Company Name Vector
For Year Ended 31 March 2020

Schedule 14 Mandatory Explanatory Notes

(Guidance Note: This Microsoft Word version of Schedules 14, 14a and 15 is from the Electricity Distribution Information Disclosure Determination 2012 – as amended and consolidated 3 April 2018. Clause references in this template are to that determination)

- 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 11 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 return on investment (ROI) for Vector's Electricity Distribution Business (EDB) is 5.44%. This is lower than the 67th percentile vanilla WACC of 7.19% and the ex-ante ROI of 7.06% generated using the Commission's DPP estimates for that year. The key factors depressing the returns are lower actual lines revenues relative to the DPP forecast.

The Commission's inflation forecasting methodology for expected inflation has systematically over-forecasted inflation expectations for over a decade. This methodology relies on the Reserve Bank of New Zealand's (RBNZ) monetary policy statement and where an explicit forecast is not available the linear trend to the RBNZ's mid-point target. This methodology has proved unreliable for an extended period of time. The consequence of the persistent over-forecasting of inflation has meant suppliers have not been able to earn their projected nominal revenues forecasted by the Commission for over a decade.

The impact of the method to forecast expected inflation are expected to continue for the next five years with expected inflation unlikely to meet the Commission's projections of 2% for the rest of the DPP3 period. This will mean that forecast nominal revenues projected by the Commission will for a period of 15 years are unlikely to be attained by EDBs subject to price-quality regulation. We do not believe the current model is sustainable and provides the right incentives for suppliers to continue to invest in their network businesses for the long-run benefit of end-users. Vector notes the Commission's nominal DPP3 prices include an expected efficient interest cost for suppliers set in nominal terms. Therefore, where nominal revenues are less than the Commission's DPP3 projections, suppliers must continue to meet interest costs set in nominal terms. This is resulting in the burden of the continuous asymmetric inflation expectations being borne by shareholders with lower nominal returns and a lower real return on equity.

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

The value of "other regulated income (other than gains/ (losses) on asset disposals)" is nil.

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)
 - 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 or acquisition expenditure has been incurred during the disclosure year.

There has been no re-classification of items in 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)

Roll forward of regulatory asset base (RAB)

The value of the RAB has been determined by rolling forward the initial RAB with allowances made for additions, disposals, depreciation and revaluation in accordance with the current IM determination.

Assets disposed

Disposed assets were mainly related to the substations' land and building assets and the Penrose-Hobson tunnel disposed to related parties in the disclosure year 2020.

Assets acquired from related parties

\$578m right of use (ROU) assets were acquired from related parties and commissioned in the disclosure year.

Reclassified items

Due to ongoing data quality review in the disclosure year, there were reclassifications in "asset category transfers line" in Schedule 4(vii), including a reduction of \$2.0m from the Distribution and LV Cables category and an increase of \$2.1m in the Distribution and LV Lines category.

Unallocated RAB roll forward

A box "Adjustment to opening RAB value" was added to section 4(ii) this year to adjust the unallocated opening RAB values of those shared assets from the previous disclosure year that are no longer shared with the Electricity business in the disclosure year 2020. As a result, \$1m was adjusted from the unallocated opening RAB.

Unallocated work under construction roll forward

A box "Adjustment to Works under construction—preceding disclosure year" was added to section 4(iv) this year to adjust the unallocated opening work in progress values for non directly attributable ROU assets that were not included in the previous year.

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

RAB loss on disposal of assets of \$8.9m is a permanent difference relating to non-deductible unamortised initial differences of RAB assets disposed and the revaluation component included in the RAB disposal.

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 are no material items in the disclosure year.

Cost allocation (Schedule 5d)

10. 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 7: Cost allocation

There has been no re-classification of items in relation to cost allocation in the disclosure year.

The accounting-based allocation approach (ABAA) has been applied to allocate not directly attributable costs in the disclosure year in accordance with the current IM determination.

The "Property, Plant and Equipment (PPE)" asset and labour hours allocators are the key proxy allocators used to allocate not directly attributable corporate shared costs as causal factors are not available. A causal relationship cannot be established for the non-directly attributable costs because of the shared nature of these services. This means there is no single cost driver leading to a cost being incurred.

Labour hours

Vector has undertaken a survey of estimated time spent on regulatory activities for the purpose of regulatory cost allocation. Not all shared service functions are able to estimate time spent servicing each business due to their activities being ever changing or because activities are primarily provided on a group only basis.

PPE

A significant proportion of Vector's activities are focused on managing physical assets. Therefore, an assumption can be made that the greater the amount of physical assets a business has (measured by value) the greater share of corporate shared costs required to support that business.

The rationale behind the use of each proxy allocation is based on a thoughtful analysis of each cost item.

Asset allocation (Schedule 5e)

11. 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 8: Commentary on asset allocation

Consistent with cost allocation, Vector applied ABAA to allocate non-directly attributable network asset values in the current disclosure year in accordance with the IM determination. Vector has determined and reported two allocators for shared network assets: a fair value ratio and a capacity ratio. The fair value ratio is determined by reference to an estimated fair value of the non-directly attributable portion of a shared network asset. The capacity ratio is an engineering-based ratio by reference to an asset's total service capacity. Determining which allocator to use involves an understanding of the nature of the shared network asset concerned and the substance of the non-electricity distribution services that the asset provides. These allocators are proxy allocators. A causal relationship sometimes cannot be established for the non-directly attributable network asset values because the shared nature of these assets means there is no single factor influencing the utilisation of the asset.

Determining the non-network fixed assets for the regulated and non-regulated businesses follows a similar process to operating cost allocation.

There have been no material changes in asset allocations in the disclosure year except for certain shared assets being removed from the electricity business due to a change in allocation.

Capital Expenditure for the Disclosure Year (Schedule 6a)

- 12. In the box below, comment on expenditure on assets for the disclosure year, as disclosed in Schedule 6a. This comment must include
 - a description of the materiality threshold applied to identify material projects and programmes described in Schedule 6a;
 - 12.2 information on reclassified items in accordance with subclause 2.7.1(2).

Box 9: Explanation of capital expenditure for the disclosure year

The materiality threshold applied to identify material projects is the level of audit materiality applied by Vector's regulatory auditors (\$10m).

Material projects undertaken related to right of use assets acquired from related parties that were commissioned in the disclosure year.

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

Operational Expenditure for the Disclosure Year (Schedule 6b)

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



- 13.1 Commentary on assets replaced or renewed with asset replacement and renewal operational expenditure, as reported in 6b(i) of Schedule 6b;
- 13.2 Information on reclassified items in accordance with subclause 2.7.1(2);
- 13.3 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 10: Explanation of operational expenditure for the disclosure year

Asset Replacement and renewal operational expenditure is largely incurred to rectify non-compliance with maintenance standards as identified from planned equipment inspections.

This expenditure includes the replacement of equipment components that do not extend the life of the asset. The major spend areas are maintenance on zone substations, grounds and buildings, subtransmission cables, and overhead lines.

Reclassified items

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

Atypical Expenditure

There was no atypical expenditure during the disclosure year which exceeded our materiality threshold, as described above.

Operational expenditure has increased by \$7m mainly aimed at improving the electricity network quality metrics.

Variance between forecast and actual expenditure (Schedule 7)

14. 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 11: Explanatory comment on variance in actual to forecast expenditure

CAPEX

Overall actual expenditure was \$574m above forecast at \$884m with key drivers being:

- System Growth increased by 1,127% or \$565m, mainly due to right of use assets acquired from related parties.
- Asset Replacement increased 8% or \$9m mainly due to the distribution asset replacement programme.
- Quality of Supply increased 115% or \$1m due to forecast projects being reported in Other Reliability. This is as a result of the category change made in the previous year's disclosure.
- Other Reliability, Safety and Environment increased by 64% or \$12m mainly due to the feeder automation programme targeting improved reliability.
- Non-network decreased by 35% or (\$10m) mainly due to the deferral of a property improvement project.

OPEX

Overall actual expenditure was 1% or \$2m lower than forecast. The key drivers of over 10% variance in actual to forecast expenditure for the disclosure year are listed below.

- Service Interruptions and Emergencies 11% lower than forecast due to lower exceptional maintenance and higher recovery of third-party damages.
- Vegetation Management is higher by 42% due to the increased focus on SAIDI minimisation.

Information relating to revenues and quantities for the disclosure year

- 15. In the box below provide
 - 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
 - 15.2 explanatory comment on reasons for any material differences between target revenue and total billed line charge revenue.



Box 12: Explanatory comment relating to revenue for the disclosure year

Vector's target revenue was \$624m, as included in Vector's Electricity Pricing Methodology Disclosure for the disclosure year, pursuant to clause 2.4.1(1) and 2.4.3(3) of the electricity distribution information disclosure determination 2012.

Total billed line charge revenue was \$623m, as disclosed in schedule 8. The variance between the target and actual revenue difference of approximately \$1m (0.16%) is mainly due to slightly lower than forecasted quantities.

Network Reliability for the Disclosure Year (Schedule 10)

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

Box 13: Commentary on network reliability for the disclosure year

The disclosed SAIDI and SAIFI values are not aligned with those presented in Vector's 2020 Compliance Statement (which is based on the Electricity Default Price-Quality Path Determination 2015). This is in line with guidance from the Commerce Commission's Issues Register item #447.

Vector has elected to report normalised SAIFI and SAIDI values in Schedule 10 for each subnetwork 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 as the methodology provides more meaningful analysis of the actual performance of each sub-network.

An increase in Planned Interruptions (SAIDI B) in the disclosure year can be attributed to an increase in planned works to improve network reliability, with various initiatives and installation of a large number of Ring Main Units (RMUs) and automated switches.

Unplanned Interruptions (SAIDI C) was lower than prior year, due to no major storm event covering multiple days, like happened in April 2018 and an increase in level and prioritisation of network investment and various initiatives around improving network reliability.

Insurance cover

- 17. In the box below, provide details of any insurance cover for the assets used to provide electricity distribution services, including-
 - 17.1 The EDB's approaches and practices in regard to the insurance of assets used to provide electricity distribution services, including the level of insurance;



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

Box 14: Explanation of insurance cover

Vector Limited takes insurance cover for group assets. These policies cover material damage, business interruption and contract works insurance.

Insurance costs are allocated to the Electricity Distribution Business using the proportion these assets represent relative to Vector's overall insured assets.

In respect of the insurance cover the information reflects "insurance years" running from 1 September to 31 August each year and premium costs are allocated to the appropriate regulatory years to derive the premium values.

Amendments to previously disclosed information

- 18. 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:
 - 18.1 a description of each error; and
 - 18.2 for each error, reference to the web address where the disclosure made in accordance with clause 2.12.1 is publicly disclosed.

Box 15: Disclosure of amendment to previously disclosed information $\ensuremath{\text{N/A}}$

Company Name	Vector
For Year Ended	31 March 2020

Schedule 15 Voluntary Explanatory Notes

(In this Schedule, clause references are to the Electricity Distribution Information Disclosure Determination 2012 – as amended and consolidated 3 April 2018.)

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

Clause 2.3.7(1)(c) of Electricity Distribution Services Input Methodologies Determination 2012: "in respect of each disclosure year after the disclosure year 2010, for assets for which there is no regulatory tax asset value, the opening deferred tax balance under GAAP for those assets at the date when those assets were first commissioned."

Where there is a regulatory asset for which there is no regulatory tax asset value, Vector is required in accordance with 2.3.7(1)(c) to include within regulatory deferred tax, the GAAP deferred tax where deferred tax is recognised under GAAP for those regulatory assets. For the avoidance of doubt if the deferred tax impact for GAAP is nil for these regulatory assets, then the deferred tax included within regulatory deferred tax will also be nil. Vector has interpreted that the GAAP balance in accordance with 2.3.7(1)(c) should be included within regulatory deferred tax as at the date the asset was commissioned (i.e. affects the closing deferred tax balance). The schedule 5a of Electricity Information Disclosures does not have a place to include the deferred tax required to be recognised in accordance with clause 2.3.7(1)(c) and therefore effect the closing deferred tax balance. Vector has therefore adjusted the opening deferred tax balance for the following year to comply with the requirements of 2.3.7(1)(c).

The difference between closing deferred tax balance reported in disclosure year 2019 and the opening deferred tax balance in disclosure year 2020 is the tax effect of 2019's ROU commissioned assets due to the adoption of NZ IFRS 16 Leases.