantity)' are sourced from last year's IDSs s9a figures for 'Items at end of year (quantity)'. However for rows 31 to 33, row 43, and rows 48-50, we have determined that the closing figures for last year's IDs used are not as accurate as the most recent data we now have. Therefore for the rows mentioned, the source data for 2016 opening figures, now comes from our most recent asset data (for 31/03/2015) and replaces last year's closing data as source data.

Data inaccuracies can arise when the data stored in our asset management system is stored under different categories/names to categories required in the IDs. We are currently replacing our present AM system. Our new system should improve data accuracy.