Company Name	Vector
For Year Ended	31 March 2015

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

The 2015 ROI, using the revised IRR calculation, is 5.42%. This is lower than the 75th percentile vanilla WACC of 8.77% used for the price reset due to:

- The actual asset revaluation rate (0.08%) for 2015 is lower than the forecast revaluation rate (2.00%) used in the price reset model. This has depressed the 2015 ROI by 193 basis points;
- The $16m revenue clawback in RY15 depressed the 2015 ROI by 48 basis points; and
- The constant price revenue growth (1.672%) projected in the Commission's price reset model did not materialise. This means that the starting price on 1 April 2012 was set lower than would have been the case if the Commission had a "better" forecast. This, combined with the clawback, has resulted in our actual revenue in RY15 being $41m below that assumed in the default price path model, thereby resulting in an ROI significantly below the regulatory WACC.

Over the 3 year first DPP to 31 March 2015, Vector's EDB revenue was $48m less than MAR due to lower than forecast growth rates. If the Commission had set MAR using the actual inflation rate, it would have been higher by $127m, so Vector's total under-recovery was $175m over the 3 years period. This under-recovery was partially offset by expenditure which was $90m less than the DPP forecasts over the same period.

Over the 3 year first DPP to 31 March 2015, Vector's EDB achieved an ROI of 7.1%, significantly below the regulatory vanilla WACC of 8.77%. The under-recovery relative to the regulatory WACC was impacted by the under-recovery of revenue mentioned above but the primary cause was the impact of the lower than forecast CPI on network revaluation, which reduced the ROI by 120 basis points. We are keen to explore with the Commission ways in which to minimise the CPI forecasting risk currently faced by EDBs.

There has been no re-classification of items in the disclosure 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
Regulatory Profit for RY15 was $45m lower than RY14. This was primarily due to the impact of the lower than forecast CPI, which resulted in revaluation income for RY15 being $37m lower than RY14. There are no material items included in “other regulated income” as disclosed in 3(i). There has been no re-classification of items in the disclosure year.

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
No merger and acquisition expenditure has been incurred during the disclosure year.

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)

RAB indexation is carried out in accordance with the information disclosure IMs using actual inflation rates. The revaluation rate that Vector has used for rolling forward the RAB is 0.08%.

In determining the starting price adjustment at the beginning of the regulatory period, the Commission assumed a revaluation rate of 2.00% in the 2015 year.

If the RAB had been rolled forward from 1/4/12 using the Commission's forecast revaluation rates for 2013-2015, the 2015 closing RAB would be $2,756m, an increase of $100m.

Variations between the Commission's forecast indexation rate and actual CPI (applied to revalue the RAB for information disclosure purposes) results in revenue adjustments not being matched by changes in RAB. On this basis the value of financial capital is not maintained in the way it would be if the RAB was not subject to indexation for either information disclosure or price setting purposes. Inflation is outside the control or influence of EDBs, and in our view there is no reason for EDBs to be exposed to this risk as they cannot take steps to mitigate it.

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

Row 10 Income under section EI 7 of the Income Tax Act 2007 $8,852,000

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)

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
A detailed description of related party transactions has been disclosed on Schedule 5b. There have been no related party transactions within the disclosure year that require disclosure under clause 2.3.6 (1) (b).

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
There has been no re-classification of items in the disclosure year. ABAA (accounting-based allocation approach) has been applied to allocate not directly attributable costs in the disclosure year in accordance with the IM determination.

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

There has been no re-classification of items in the disclosure year.

Vector satisfies the thresholds in the IM determination to enable the application of ACAM to allocate not directly attributable fixed assets.

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

The materiality threshold applied to identify material projects and programmes is $10m.

There have been no reclassified items.

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

Vector has not replaced any assets under operational expenditure in the disclosure year (excludes replacement of components of assets that do extend the life of the asset). All asset replacement and renewal of asset expenditure has been classified as capital expenditure.

Costs in relation to Regulatory and Pricing support functions have been reclassified from Network Support to Business Support in the RY15 disclosure. This aligns to the treatment in the 11b disclosure and to the treatment adopted in the gas information disclosures.

Service Interruptions and emergency expenditure is higher in RY15 due to a number of exceptional events in the year including storms in June and July and a fire at the Penrose GXP.

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:

Consumer connections were higher than forecast by 22% largely due to a higher level of business and residential subdivision activity compared to forecast.

The forecast for system growth assumed a number of reinforcement projects that have since been deferred. This includes reinforcement works at Piha and Newmarket.

Asset replacement and renewal increased by 10% due to delays to two major projects (Rosebank 33kV cable replacement and Kingsland 22kV switchboard replacement) from the prior year.

Asset relocations reduced by 31%. These activities align to the timings of NZTA and Auckland Transport programmes, which are outside of Vector's control.

Reliability, safety and environment expenditure was 74% below forecast as a result of the following:

- The forecast included spending on batteries which didn't eventuate.
- The forecast for Legislative and Regulatory assumed rectification works as part of a seismic review of substations. The findings of these reviews has resulted in less work than anticipated to date.
- The forecast for Other Reliability, Safety and Environment included expenditure to resolve issues with customer right of way poles. Work was undertaken to determine the extent to which issues existed that resulted in less work being identified.

Operating Expenditure:

Costs in relation to service interruptions and emergencies were higher than forecast due to a number of one off events that included storms in June and July and a fire at the Penrose GXP.

Investigations and analysis of expenditure on vegetation management enabled the activity to be focussed on the worst performing feeders. Some routine maintenance had to be deferred due to resourcing constraints with the field service providers.

The operational expenditure forecast was prepared on the basis that the business applied a mark-up on certain services consistent with related party requirements of the regulations. For the current disclosure year this mark-up was not applied.

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

Vector's target revenue for the year ended on 31 March 2015, as included in our pricing methodology disclosure pursuant to clause 2.4.1(1) and 2.4.3(3) of the electricity Distribution Information Disclosure Determination 2012, was $645m. Total billed line charge revenue for the disclosure year ended on 31 March 2015 was $626m, as disclosed in schedule 8 of this disclosure. The variance between target revenue and total billed line charge is $19m.

The material sources of variance arise from lower observed growth than forecast. As a result of the declining trend in consumption per consumer actual revenue billed was significantly less than the target.

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

During the RY15 assessment period there were three storm events that were significant enough to be classed as 'major event days' (allowing the SAIDI and SAIFI values to be normalised per Attachment B of the Determination), as well as numerous other high wind events that had a significant impact on network reliability. The Penrose fire was the fourth and final major event day that was normalised. More detail on each of these events, as well as the impact of high winds on the network can be found in Vector's 2015 Price-Quality Annual Compliance Statement.

Penrose Substation Incident

The Penrose grid exit point substation fire, which occurred on 5 October 2014, is the subject of an inquiry by the Electricity Authority (EA). Vector's disclosed SAIDI and SAIFI figures currently include this incident as a Class C interruption, however this classification remains subject to the outcome of the EA inquiry.

Material Factors Impacting Network Reliability

It is acknowledged that network reliability is a combination of many factors, however, we believe that the high SAIDI values seen in RY15, is primarily attributable to the series of major storm events. The Penrose fire was the other significant event. We consider this a one-off exceptional event that is in no way representative of a general network trend.

Past experience has shown that Vector's network performs well when exposed to sustained wind speeds of up to 60km/hr but performance deteriorates significantly when higher wind speeds are experienced for sustained periods for the reasons described below. Within RY15, Vector experienced significantly more than average high wind speed days, when compared to the previous period of RY05-RY13. In particular during RY15, Vector experienced a number of days with the highest sustained wind-speed ever recorded on its network. The storm-related major event days all occurred on days with exceptionally high sustained wind-speeds.

Vector's network is designed to withstand typical wind speeds. A significant number of the outages associated with high wind speed are attributable to trees and vegetation debris hitting the lines. It is acknowledged that effective vegetation management around the overhead assets is key and is something that Vector has a programme to manage, pro-actively monitoring overhead assets for vegetation issues on an annual basis. However, in high-wind situations, the impact of 'out-of-zone' vegetation from airborne debris becomes more pronounced. 'Out-of-zone' vegetation is that not in the cut-zone of the overhead assets, and therefore not currently managed through Vector's vegetation management programme. Given the number of high wind events over the past two years relative to recent history, Vector has been reviewing and further optimising its practices for best administering its vegetation management programme for the future.

When reviewing the metrics presented in Schedule 10, the following point should also be noted:

- Vector has elected to report normalised SAIFI and SAIDI values for each sub-network based on normalised assessment datasets for each sub-network, with boundary values calculated using the reference dataset for the sub-networks. This is one of two options the Commission provides for EDBs to report on sub-network reliability (ref: External Issues Register response #231). Vector has chosen this option on the basis that this methodology provides more meaningful analysis of the actual performance of each sub-network.

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

Insurance costs are allocated to the electricity segment through an assessment of the proportion of assets insured for property insurance.

The types of cover purchased for these assets include material damage, business interruption and contract works insurance.

In respect of the insurance cover the information reflects "insurance years" running from 1 September to 30 August each year and premium costs are allocated to the appropriate regulatory years to derive the premium values.

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

Company Name Vector

For Year Ended 31 March 2015

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

Schedules 9a and 9b – Asset Categorisation: In reference to response #249 on the Commission's Issues Register for Electricity and Gas Information Disclosure; as with previous disclosures, Vector can confirm that it has been unable to align the following assets to any of the Commerce Commission provided categories in Schedules 9a and 9b:

Asset Class
LV Pits and Pillars (network boxes and cabinets)
LV Switch Board
LV Switch
LV Overhead Switch

No category was found that these assets could even be closely aligned to, and as such we have not disclosed any of these assets in Schedules 9a or 9b.

Schedules 9a and 9b – Asset Quantities: A number of data quality improvements to the information in these schedules have been made since the previous 2014 disclosure. This means that for a number of asset classes, the quantity and age profile information of assets installed pre-2015 may not be identical to that disclosed last year.

Schedule 9b – Asset Age Profile: Vector has used the same age profile definitions as per the 2014 disclosure, i.e. 'capitalised date' as the primary source of information rather than 'installation date' (which may only represent an asset's relocation date). We believe this provides a more accurate age profile of our assets and better meets the intent of the schedule.

Schedule 9c – Circuit in Sensitive Areas: Vector's interpretation of this requirement (based on guidance provided in response #10 of the Commission's Issues Register for Electricity and Gas Information Disclosure) is not just to identify circuit length that is routed through generic sensitive areas (e.g. conservation areas), but to specifically identify those areas where Vector's costs or normal practices must be adjusted for sensitivity reasons.

We have taken into account the Heritage New Zealand Act 2014, the Waitakere Ranges Heritage Area Protection Act 2008, as well as the proposed Auckland Unitary Plan. The latter provides definitive "overlays" which highlight areas where Vector's normal practices need to change based on the Council's preference, or where additional costs will be incurred to manage the Council's requirements. This includes areas such as the following, which we have incorporated into our analysis:

- CBD (requiring night-works or additional traffic management)
- Notable trees
- Outstanding Natural Features
- Outstanding Natural Landscapes
- Volcanic viewshafts & height sensitive areas (requiring undergrounding)
- Ridgeline protection
- Indicative roads and open space
- Special character areas
- Sites and places of significance or value to mana whenua
- Historic heritage place
- Auckland museum viewshaft

Schedule 9c - Overhead Circuit Length by Terrain: For the DY15 disclosure, the circuit length by terrain calculation has been revised to reflect Vector's updated Use of Systems Agreement, which came into effect on 1 September 2014. This has made a minor difference to the defined urban / rural boundaries within the network.

Schedule 9c – Circuit requiring Vegetation Management: Vector actively inspects 100% of our subtransmission overhead lines on an annual basis, and 100% of our distribution overhead lines over a 3 year rolling cycle (33% per year) for vegetation growth. We then execute trimming work within the cut-zone, as prescribed by the Electricity (Hazards from Trees) Regulations 2003.

Schedule 9e and 12b – Transformer Capacity: As with previous Vector disclosures, the non-EDB owned distribution transformer capacity reported in Schedule 9e (and Schedule 12b) is an estimated figure only. This dataset is known to be incomplete, as Vector has no mechanism (or authority) to collect data on non-EDB owned transformers, and relies primarily on voluntary disclosures from customers.

ICP numbers in Schedules 8 and 9a, 9b.

Following implementation of Vector's new Use of Systems Agreement during DY15, and changes to EIEP requirements, approximately 4,500 ICPs had their registry status restated to "disconnected" by retailers.

Vector's disclosures are affected by the restatement. Schedule 8 discloses the 'average number of ICPs' in the 2015 disclosure year as 540,539. DY14 disclosed 540,125 ICPs. This may suggest that ICP numbers have not grown on the prior period, but as demonstrated by schedule 9e, Vector has experienced connection growth.

Consumer service connections, as disclosed in schedule 9a and 9b are also prepared using connected ICP data. In RY14 the closing consumer service connections numbered 542,183, and in RY15 given restated ICP status, Vector must disclose opening consumer service connections of 537,757, and closing of 542,826.

Gross new connections as disclosed in Sch 9e are unaffected by the restatement of ICPs by retailers.